

**Health Workforce Needs:
Opportunities for U.S.-Mexico Collaboration**

Conference Proceedings and Background Papers

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Our understanding of the Mexican health professional education and training system was enhanced by a field visit of four students to Monterrey, Mexico, when they met with the Secretary of Health for the State of Nuevo Leon as well as faculty and administrators at

the three medical schools and two of the nursing Schools in Monterrey. A visit to the dental school at the University de la Salle in Leon Mexico was also very helpful.

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Foreword

These conference proceedings and the associated background papers represent the product of a year-long Policy Research Project at the LBJ School of Public Affairs at The University of Texas at Austin. As Mexico and the United States have increasingly become integrated economically and as many Mexicans live and work in the United States on a temporary or permanent basis it has become important that social services such as education and health also be more inter-connected and responsive. Both the conference proceedings (Section I) and the background papers (Section II) identify barriers to and opportunities for increased cross-border collaboration in training, licensure, and practice of physicians, dentists, and nurses.

A conference associated with the research project was held on March 28, 2003, at the LBJ School of Public Affairs in Austin, Texas, to bring together a number of experts in the field from Mexico and the United States. The title of the conference was “Responding to Unmet Needs through International Collaboration for Health Professionals: The Case of the U.S. and Mexico.” The conference began with a keynote address by Dr. Guillermo Soberon in which he presented a brief history of the expansion of medical education in Mexico and the recent development of the Mexican Council for the Accreditation of Medical Education in Mexico (COMAEM) and some of the challenges that will face that body. Dr. Soberon, as chairman of this body and a former Secretary of Health and former rector of the National University of Mexico (UNAM), is uniquely qualified to make such a presentation at a time when accreditation and quality assurance have become increasingly important.

Corresponding presentations on the U.S. side were made by Dr. Antonio Furino and Dr. Marilyn Biviano. Dr. Furino presented some of the challenges that his Regional Center for Health Workforce Studies at the University of Texas Health Sciences Center at San Antonio faces in developing analyses and proposals to ameliorate shortages and inadequacies in the workforce in the U.S. border states. Dr. Biviano, the acting director of the National Center for Health Workforce Analysis at the Health Resources and Services Administration, presented a number of studies and findings from a national perspective on the health workforce. She highlighted, in addition to macro-level studies of supply and demand for particular professions, several studies that look at the intensifying nursing shortage and research on health workforce diversity and foreign medical graduates.

Next, Arnoldo Torres, Dr. Alejandro Cravioto, and Dr. Jose Antonio Vela Capdevilia discussed the development of innovative legislation in California (AB 1045) which, as Arnoldo Torres says, is “a three year pilot-program to allow 30 Mexican-licensed board-certified physicians in Mexico to come to California and practice in medically underserved populations...primarily...in rural, farm worker communities.” The program also includes 30 licensed dentists from Mexico. Since Arnoldo Torres was instrumental in pushing the bill through the legislature and Dr. Cravioto, then the dean of the UNAM

medical school, and Dr. Vela, the dean of the UNAM dental school, helped design the program, their description of the development of the program is authoritative and thought-provoking, especially for Texas health professionals and policy-makers attending the conference.

Finally, in the morning session, Dr. Eldon Nelson and Michael Denis presented two separate programs that have been developed in Texas to help Mexican-trained nurses become licensed in the state. Eldon Nelson's program in Brownsville is funded by the hospitals in Cameron county and is oriented to teaching nurses who reside in Matamoros. Participants in the program have completed training at the licenciado level and are licensed in Mexico. Michael Denis describes a program that is already underway and is geared to helping nurses who live in the Dallas-Fort Worth area and who have migrated from Mexico or other Latin American countries become able to pass the nursing licensure exam in Texas. Both programs are quite interesting and have the potential over time to help ameliorate to a limited extent the shortage of linguistically and culturally competent nurses in Texas.

The balance of the conference proceedings is devoted to the presentation of issues that surfaced from the three break-out groups. The physician break-out session was chaired by Dr. Adela Valdez, the dentist break-out group was chaired by Dr. Ramon Baez, and the nurse break-out session was chaired by Dr. Steve Shelton. The discussions in all three were lively and some of the suggestions and insights that emerged from the discussions are included in the summaries that follow the conference proceedings.

The second half of this volume contains the background papers that were prepared by members of the Policy Research Project. Section II, Chapter 1, "The Impact of International Trade Agreements on Services: An Examination of Cross-border Medical Services between Mexico and the U.S." by Amy Kirschenbaum and Jessie Kempf, examines the North American Free Trade Agreement, the General Agreement on Trade in Services, and the proposed Free Trade Agreement in the Americas as they relate to health care. They identify a number of unresolved issues and barriers to trade and provide the reader with a very useful introduction to both the trade agreements and their potential relationship to health services.

Chapter 2, "Physicians: Certification and Licensure Options and Processes" by Don Lucas and Sarah Davis, surveys the rate at which foreign medical graduates have become certified to enter into graduate medical education programs in the U.S. and the number who have actually entered such residency programs. One significant finding of this analysis is that the number of Mexican physicians receiving ECFMG certification amounts to only 1 percent of the number of foreign-born foreign medical graduates who receive such certification. For example, in 2001, Mexican citizens accounted for only 45 of the 4416 non-U.S. citizens receiving such certification. Given the proximity of Mexico to the U.S. and the large numbers of Mexican nationals seeking treatment in the U.S. this statistic is particularly striking.

Chapter 3, "Medical Education in Mexico" by Cory Macdonald and Carlos Cantu Mireles, provides an excellent look at the process of medical education in Mexico as well

as the development of accreditation by some of the schools themselves, a process which has been refined by the establishment of COMAEM.

In Chapter 4, “Mexican-Trained Dentists: Opportunities for Licensure in the U.S.,” Emily Blosser provides a clear picture of the current process by which foreign dentists may be licensed in the U.S. Unlike in medicine, a number of states make graduation from a U.S. or Canadian dental school an absolute requirement for licensure in their states. The other states will license a limited number of foreign-trained dentists providing they complete a minimum two-year training in an ADA-approved specialty education program. She then identifies two new initiatives in California designed to increase the number of qualified Latino dentists.

In Chapter 5, “Problems Facing Dentistry in Texas and Possible Solutions Involving Mexico,” Ben Bosell discusses some of the programs that in recent years have begun to provide improved dental and medical coverage for low-income children and some of the problems many have with gaining access to dental services. He then discusses how the Mexican dental education system works and some of the initiatives that the ADA is discussing with regard to accrediting foreign dental schools, mentioning the University de la Salle in Leon, Guanajuato, which has received provisional accreditation by the California Board of Dental Examiners.

In Chapter 6, “Cross-Border Credentialing for Health Professionals: Licensing Mexican Nurses to Work in the United States,” Jessie Kempf, Sonja Scott, and Gina Amatangelo discuss the steps required for Mexican nurses to become certified in the U.S. and some of the impediments to that process. In particular, they document how the requirement that Mexican-licensed nurses already in the U.S. take and pass the exam developed by the Commission on Graduates of Foreign Nursing Schools prior to taking the National Council Licensure Examination for a Registered License substantially delays and in some cases impedes the process.

In Chapter 7, George Rivas presents the process of nursing education in Mexico in his paper “Nursing Schools in Mexico: An Overview.” He describes the different levels of nursing in Mexico and provides some data on the different schools.

In the final chapter, Chapter 8, “The Healthcare Needs of a Changing Population: Workforce Shortages in the US-Mexico Border Region and the Case for Culturally Competent Care,” Andrea Tirres and Gina Amatangelo survey the literature on cultural competence and the growing diversity of the population. They also present a number of model programs that have been developed to mitigate the poor match between the number and linguistic abilities of providers and the growing populations they must serve. This discussion is augmented by additional information provided by Marilyn Biviano and Antonio Furino on federal programs.

Section I. Conference Proceedings

**Responding to Unmet Needs through International Cooperation for
Health Professionals: The Case of the U.S. and Mexico**

March 28, 2003

Welcome and Overview

Sarah Davis: Good morning. Edwin Dorn has had a distinguished career in public life and higher education. He has been Dean of the LBJ School since 1997. Immediately before that, he served four years as Under Secretary of Defense for Personnel and Readiness. Prior to his presidential appointment in the Department of Defense, Dean Dorn was a Senior Staff Member at the Brookings Institute. He has also served as Deputy Director for Research at the Joint Center for Political and Economic Studies. He has a Ph.D. in political science from Yale University. Please help me welcome Dr. Edwin Dorn.

Edwin Dorn: Sarah Davis, thank you, and good morning. Thanks to all for being here. I especially want to acknowledge and thank our co-sponsors, HRSA, of course. I believe Marilyn Biviano is here ably representing them, our friends from the San Antonio Health Sciences Center, and our colleagues from the Mexican Center of the Teresa Lozano-Long Institute of Latin American Studies at UT Austin. Thanks all for your support and encouragement. I am especially honored that one of Mexico's most distinguished healthcare professionals, Dr. Guillermo Soberón, is with us. As you know, Dr. Soberón was Minister of Health and now heads the Mexican Health Foundation. I was also delighted to meet for the first time Dr. Alejo, who is Mexico's Counsel General here in Austin. Thank you for being here. I hope to talk with you further.

Access to good, affordable healthcare is important. It's important for moral reasons, because we have an obligation to care for people who are ill. It's also important for economic reasons. But we in the United States fall woefully short of providing good, affordable healthcare, and those problems are especially acute among the Hispanic population. It is estimated that 40 percent of Hispanics living in Texas are uninsured. Millions of people born in Mexico but living now in the United States are not getting good quality healthcare. Why? Well, they can't afford it in many instances. They are not fluent enough in English to have a meaningful conversation with healthcare professionals in the United States. And of course because our government appears to have other priorities. Those access problems could be reduced if it were easier for Mexican health professionals to practice in the United States, and this conference is about the obstacles to greater cross-border cooperation and about some of the efforts to address them.

Sarah mentioned that I had worked at the Pentagon, and one of my jobs there was overseeing the Defense Health Program. At that time, the early 1990s, we were spending roughly \$15 billion a year. We had roughly eight million potential beneficiaries, and frankly, we were under-funded and we never got the solutions right. This is a complicated area, but today you will get an opportunity to discuss at least one way in which we can make better and more affordable healthcare available to large numbers of people on both sides of our common border. Again, thank you very much for being here, and I look forward to your discussions. David, thank you.

Keynote Speakers

David Warner: Next we will introduce our keynote speaker, whom I have known and respected for many years and have been impressed by all he's contributed. When I first met Dr. Soberón, he was Secretary of Health, and between then and now, Mexico has cut its infant mortality rate almost in half. Many of the things that he initiated certainly played a major role in that. Carlos Cantu, who is a native of Monterrey, Mexico, will introduce Dr. Soberón. Carlos is a graduate of Monterrey Tech. He spent two years as a currency trader at Harbor Investments, a firm in Monterrey, then he saw the light and came to the LBJ School. He has been working in the physician group on our project.

Carlos Cantu: Good morning. Dr. Guillermo Soberón is currently serving as the Executive President of the Mexican Health Foundation and Secretary of the National Human Genomic Council as well as President for the Mexican Council for the Accreditation of Medical Education, and Coordinator of the Consortium for the Mexican Institute of Genomic Medicine. He obtained his degree at the National Autonomous University of Mexico (UNAM), and his Ph.D. in physiology at the University of Wisconsin. He has served as the Director of the Institute for Biomedical Research, Coordinator of Scientific Research, and on two different occasions has held the office of President of UNAM.

As for his participation in public service, he also held the positions of Coordinator of Health Services for the Presidency of the Republic, Secretary of Health, and Coordinator of the Scientific Advisory Council. His scientific endeavors have gained him recognition. He has been the recipient of diverse distinctions, and has been awarded honorary doctorates by numerous universities. He has written several books, and is a member of a number of different associations and societies. He has been President of the Union of Latin American Universities, President of the International Association of Universities, President of the 37th Assembly of the World Health Organization, and President of the Board of the Directors of the National University Club.

We are very honored and happy to welcome one of the most influential persons in the health sector in Mexico, Dr. Guillermo Soberón.

Guillermo Soberón: Thank you, Carlos. I would like to express my gratitude to Dr. Warner and all of the organizers of this meeting for the kind invitation that allows me to be with you today. The subject I was asked to elaborate for you is the Mexican Council for the Accreditation of Medical Education in Mexico.

On January 24th, 2002, the Mexican Council for the Accreditation of Medical Education (COMAEM) was established. This act culminated a 30-year effort to create a culture of evaluation and accreditation for institutions of higher education.

It is our intention to describe the reasons why there has been an increase in demand for higher education in our country, and to review some aspects of the problems affecting

medical education in Mexico which, in our efforts to overcome them, have shown us ways to establish reliable and effective mechanisms so as to assure Mexican society that criteria do exist, through which to ensure the suitability of medical schools that merit accreditation. Subsequently, I shall tell you about the two paths that converged into the creation of COMAEM and, finally, I shall talk about the accreditation of hospitals, which also has a bearing on medical education.

Increase in the Demand for Higher Education

In the 1970s we witnessed the high point of the population explosion in Mexico. As a matter of fact, in 1974, the fertility rate reached 6.8 and annual growth was 3.6 percent. That same year, Mexico established its population policy, which was quite successful, since the current fertility rate has decreased to under 3.0 and annual growth has dropped to 1.8 percent. On the other hand, the population between the ages of 20 and 24 has increased 2.25 times in the past 30 years. Although the country's economic development grew during the same period, job openings were insufficient. Consequently, many youths knocked on the doors of institutions of higher education and these, under pressure, yielded to the demand and saw their response capabilities severely stretched when their infrastructure became over-saturated, which ultimately led to a deterioration in the quality of education.

There was, necessarily, an increase in the number of institutions of higher education. During the afore-mentioned period, public institutions grew from 82 to 459 and private institutions from 36 to 838. It should be said, however, that enrollment is higher in the former. Higher education became more diversified since, in the period under consideration, the number of educational programs grew from 2,500 to 11,822, and 52.8 percent are being taught in public institutions.

The federal government was unable to cope with this kind of demand. In fact, it is said that it favored excessive admission to universities because it was cheaper to create a space in an educational facility than to generate a job. This resulted in the concept of "nursery-university."

The Problems of Medical Education

Medicine is enriched and is consequently renewed with a tremendous amount of dynamism through scientific contributions and subsequent technological innovations, which translate into new outlooks, new procedures, and new therapeutic resources. In short, we went our ways immersed in a growing awareness of mankind's phenomenology and, in particular, the binomial health-disease. Thus, medical education is being forced to adapt in order to prepare today's professionals and, above all, tomorrow's doctors. Their outlook has broadened because they are no longer limited to a baccalaureate. Indeed in the past few decades post-graduate studies have become more popular, such as medical specialties, master's degrees, and doctorates, and more recently, further continuous education is required to help doctors absorb the accumulation of new information they must face every day. Furthermore, medical education must be competitive, receptive, and benefit from educational innovations that are appearing with

great impetus. It is therefore easy to understand that, like so many aspects in our daily life, medicine, or better yet medical education, feeds off bio-technology, informatics, and telecommunications whose overwhelming advances confirm the presence of this tremendous dynamism, particularly in medical education.

Another aspect merits special consideration since it is directly linked to the quality of medical education: the surplus in Mexico of doctors, medical students, and medical schools. During the 1950s and '60s there was a great deal of demand for higher learning, particularly medical careers, which led to a serious decline in the quality of medical education. We must review the speeches of Maestro Ignacio Chávez, renowned Rector of the National Autonomous University of Mexico (UNAM) in the 1960s, to understand how important this situation was to him, and appreciate his efforts to lower enrollment, mainly through the implementation of admission exams, where he was quite successful. In the 1970s, as Rector of UNAM, I faced the same situation because the measures implemented by Ignacio Chávez had been put aside, and there was an impressive rebound in UNAM's student population. There had been 8,000 applications to the medical school for the 1972 scholastic cycle, and 6,000 had been admitted.

The policy established since 1974 included several measures: a progressive decrease in *numerus clausus*, no possibility of changing from another career to medicine or the option that the latter could be accepted as a second career and, most importantly, rejection of applications from students who hailed from places where schools of medicine already existed. The measures had the desired effect because six years later, in 1980, only 2,300 students were admitted to the career of medicine, and they pursued their career not only at the faculty of medicine, but also at two National Schools of Professional Studies, Iztacala and Zaragoza, established in 1975 and 1976 respectively.

Given the severity of the situation, UNAM was forced to face this serious problem alone, since it took several years for the other schools of medicine in Mexico to reach a consensus. Consequently, many of the rejected students had no other recourse than to knock on the doors of different schools of medicine, both public and private, throughout the rest of the Mexican Republic. Many schools yielded to the pressure and saw their facilities saturated; it also led to the establishment of new schools. By 1980, there were 52 schools of medicine, and 17 of them had opened their doors during the 1970s. The national matriculation in medicine ascended to 91,819, the highest in the 20th century. That year alone, 16,076 students enrolled and 11,586 departed.

The surplus of medical students and doctors has become a serious social problem because there is a high level of unemployment and sub-employment in this field. As a matter of fact, studies carried out by Nigenda and Frenk indicate that by 1993, there were 173,000 doctors in Mexico, and more than one-fifth were unemployed or under-employed. Besides the frustration of students investing so much effort and energy into so many years of studies, only to discover they cannot practice their profession, several other resources were wasted in building a human capital that ultimately went unused. All this also implies a high financial cost to the country.

In the 1980s, it seemed that the situation was almost contained and this allowed medical schools to improve their teaching. The National Education Law, promulgated in 1978, declared that the official recognition of studies from higher educational institutions should be the responsibility of the Public Education Ministry, state governments, and local public universities. At the time, since decision-makers were well aware of the defining aspects of the afore-mentioned problem, it was thought that the policies adopted by the schools of medicine and the national legislative framework would overcome this difficult situation.

Since the clinical fields for medical education are provided by health institutions, the latter obviously felt their interests were being affected, which led to tensions between health and education institutions. A period of “mutual reproaches” prevailed when the health institutions complained that universities were not forming the kind of doctors the health system needed and the educational institutions replied: “Which system? The health institutions do not even know what type of personnel they need, much less their professional profile.” The creation of the Inter-Institutional Commission for the Formation of Human Resources for Health (CIFRHUS), established in 1984, channeled the differences, solved mutual problems, and lessened tensions.

Nevertheless, ominous signs have once again appeared on the horizon of medical education in Mexico, due to the vertiginous increase in the number of schools of medicine in the past few years: there are currently more than 80 medical schools. In the year 2000, 10,423 students enrolled and 8,360 departed from schools throughout the country; the national matriculation was 82,063 students. Information obtained through the National Survey of Urban Employment for the fourth trimester of the year 2000 indicates that in Mexico’s 44 most important cities, where 70 percent of the population can be found, there are 210,621 graduated doctors that probably represent over 75 percent of the Mexican medical force, since they tend to concentrate in urban areas. Approximately 35 percent of the latter are unemployed or under-employed. Even if there are methodological discrepancies with the works of Nigenda and Frenk, it would seem that the problem not only continues to exist, but has worsened.

It is important to point out that this problem affects many countries all over the world. That is why the World Health Organization organized in Acapulco, Mexico, in 1986, the conference “Health Manpower, Out of Balance,” with the participation of representatives from over 80 nations. From this meeting came the following recommendations:

1. Consolidate the health labor force with regards to the strategy of primary healthcare.
2. Obtain reliable information on the health labor force.
3. Define reliable and feasible national standards with regards to the formation and performance of health personnel.
4. Plan the development of human resources for health, jointly, in a collaborative manner, between the areas of health and education.

This last point focuses on the Inter-Institutional Commission of Human Resources for Health, established in Mexico in 1984, as already stated, which was closely examined and widely recommended.

Accreditation through Mexican Association of Faculties and Schools of Medicine

It should be stated that the accreditation exercise in Mexico, rapidly being extended, was preceded in all academic programs of higher learning by successive stages of planning and evaluation.

Since 1990, The Mexican Association of Faculties and Schools of Medicine (AMFEM), founded in 1947, has been persistent in encouraging its members to improve their institutional structure and function and the quality of their education. The cohesion among its members has allowed AMFEM to elaborate programs and undertake measures that have benefited everyone. They decided that the educational functions with which they are entrusted should always strive towards excellence, for which they established several measures. The evaluation of the impact made them realize that they needed to accredit the successful cases; this led to the proposal of an appropriate mechanism. That is why the accreditation process for schools of medicine was the culmination of a process whose objective is to elevate the quality of education. They developed 78 indicators that objectively determine how performance must be rated, established verification procedures, and selected a suitable team of examiners who were well-trained. They accredited 28 schools of medicine, two of which have since renewed their accreditation, since it was decided that this exercise must be repeated once every five years. AMFEM ceased accreditation when COMAEM came into existence.

Accreditation through the Planning of Higher Learning

This undertaking, initiated in the 1970s, took place because education authorities and heads of the highest-ranking and most traditional higher educational institutions felt the need and desire to establish channels that would delimit areas of operation, strengthen infrastructures and, in general, improve the performance of higher learning institutions. Back then, the number of institutions was growing at a disproportionate rate and matriculation had increased excessively due to greater demand from demographic, social, economic, and political factors, as we explained earlier.

The Public Education Ministry, the National Association of Universities and Higher Education Institutions, the National Autonomous University of Mexico and the National Politechnical Institute were the forerunners of these initial efforts, which were mainly directed towards public institutions, although a gradual and enthusiastic response from the rest of the higher educational institutions soon followed.

The first outcome of this debate was the creation, in 1979, of the National Permanent Planning System for Higher Education that consisted of four levels: the National Coordination for the Planning of Higher Education (CONPES) at the national level; eight regional Councils for the Planning of Higher Education (CORPES), each including the private and public universities of several states; 32 State Commissions for the Planning

of Higher Education (COEPES), at state level, as its name indicates; and finally, Institutional Planning Units (UIP), as many as the number of higher educational institutions enrolled in the process. The Mexican Federation of Private Higher Educational Institutions (FIMPES) has also been an important forum for private institutions and a way to link them to the Permanent Planning System for Higher Education.

In 1989, in the bosom of the CONPES, the National Commission for the Evaluation of Higher Learning (CONAEVA) was established to evaluate the impact of the measures taken to improve institutional performance that ensued from this planning process.

The CONAEVA applied a dual strategy in individual institutions and at the national level, that is to say, the system for higher learning itself. The former essentially entailed an institutional focus (self-evaluation) and an inter-institutional focus carried out by peer academicians; in the latter case, other organizations intervened: The National Council for Science and Technology (CONACYT), the Council for the National Technological Education System (COSNET), the Vice-Ministry of Higher Education and Technological Research (SEIT), and the National Center for the Evaluation of Higher Education (CENEVAL), which carries out the admissions exams and final dissertations of all students within the system of higher education.

Inter-institutional evaluation was left in the hands of the Inter-Institutional Committees for the Evaluation of Higher Education (CIEES), created in 1991, formed by peer academicians and divided into nine fields of expertise. They were assigned four principal functions: diagnostic evaluation, accreditation, adjudication of projects and programs, and advice on how to formulate them. However, years later it was decided that the second function, accreditation, should be changed in order to better evaluate for the purpose of accreditation. Therefore, in 1997, a National System for the Evaluation and Accreditation of Higher Education and, in 2000, the Council for the Accreditation of Higher Education (COPAES) were established, which produced general outlines and defined characteristics regarding accreditation mechanisms.

COPAES is in charge of studying the suitability of accreditation procedures and ratifying the organisms that carry them out. It therefore undertook the task of identifying and profiling those that had already attempted this task, among these, the program started by AMFEM. Although it discovered that the accreditation process of the schools of medicine satisfied every requirement, this process could not remain in the hands of the Association because it could not be both “judge and jury.” Thus ensued the creation of the Mexican Council for the Accreditation of Medical Education.

The Mexican Council for the Accreditation of Medical Education

The Mexican Council for the Accreditation of Medical Education (COMAEM) is formed by a president, a vice-president, an executive secretary-treasurer, and four members who are assigned by the Health Ministry, the National Academy of Medicine, the Mexican Academy of Surgery, and AMFEM. There are, moreover, five observers, representatives from the most important health institutions, who have a say in all decisions but who do

not vote and are individuals who are invited because of their expertise on the subject. Since its establishment 12 months ago, COMAEM has accredited 12 more schools, bringing the total to 36. One school's request for accreditation was denied.

The procedure is arduous and rigorous. First there is a process of self-evaluation based on a series of previously mentioned 78 indicators that are focused on determining the characteristics of the infrastructure, the functions to be carried out, institutional performance, and the quality of the products (graduates, research projects, social welfare programs, services, etc.). Once the school has finished its self-evaluation, it requests its accreditation from COMAEM and submits the necessary documents.

COMAEM analyses the documents and requests additional information if necessary. Once the information has been satisfactorily analyzed, a team of five examiners or more, if necessary, is formed; a coordinator and a secretary are chosen from its members. The team carries out one or several visits *in situ*, and ascertains the veracity of the information it has in its possession, not only by reviewing documents but also by interviewing professors, students, and administrative personnel. A report is made and judgment is passed down to the council, which discusses and considers all the facts before determining a final verdict. Recommendations are made so the institution may implement measures to overcome any deficiencies, and if 80 percent of the indicators are met, the school is accredited for five years; in the case where it meets over 70 percent but under 80 percent, it is only accredited for one year, giving it time to make the necessary changes and improvements. Less than 70 percent means the institution's accreditation cannot take place.

The examiners have been well trained. Specific workshops are organized to that effect. Preferably, professors who have had managerial experience in schools of medicine are recruited. To date, there are 100 fully trained examiners.

It is important to emphasize the full autonomy the council has, thus enabling it to fulfill its objectives without receiving undue external pressure. Its judgment must be impartial so that its decision-making is based on the rigorous application of the established criteria, thereby assuring the substantive quality of the institutions.

The COMAEM is currently reviewing the pertinence and validity of the indicators and will study them further in order to assign a specific weight to them with regards to accreditation. Furthermore, it is reviewing the training process of the examiners and is looking into post-graduate and other educational activities carried out by the schools; the COPAES has decided that the evaluation of post-graduate degrees should continue to be carried out by CONACYT, since it has done so for the past two decades.

Accreditation is a voluntary act for the schools. Its value consists in letting society know which schools are accredited and which are not. However, we believe that is not enough. Fortunately, the Health Ministry has decided not to concede clinical training facilities to non-accredited schools. This requirement will now force them to apply for accreditation.

Hospital Accreditation

In Mexico, very few schools of medicine have their own hospitals. The necessary clinical *milieu* to train medical students has always been provided by health institutions. This arrangement has been mutually beneficial since the schools need not invest large sums of money nor get involved in the complexities of administrating such a facility; on the other hand, it is well known that education enhances the quality of healthcare. That is why, without a doubt, the certification of hospitals initiated in 1999 will lead to improved medical education.

The Council of General Healthiness, included in the Constitution, is in charge of carrying out this task. It is the highest ranking health authority in the land and is presided over by the Health Minister of Mexico.

In 2001, a decree introduced certain new aspects; among these, the expansion of certification to other medical establishments such as primary healthcare units, clinical laboratories, imagenology laboratories, and rehabilitation centers.

The evaluation of hospitals, which is free of charge and voluntary, has met with approval: since March 19th, 257 new hospitals have already registered (SSA: 91, IMSS: 61, ISSSTE: 43, private: 45, other social security institutions: 15, and universities: 2). Of these hospitals, 103 have finished their self-evaluation, 67 have attained the percentage required to pass structure requirements, 38 have passed on to the next stage, the evaluation of procedures and results, and 24 have been completely certified.

The program, designed by the corresponding commission, contemplates two aspects: a) structure, and b) procedures and results. The first aspect includes nine categories, each with specific indicators: human resources (25), physical installations (23), supplies (242), assets (15), clinical records (5), clinical services and complaints (2), committees (7), organization and methods (6), and government (7). The aspects covering procedures and results include three categories: attention to patients (130), healthcare support (34), and information to elaborate indicators (30).

The 249 examiners from health institutions are trained by the Canadian company Quality Management Institute as “Internal Quality Auditors.”

The accreditation of schools of medicine, besides being an important way to guarantee the quality of medical education, could also be an important factor in solving the surplus of students and doctors. As long as COMAEM’s performance is honest and efficient, it will have enough moral authority to maintain the support of education and health institutions, thereby enabling it to undertake actions that escape the normal sphere of activities of the council but are necessary for the total fulfillment of the council’s responsibilities. Only then can its voice have sufficient moral authority to be heard and perhaps even induce health and education institutions to take the necessary steps to stop the growth or reduce the number of medical schools and students.

I believe that our Achilles heel has been the Recognition of the Official Certification of Studies (REVOE) that I mentioned before, which the General Education Law has left in the hands of the Public Education Ministry, state governments, and local public universities. It appears that REVOE at schools that have recently been certified has originated from the three afore-mentioned aspects. Now we have requested the CIFRHMS to give its appraisal; however, this evaluation will be based on the fulfillment of requirements when, we are convinced, it should above all be based on the academic and social circumstances that lead to a political decision. If we overcome this problem, I am sure it will lead to a better quality of medical education. This is the challenge we are presently facing.

David Warner: Gina Amatangelo will introduce our next speakers. She is a native of Pittsburgh, Pennsylvania, a graduate of Penn State University in political science, and has worked for several NGOs before coming to the LBJ School. She has also been translating from English to Spanish for several attendees today.

Gina Amatangelo: Our next speakers are Dr. Marilyn Biviano and Dr. Antonio Furino. Dr. Biviano is the acting Director of the National Center for Health Workforce Analysis at the Bureau of Health Professions in the Health Resources and Services Administration. She has been working in that capacity for the past four years, where she manages five regional centers for health workforce studies, and she's directed the development of 50 state health workforce profiles and many other health workforce studies. She has over 15 years of experience conducting policy analysis, and before joining HRSA, she directed the U.S. Geological Survey Program on Sustainability and represented the USGS at the President's Council on Sustainable Development.

Dr. Antonio Furino is a professor of economics in the Department of Family and Community Medicine, and also the Director of the Center for Health Economics and Policy, and of the Regional Center for Health Workforce Studies at the University of Texas Health Science Center in San Antonio. Dr. Furino is also a Senior Research Fellow at the IC² Institute of the University of Texas at Austin. His interdisciplinary publications include work on national economic and health policy and its impact on minorities in the Hispanic Latino population. I want to welcome them both and thank them for being here today.

Antonio Furino: Thank you, Dr. Warner, and thank you, Dean Edwin Dorn of the LBJ School for hosting this conference. I commend you, your colleagues, your staff, and this exceptionally talented group of graduate students for taking an important step toward translating into action the vision of a better future in the regions that lay on both sides of the U.S./Mexico border. A binational dialogue, to be meaningful, requires both a commitment to cooperation and a solid knowledge base.

The reason we are here is that issues and solutions regarding the border health workforce, in spite of many good efforts, are not adequately addressed. Part of the problem is a vicious cycle of ignorance and inaction. Knowledge about the border health workforce is not adequate; we do not know enough about the quality, the magnitude, and the location of needs relative to available options for addressing them. Inadequate information leaves

policy uninformed and creates the vicious cycle of ignorance and inaction. Conferences such as this one offer opportunities to break that unfavorable chain of events. We cannot expect one conference to open doors that have been shut for decades. But, today, together, by advancing the dialogue on international cooperation we will contribute to improving the quality of life at the border.

Thank you for inviting me. I am grateful to Dr. Marilyn Biviano, the Director of the National Center for Health Workforce Analysis of the Health Resources and Services Administration, for accepting to share the podium and discuss the research she directs at the national level. The work she and her staff promote, lead, and coordinate throughout the country is unprecedented and very relevant to the topic of this conference.

I was asked to direct your attention to two key phrases used in describing this conference: “workforce needs” and “knowledge for action.” Recognizing that these are familiar terms to you, I will just underline certain aspects of their significance in the context of today’s proceedings. When workforce needs are discussed, usually the focus is on the statistics that document shortages. This is understandable since the data are so painfully shocking. Over 80 percent of border counties have primary care Health Professions Shortage Areas (HPSAs); the national average is 63 percent. The primary care physician-to-population ratios in border counties are 25 percent lower than the U.S. average of 81 per 100,000 population. And, the number of primary care physicians (PCPs) per 100,000 population has decreased and will continue to decrease because population increases are outpacing workforce increases.

Seventy-three percent of border counties have dental HPSAs (the national average is 31 percent). Eighty-five percent of the counties close to the U.S./Mexico border have mental health HPSAs (the national average is 55 percent). Between 2000 and 2020, the state-wide shortages of RNs will increase. And, in the border regions, the condition of declining entrants and aging professionals that account for the decreasing workforce supply is expected to be more pronounced than in the rest of the country. However, because shortage statistics are the result of many interacting forces, these factors must be recognized and addressed with visionary policies.

The adverse impact of shortages on the quality of life of the people living close to the U.S./Mexico border may not be eliminated by just increasing state workforce supply if we do not pay sufficient attention, for example, to the economic and health infrastructures that support, attract, and maintain health professionals in the areas where they are needed most. For example, one-fifth of the border population is at or below poverty (the national average is 13 percent). This condition, a link in the vicious cycle of poverty where disincentives to capital investment aggravate an existing low-income status, requires targeted economic incentives, or providers that have a strong motivation for practicing in underserved areas. Just more graduates in the health professions will not solve the problem.

In a study we just completed, we found that on average, after 10 years, 30 percent of primary care practitioners are no longer in the same border location and most of them have moved out of the region. To complicate matters, the health workforce is aging. An

ever-increasing number of new young health professionals are required for increasing or simply maintaining the health workforce at current supply levels. Unfortunately, these young professionals are not forthcoming in sufficient numbers and a delay of several years of education divides interventions from results. So, for immediate relief, the name of the game becomes workforce retention and induced migration of individuals from professional pools outside the border areas.

Another issue is our approach in increasing the health workforce. We are learning about the importance of local educational opportunities that recruit and train individuals where they are likely to practice after graduation. Distribution and access rather than supply are in some cases the main problems. From a study by one of the other regional centers, we learned that 44 percent of California adults had no dental insurance. Typically, they live in communities designated as Dental Shortage Areas (DSAs) with a high percentage of minorities, low median incomes, and a high percentage of children.

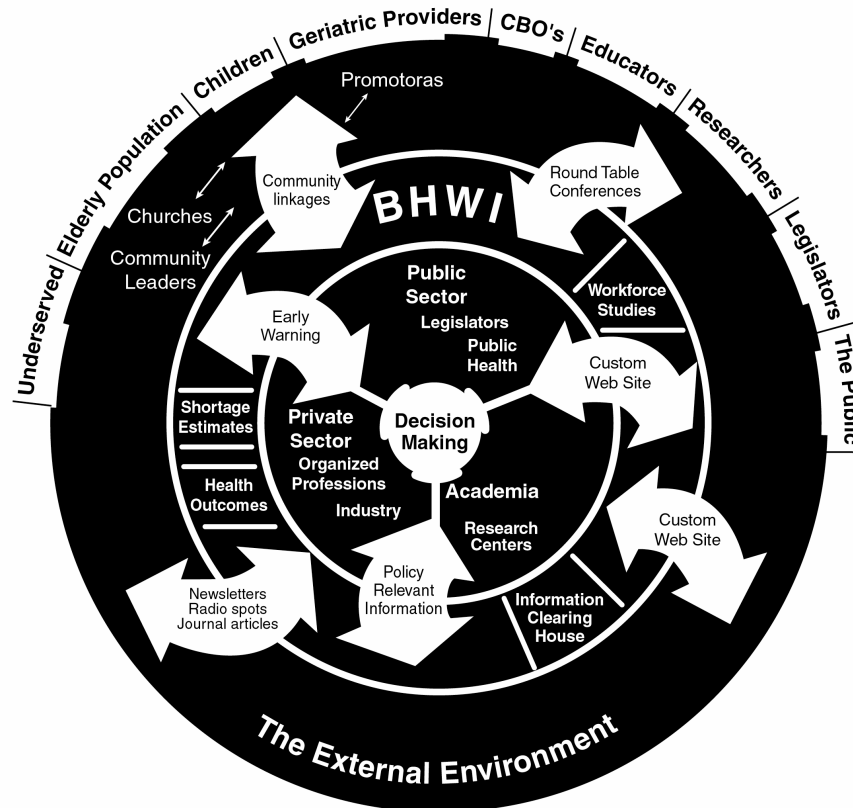
Finally, we must consider that more providers may not guarantee more medical or dental encounters if there are barriers such as low awareness of available care, mistrust of the health care system, cultural incompetence, or geographic distance. In one of our latest studies, we found that the loss of primary care physicians per Hispanic population is larger than that for the total border population and it is likely to become larger in the near future. Therefore, an additional key issue is how to bring the diversity of the health workforce to mirror more closely that of the population. In conclusion, policy makers addressing health workforce shortages at the border must be aware of many factors, use a multidisciplinary approach, rely on multiple interventions, and employ a critical mass of effort.

All of us agree that interventions to be effective must be guided by adequate data as well as a solid understanding of their significance. The expression “knowledge for action” underlines the delicate process of developing policy-relevant information and the continuing and systematic efforts needed to validate and sustain the process. At our center, we are working hard toward this goal. But the target is too broad in scope and too complex in methods to be reached successfully by any one organization. We have some outstanding partners and supporters, but more are needed to adequately address the challenges ahead of us. And, most of all, we need your input and guidance.

The demand for border health workforce information that is a) reliable; b) updated, verified, and, when possible, bilingual; c) comparable over space and time; and d) customized to the decision-making needs of those working for better health care in the border region is increasing. It is increasing because of economic stimuli such as NAFTA, the resolve of the border communities, and greater attention by national legislators to the socioeconomic status of the border people. Now, more than ever before, we seem to be aware that border health is not just a regional problem, but one that involves both nations in their entirety.

The following diagram illustrates the approach we are taking to develop the first Border Health Workforce Informatics System.

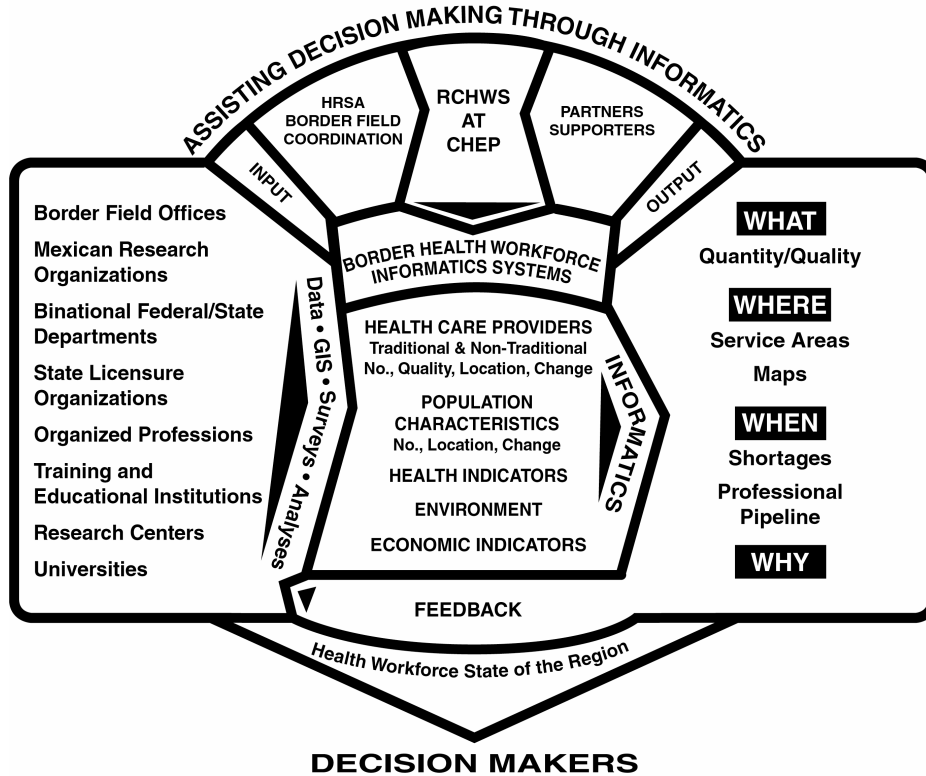
Border Health Workforce Informatics (BHWI)



The basic principle guiding its design is that data contributes to knowledge best when it is rooted in multiple disciplines, community-based, comparable over time and space, and developed in collaboration with all users and beneficiaries. The system must rely on linkages with communities to collect community-based data and to monitor the size and the effectiveness of the traditional and non-traditional workforce (e.g., promotoras). Linkages with communities, universities, organized health professions, and the private and public sectors are maintained using both traditional methods such as town meetings and the latest information and communication technologies.

The next chart illustrates the input/output relationships of the data flow.

From Data to Action



Some of the elements of the Border Health Workforce Informatics System are already in place. For example, RCHWS at CHEP already manages a large health workforce database for the State of Texas and the Texas/Mexico border and is using geographic information system (GIS) technology to address more effectively complex workforce issues. The capacity of the current RCHWS system is being expanded with the help of cooperating organizations to include New Mexico, Arizona, and California. The HRSA-sponsored Regional Center for Health Workforce Studies in California is currently doing research on that state's workforce that can produce needed information on the Arizona and California border regions. The U.S/Mexico Border Commission has already invested resources to make available, on the web, maps of binational border health data. The informatics system being developed would be complemented by workforce data important to planners, health care organizations, providers, and legislators. The Mexico Section of the Commission has access to current informatics initiatives in Mexico and is considering assisting in the development of comparable binational data. The HRSA border field offices located in every border state are willing to become a unique and competent field resource for community linkages. The Texas Department of Health has

recently geo-coded information on “promotoras,” and is exploring with RCHWS at CHEP ways to develop more information on community health workers.

As shown in the chart, input from many data sources is processed with the assistance of collaborating organizations and partners and used to explain the availability, quality, location, and utilization of the border health workforce. In summary, the goal of the informatics system is that of creating linkages, collaborative agreements, and the technological framework needed to fuse currently scattered and often non-comparable data into a working coherent mechanism that will provide useful explanations of health workforce supply, demand, utilization, and retention. The spirit of cooperation that this gathering demonstrates gives me hope that such a system can be built and shared among all of us who care about border health. This concludes my remarks. Now, it is my distinct pleasure to call to the podium a distinguished researcher, a visionary administrator, and a very special lady: Dr. Marilyn Biviano, the Director of the National Center for Health Workforce Analysis.

Marilyn Biviano: Thank you, I am privileged to be here today. I want to thank the LBJ School of Public Affairs; Dr. Furino, the Director of our HRSA Regional Center for Health Workforce Studies; and Dr. Warner for directing this important effort on border health workforce issues. I also recognize and thank the collaborators from both sides of the U.S./Mexico border. And, special thanks and recognition goes to the LBJ graduate students who authored the border health workforce papers exploring issues on dentists, physicians, and nurses. These papers are seminal works and are going to serve as an excellent foundation for us to move forward on the border health workforce issues. Dr. Duke, our administrator at the Health Resources and Services Administration (HRSA), has made HRSA border health activities a priority—creating a HRSA Office of International Health Affairs, and within that office, a division devoted to border health. Dr. Howard Lerner is the Director of the Office of International Health Affairs.

This part of our (Dr. Furino and my) presentation has a broader health workforce research focus. I'll begin by introducing the National Center for Health Workforce Analysis (National Center) at the Bureau of Health Professions in HRSA. There are two parts to the National Center. One part is the Shortage Designation Branch, headed by Andy Jordan. The Shortage Designation Branch works closely with the primary care organizations to develop and analyze health professional shortage areas. The other side of the National Center is the Workforce Analysis Branch (Workforce Branch), headed up by Steve Tise. The Workforce Branch is responsible for conducting the health workforce research efforts. It is these research efforts that I will highlight in my presentation today. The mission of the Workforce Branch is to collect, analyze, and disseminate health workforce information. One of the Branch's functions, or goals, is to assist state and local workforce planning efforts. We know that's where the health workforce issues really come to bear—it's in your local hospital, community health center, and clinic that health workforce shortages and other workforce issues are really felt and need to be addressed.

In terms of local and state health workforce research, our HRSA Regional Centers for Health Workforce Studies (Regional Centers), are at the heart of our state and local health workforce research. We have five large regions covered—every regional area in the United States, except the Southeast, is covered. The HRSA Regional Centers for Health Workforce Studies include: 1) University of California at San Francisco; 2) University of Illinois at Chicago; 3) State University of New York at Albany; 4) University of Washington at Seattle; and, our newest center, headed by Dr. Furino, 5) University of Texas Health Science Center at San Antonio (UTHSC). Our Texas center has the strongest focus on border health issues. You are all invited to visit the National Center and Regional Center websites to access all of the health workforce studies that have been completed. Our website is <http://bhpr.hrsa.gov/healthworkforce>.

Next, we'll quickly run through some highlights of the research that is going to be released in the next year. One very important research report to be released is "Workforce Trends, Issues, and Supply and Demand Projections." This report will cover 30 health occupations and include 15-year supply and demand projections and a discussion of the workforce issues for that profession. Next, we have health workforce reports for 18 states, including Texas, that look at health professions education, licensing and regulation, reimbursement rules, workforce planning efforts, and incentives for health workforce training and practice.

We are about to release a study on the direct care workforce—nursing aides and home healthcare aides, which are especially important in providing long-term care to the disabled and the elderly. The shortage of nursing aides, according to a National Conference of State Legislatures survey of State Health Committee Chairs, is a major health and workforce issue for most states. Further, the shortage is expected to worsen in the future as the size and proportion of the elderly population increases. Over the next 25 years, according the Bureau of the Census, the population over 65 years old will grow at a rate five times that of the population under 65. And, the fastest growing segment of the population today are those over 85 years old. As these two elderly populations increase, the demand will grow for long-term care and, in turn, nursing aides and home healthcare aides. One of the reasons there are too few nursing aides is low wages. As you can see on the following table, the average wage of a nursing aide is equivalent to a bakery worker (about \$8.50/hour). So having a low-wage job with many alternative, perhaps less demanding jobs, may result in a long-term shortage of nursing aides.

Supply and Demand for Nursing Aides and Home Health Care Aides

Study from SUNY-Albany, available soon:	Hourly Earnings*	
➤ Factors that will be examined include relative wages, retention, promotion potential, and training requirements.	Bread and pastry bakers	\$8.10
➤ Health care settings such as hospitals, nursing homes and home health care agencies are to be included in the study.	Cooks	\$7.81
➤ Project is being coordinated with ASPE, AHRQ, States, and others.	Nursing Aides	\$7.99
➤ Official Title: Trends, Issues, and Projections of Supply and Demand for Nursing Aides and Home Health Care Aides in the United States.	Home health care aides	\$7.81

*Source: BLS, OES, median hourly earnings, 1998.

Scope of practice laws are very important in terms of getting nurse practitioners and physician assistants, and even dental hygienists to provide care to underserved, uninsured populations. We are completing a study focusing on state scope of practice regulations for physician’s assistants, nurse practitioners, and certified nurse midwives. The study is a comparative analysis of state scope of practice regulations and the related supply and practice of these healthcare providers.

A study of the impact of the changing demographics on health provider demand or requirements is about to be released also. As indicated above, in the next 25 years, the aging of the population will have a profound impact on the demand for healthcare and, in turn, the demand for the healthcare workforce. This study provides estimates of the impact on the demand for physicians, nurses, and dentists as a result of the aging of the U.S. population.

We have also developed state-based nursing supply and demand models. We have used these models to project registered nurse workforce demand, supply, and shortages for each of the 50 states and the District of Columbia. Now, we are readying these models for public use. The models are tools that can be used by researchers, policy makers, state organizations, nursing schools, and others to do their own projections and plan their own strategies for addressing nursing shortages now and avoiding shortages in the future.

We’re also responsible for conducting the National Sample Survey of Registered Nurses (NSSRNs). The NSSRNs is conducted every four years and it serves as a basis for our nursing workforce analysis. In fact, the NSSRNs is the most comprehensive source of data on the nursing workforce and it enables us, other researchers, nursing schools, state policy makers, and the public to better understand and quantify nursing workforce issues.

We’re also doing some fundamental physician supply and demand research. We will use the research to improve our physician supply and demand models and the resulting

projections. Research underway includes the extent to which nurse practitioners and physician assistants can substitute for primary care physicians; how economic growth impacts the demand for healthcare and (in turn) the demand for physicians; and the impact of insurance coverage, the aging of the population, and advances in technology on physician demand. On the supply side, we are looking into the age at which physicians retire and whether there is a trend towards retiring at a younger age. Also, with the increase in women in medicine, we are looking at female practice patterns—how many hours at a given age, in what specialty, and in what setting do female physicians work. We are also looking at the large variation in income by physician specialty and how it is impacting the specialty composition of the physician workforce and the practice location of physicians.

Another related study that is underway is an analysis of international medical graduates—who they are, where they come from, and where they practice. International medical graduates (IMGs) are a very important component of our physician workforce—one out of every four physicians in the United States is an IMG and IMGs fulfill a critical role in providing health care access in underserved areas.

The second edition of our state health workforce profiles will also be released this year. A study is also underway looking at clinical laboratory personnel shortages. We released in 2000 a study on the shortage of pharmacists in the United States, and we are getting increasing indications that the clinical laboratory personnel shortage is growing and may be difficult to address. A study on licensed practical nurses across the United States is underway. While the registered nurse population is about 2.7 million in terms of licensed registered nurses, licensed practical nurses are a significant occupation as well, and represent part of the solution to the nursing shortage.

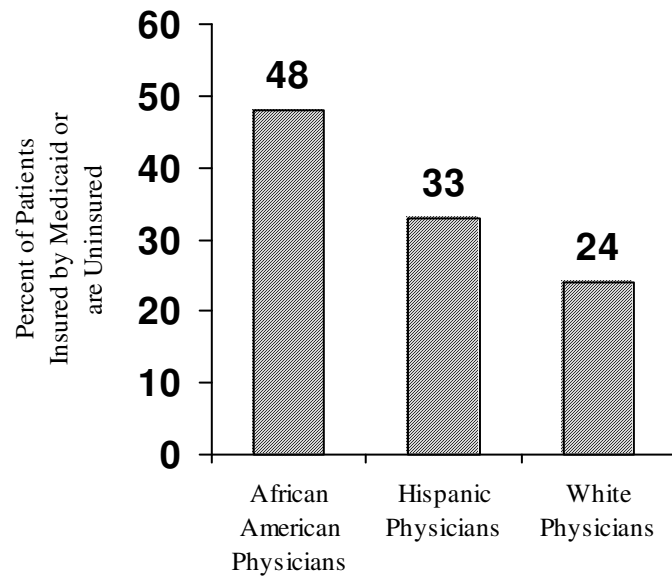
We are also conducting research on health workforce diversity. One very important fact about underrepresented minorities is illustrated in the following chart. This chart shows that African American and Hispanic physicians are 1.5 to 2 times as likely to treat Medicaid or uninsured patients than non-minority physicians in the same area.

URM Physicians are Far More Likely than White Physicians to Treat Medicaid or Uninsured Patients

- African American and Hispanic physicians are far more likely to treat Medicaid or uninsured patients than white physicians from the same area.
- Nearly half of patients seen by African American physicians and one-third of patients seen by Hispanic physicians are Medicaid and uninsured patients

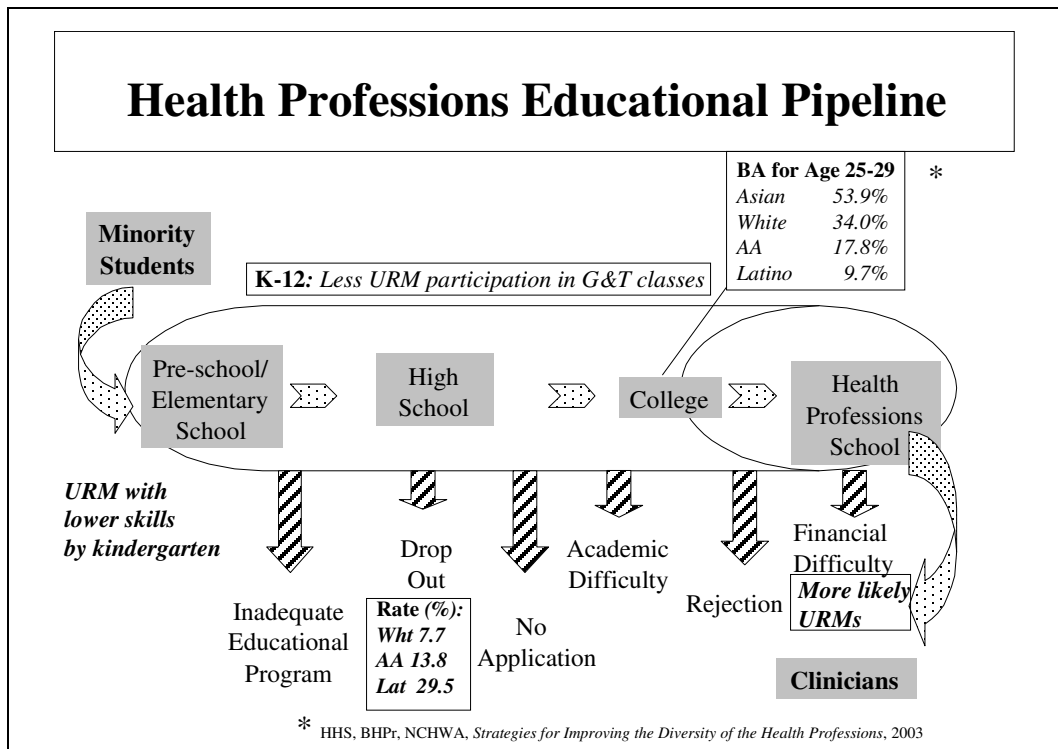
NOTE: Data on American Indians/Alaskan Natives are insufficient to calculate reliable estimates.

Physicians that Treat Medicaid or Uninsured Patients



Source: Komaromy et al., *New England Journal of Medicine*, May 16, 1996.

The next chart depicts the health professions education pipeline and the various points that youngsters and young adults fall out of the educational pipeline to becoming health professionals. This chart was developed by Dr. Kevin Grumbach, Director of the HRSA Regional Center for Health Workforce Studies at the University of California at San Francisco. The whole pipeline for training is illustrated—from pre-school through health profession schools—and coming out of the bottom of the education pipeline are the “leakages.” When you look at high school dropout rates for Latinos, it’s 29 percent, so that is a big issue: almost a third of Latinos are out of the health professional pipeline before they finish high school. Lower rates of bachelor’s degrees (and so on) also occur for minorities. So, an important strategy for increasing the percent of minorities in the health professions is to increase the percent completing high school and attending and graduating college.



I leave you with one final thought on the health workforce. “If you want a year of prosperity, grow grain. If you want ten years of prosperity, grow trees. If you want 100 years of prosperity, grow people.”

David Warner: Thank you very much, Dr. Biviano.

Mexican Physician and Dentist Pilot Program in California

David Warner: To introduce our first speaker, a member of the class, Andrea Tirres, who is a native of El Paso and a graduate of Stanford University, and who worked for a couple of years at an environmental policy organization in El Paso before she came to the LBJ School, is going to introduce Arnoldo Torres, our first speaker in this session.

Andrea Tirres: Arnoldo Torres is currently a policy consultant and partner at Torres and Torres Policy Consultants in Sacramento, where he principally represents non-profit organizations providing health and education services to California's minority and indigent communities. His work focus includes Latino health concerns associated with managed care, access to health care, and Medi-Cal. He also works towards assisting clinics with federal underserved designations, and with securing state and federal funds for healthcare services.

Past positions Mr. Torres has held include National Executive Director of the League of United Latin American Citizens, consultant to the Center for Chicano Studies at UC Santa Barbara, and representative in D.C. for the National Hispanic Leadership Conference and Arizona Farm Workers Union. Mr. Torres graduated from American University with a master's degree in public administration. He has been an activist in local and national politics since 1977. Without further adieu, Mr. Torres.

Arnoldo Torres: I want to thank Dr. Warner and the students. I am very impressed to be a part of this effort. I was telling some of the students yesterday that often institutions of higher education have a phenomenal image and prestige in our society. Yet you wonder what the institution has left as a result of that great image and reputation. I think the fact that you have a conference like this is great—I was telling Ms. Tirres, who went to Stanford, that this is not something that we have ever done in California, yet you would think we probably would be the first to do something like this. On the contrary, you are going to hear the story of the things that we don't do in California, and why we had to write this bill, which some of you think is quite interesting and some of you think is extremely bad. We very much believe in this great country that dialogue is very important. I think if we would have had it in the development of our bill from the California side, the bill would have been a better bill. But we are very pleased with it, and it's a real honor to be here with Dr. Vela and Dr. Cravioto, who I worked with for two and a half years in developing the bill. So I greatly express my gratitude and my admiration to the students and to Dr. Warner for putting this together. Also, I was rejected by LBJ in 1970. I graduated from the University of the Pacific and LBJ was just getting started. That was my first choice. I really wanted to come here very badly. But I don't feel bad about that. I have arrived and I am fine with it.

Let me begin by reading to you one of the articles that came out in the *Newspaper for America's Decisions*, AMEDNews.com, that I got from the Internet. In regards to AB1045, which is a three-year pilot program to allow 30 Mexican-licensed board-certified doctors in Mexico to come to California and practice in medically underserved

populations and HPSAs in the state of California, primarily, we want them in rural, farm-worker communities. We want 30 licensed dentists from Mexico as well, and I will provide you with some overview of the structure under which they are to function. But I want to explain to you the odyssey of what got us there, because I hear the Texas Dental Association is very upset with this concept, and so it gives us a chance to have that discussion as well as with the Texas Medical Association.

In describing our bill, the article reads, “The California Medical Association, while acknowledging this need, and that need is that it’s a short term measure to address the need of the state’s one million out-culture workers, few of who have access to any physicians, let alone one who speaks Spanish. The California Medical Association, while acknowledging this need, said, ‘Bringing in Mexican doctors to treat Mexican citizens in the United States undermines California’s licensing system.’ ‘We should have a level playing field and one criterion for licensing professionals so that California residents know that their doctor is qualified,’ said Mahal, M.D., Vice Chair of the CMA Board of Trustees, and a leader of the organization’s opposition to the bill.” Bob McAldry, who I worked with a great deal at the California Medical Association, indicated we would be creating a two-tiered licensing structure. We’re changing the nature of this licensing process. By not requiring the same exams and residency programs, we’re raising questions about the minimum qualifications necessary to treat these patients. We’re lowering the bar.

Now, these comments came after our bill was signed. The legislature passed it, not overwhelmingly but comfortably, both the senate and the assembly. And understand, our association doesn’t give one penny in political contributions and yet we got the bill through the legislature. We got the governor of the state of California to sign the bill. So despite the phenomenal power and the phenomenal arguments that were given by the medical and dental communities of California, the so-called policy makers of California and the governor felt the problem was very severe in our state, which Mr. Furino and Ms. Biviano very eloquently described. The problem isn’t just along the border in California. The problem goes all the way to the other border, which is with Oregon. If you think you have it bad in Texas you are only second to us in California in terms of the problem. Why? Because the largest flow of Mexican immigrants is not to Texas; it’s to California. Regrettably you’re second this time. And then Arizona and then Illinois, depending on what numbers you’re looking at. So, our problem is extensive.

In 1980 the Census Bureau said that the majority of people in California were going to be minorities (remember when Coors Beer called the 1980s the “Decade of the Hispanic”?). What did the medical and dental and mental health communities do academically and professionally? Nothing, absolutely nothing. Now, if somebody gets mad at me for saying that in the manner that I have said it, I’m very sorry. It’s not my intent to offend anybody, but those are the facts. Nothing was done. Academia did not create any programs to create any degree of competency. Do you know that there’s no definition of competency in culture or in language? The federal government does not have any definition of what cultural linguistic competency means. The State of California doesn’t have one. We have a bill this year that defines it and sets up a program with the Medical

Association, which is co-sponsoring the bill with us. We're working together on this problem now. Hopefully the Dental Association will join us in developing and providing training to the core of current practicing physicians and doctors. But nothing was done previously. The medical societies didn't do anything, the dental societies didn't do anything. And so we had a phenomenal growth in population in California. From 1990 to 1999 our population grew by four million, and 61 percent of that growth was Hispanic. Shouldn't that tell us that we should be doing something different? But we did nothing different.

And so our mantra for this bill was very simple: "Let us fail." Give us a chance as Latinos to fail. Everything else hasn't been done. The time has come before us, and nobody's made any attempt to address the problem. "Give us a chance to fail." And it's very hard as a Hispanic advocate or a Hispanic lobbyist or a Hispanic public policy consultant to do our work because we are pigeon-holed. We wrote a bill that was designed not exclusively just for our community in the long run. It was designed to explore a much broader and more important vision. And for those in public policy, you should know that in politics, public policy is always third or fourth priority. We viewed a vision and that vision is very simple: a vision of one integrated healthcare system between the United States and Mexico. There is no other way of dealing with the problems that Dr. Furino and Dr. Biviano spoke about today, the realities that you confront in the Rio Grande Valley, realities that we confront along the border. There is absolutely no other system that makes any other sense in our opinion, and we are phenomenally well prepared to debate that with anyone in this country, anyone in this room, anywhere at any time. That is the answer, in our opinion. We must create one.

And in order to do that what must be the first thing in our opinion? The first thing is that we've got to quit saying we're better than you are. And that's exactly what doctors and dentists do with each other. In California, the issue isn't what the topic of this title is. It isn't about unmet needs. It's about professional better. And you know what this bill will do if we can finally get it off the ground because getting it funded is more difficult than getting it passed through the legislature. The arguments are the same, but now the arguments never come to the forefront. You don't have a chance to confront those arguments in a public hearing. You don't have the chance to confront those arguments in a press article or an interview. They are done behind peoples' backs to the foundations. "Oh, don't do it, the medical community's very upset. Oh no, you don't want to do that because it's going to really hurt your medical school. Your reputation will be hurt." It's very, very un-American. And we believe in American values and American's foundations of what we're about. We ought to have enough respect to have that dialogue, and yet we don't have that dialogue. We won the process through the legislative process. We didn't cheat. I didn't come in and say, "you know what, vote for this because I'm a Mexican." No. In fact I had several Latino members who voted against the bill. We had a lot of Hispanic interests in California who opposed our bill. So we did it the California way—we passed a public law.

And yet we're still having problems trying to implement its provisions. Because the debate isn't about how you address unmet needs—that's never been the debate. The

debate is “we better not start down that slippery slope.” This bill for the first time will actually allow us to evaluate the contentions made by the American dental and American medical communities that says doctors in Mexico are unprepared to deal with this population. And I like to be participatory in this so I’m going to ask a question. Why do you think we’re bringing Mexican doctors and dentists over from Mexico to California? Anybody?

David Warner: Because there’s nobody willing to treat the Mexican population.

Arnoldo Torres: To some extent, but you know what....we’re not bringing them in to see Chinese patients, Asian patients, Black patients, or Anglo patients. Our clinics see 95 percent Mexicans. We’re bringing them in to see the same Mexicans that they were seeing in Mexico. That’s what we’re doing. It’s real simple. And the argument of the left in California, California Rural Legal Assistance, all legal services groups, the ACLU, all these groups, you know what they said? “Oh no, you can’t bring doctors and dentists from Mexico to see this population. They deserve better care than that!” Oh yes, that was the argument! They deserve better care than that. And our response to them was very simple and again very politically incorrect, because, you know, you can’t go against the left like that in California. Our response was very simple: “We’re tired of waiting for your nirvana of universal healthcare. This population doesn’t have that luxury to keep waiting.” Very, very simple yet very, very difficult.

Our bill does a very simple thing. It establishes a three-year pilot. Thirty doctors have to be licensed and board-certified in Mexico. We’ve looked at four specialties in priority order: family practice, internal medicine, obstetrics, and pediatrics. That, as all of you know, is the foundation of a primary care clinic infrastructure. Primary care doctors are the gods of a clinic. We need those gods to come into our clinics. We don’t have enough of them, and we certainly don’t have enough that speak Spanish and know the culture of the people who are coming to us from Mexico to California. And in California we have three major states that give us our flow from Mexico: Oaxaca, Jalisco, and Michuacan. Starting Monday we will have a delegation of five people from Ornelares Agricultas in Mexico and from Comunidades Mexicanas. Melba Pria, who is their director at Comunidades Mexicanas with the Secretaria de la Relaciones Exteriores, was very helpful in developing a program in which we are bringing them over to help our clinics do a better job of serving the needs of indigenous populations that we don’t know much about their culture and we don’t speak their language. So we have already begun to take phenomenal initiatives to go to Mexico and use their abilities instead of trying to reinvent the wheel in California. Mexico has phenomenal talent, phenomenal ability, and we want to bring them in, and that’s what our bill does.

Before they come they have to go to a six-month orientation program that UNAM would operate with our participation and our development as well as that of a medical school in California. UNAM would select the 30. The reason why we asked UNAM to do it is because we feel very comfortable with them, and this is a very unique thing and a decision that we made. We feel so comfortable with UNAM medical school and the dental school for one major reason: because we believe they have a great consciousness

about serving the population who is in absolute need of care. That is not the experiences that we've had with medical schools in California. It isn't the same drive, it isn't the disposition, it isn't the same commitment to serving poor people. And we felt that that was a very key element in our selection of UNAM. In the 30 doctors, UNAM can make a decision whether it's UNAM graduates or whether it's 30 of the best that apply. Why? Because the CMA was concerned precisely about the issue that Dr. Soberón spoke about, the issue of accreditation of the medical schools. So we think we chose the best medical school and the best dental school to participate in this program on a pilot basis.

Before they come they will have six months of orientation to California healthcare infrastructure. Hospital privileges, the way clinics operate, all of those things, every imaginable kind of course that you have in medical schools now already there we put them in there. And before they come over they have to take a review course exam for their specialty. Understand what we proposed. We proposed that they take the USMLE part two and part three. How many doctors here could pass part one right now? Thank you for your honesty. That's a very difficult exam that's given in the second year of school. Very few doctors can pass that exam after practicing five, six years. It's a very difficult thing because it's been so far removed from their practical experiences. We proposed that but USMLE said no. Then we talked to the CMA and CMA said, "Why don't you give them the board certification exam? That's a lot better." So we went to every board, and every board said no, they wouldn't do it. So we tried everything, and everything we tried we went back to Dr. Cravioto and we said, "Is this acceptable to you?" "Yes." We went back and said this is what we'd like to propose." "No." "Is this acceptable to you?" "Yes." "We'd like to propose..." "No, we can't do that either." So we came to this bottom line in our bill not because of what we were trying to accomplish. We wanted the doctors to take exams. Dr. Cravioto wanted them to take exams as well, and was very confident that they could pass the exams. Our system wouldn't give those exams. So they take the review board exam, they come into our state, and they have to do a six-month externship under the auspices of a medical school. And once that's done then they have to be under the direct supervision of the medical directors in our clinics.

Our bill also requires that every one of our clinics that employs them has to be JCAHO accredited. And if they're not JCAHO accredited, their medical quality standards and protocols have to be equivalent to what JCAHO requires. So we think that we've addressed the issue of quality quite extensively. We are going to be providing better care than in any private medical group practice in California under this system. We challenge anybody in California to tell us that that's not the case and no one has ever told us that that is not factual. With regards to dentists, working with Dr. Vela and Dr. de la Fuente, eight courses were developed that UNAM recognized were not taught in their system that are taught in California, and they'd have to offer them in order for them to be equivalent. We put that language in. Eight additional classes are required before they come over.

And when they come and work in our clinics, they will have to work under what we call in California Extramural Dental Facility Structure. That is that again we're working under the auspices of a dental school. Protocols are arranged between that dental school and our clinics and there are protocols of oversight that are followed. Once again very

high standards, standards that are not met by anybody providing dentistry right now in California. So if you want to come in and get good quality care in this program or anywhere in California once this program operates, you want to come to our clinics. Because there'll be more oversight there than in any other place in the state of California, except for maybe the county of Los Angeles, and that's for different reasons.

Malpractice insurance is required; we have to provide it. We have no difficulties in that. We talked to the malpractice companies in California, the major insurers, and we did not encounter any difficulties in terms of privileges with hospitals either. We are in areas in which there may be one hospital that does not have a full staff to deliver babies. They use our clinic staff to staff their emergency rooms at times and to staff the delivery rooms. So we won't have any problems in being able to adjust the admission criteria to allow hospitals to allow these doctors to practice.

Now the big question I kept getting from Dr. Valdez is "what happens after the third year?" Well, part of this bill is that we require an evaluation by UNAM and by one dental and one medical school in California. And after the three years our vision is very simple. Our vision is that the experience that we're having will bring us closer together in the context of the professions. We will see what differences really exist and where they stem from. Are they real differences of quality, or are they simply differences in perspectives and the populations that doctors are trained to serve? In California there's a lot of concern that the patients that we're seeing now are contrary to the profiles that we teach our medical students now. The illnesses are different. They're a throwback to 10, 15 years ago. Why? You've got immigrants. That's no surprise to us, but it is a surprise to the medical community.

Now there's a lot of things that the medical community is attempting to do. One was a loan repayment program, \$3 million for 30 doctors. Now how many of you think that there is this huge reservoir of doctors that speak Spanish and know the culture in the United States of America right now? There isn't any. When affirmative action was working, it wasn't working. I'm a Chicano, I'm American-born, red, white, and blue, in Sacramento, California, great hospital, Sutter Memorial. But you know what the difference between me and the immigrant population is? I'm one of the few Chicanos that actually can speak Spanish pretty well. Most Chicanos that go into medical school don't speak Spanish. So do I want to run a game that says I want an ethnic last name, and as long as I have an ethnic last name that's good enough for me? I can put him into one of these communities. The reality is that even when it's working it's not working. And so the National Health Service Corps, everybody says that's great. Have you ever hired a National Health Service Corp doc? Some of them are real good, but many of them are only there to fulfill their obligations. And they develop a completely different attitude because the feds expect them to be more aggressive. They don't fold into the system of a clinic, many of them don't. Loan repayment, great idea, great program. Too much money, not enough docs.

So we tried everything, ladies and gentlemen. We looked at everything. We exhausted everything that's come before this bill. This bill makes a lot of sense to us—it's very

practical. I think the biggest challenge is to the community of professionals, to the medical community of this country, to the dental community, to the mental health community. Mexicanos bring illnesses with them and they take illnesses back. Who's winning under that proposition? Certainly not society. This should not be about turf, this should not be about professionalism—this should be about recognizing that what we've tried to do in the past has not worked. The problem gets worse and worse and worse. In California we have 6 million people who do not speak English well. Of that 6 million, at least 3.2 million don't speak English at all. And we're talking about universal healthcare? That's a paper dream. Yes you may have a card, but as long as our workforce of professionals are not competent to serve that population, then what do you have? You have fraud access, that's what you've got. You've got a game.

Let me tell you how they address it in California. Let us just get universal care and then we'll worry about the second component. I was told that just last week. Our association is comprised of nonprofit community health centers. Our attitude was the other guys have failed enough. Give us a chance to develop our own destiny. Give us a chance to propose our own solutions to a problem that in California is massive. Let us fail. Why shouldn't we be given that chance? We've been given that chance by policy makers, and we thank the legislature and the governor for that. And now the biggest challenge is trying to convince the foundation world, the individual institutions in dentistry and medicine, and academia that we deserve their support in trying something that they have failed to understand and to effectively address.

I thank this body, and I really thank again Dr. Warner and his students for having this dialogue, and I think that maybe you have started something. It depends on what's done with this afterwards. But I really greatly admire what you've done. If I had enough funding in my association I'd hire any of the ten even if they don't speak Spanish. Thank you.

David Warner: Thank you. And to introduce the next two speakers, I want to introduce the student who does speak Spanish, and also Dr. Jose Vela will be speaking in Spanish and one of the other students who you've already met, Gina Amatangelo, will translate. Amy Kirschenbaum is a native of Phoenix, Arizona, who graduated from Yale University almost three years ago. She worked for Lucent Technologies in Buenos Aries before coming to the LBJ School in September, and she's in the joint degree program with the Institute of Latin American Studies and the LBJ School.

Amy Kirschenbaum: Thank you. Our next speaker will be Dr. Alexander Cravioto. He is currently a Professor of Public Health at the School of Medicine at the National Autonomous University in Mexico City, or UNAM. In 1973 he received his medical degree with honors from the School of Medicine at UNAM. He continued his studies in pediatrics at the Institute of Pediatrics in Mexico City and the London School of Hygiene and Tropical Medicine, where he obtained a diploma and Ph.D. in public health. He has worked as Deputy Director at the National Institute of Health and Technology for Child Healthcare and has served as Dean of the School of Medicine at UNAM. He has recently received the National Award for Public Health given by the Mexican government in 1996

and has published numerous scientific articles and two books. Please help me welcome Dr. Alexander Cravioto.

Alexander Cravioto: Thank you very much for the kind introduction. Professor Warner, Dr. Soberón, ladies and gentlemen. First of all let me thank you for the invitation to be here. My presence here is thanks to an e-mail I received some months ago from Cory Macdonald asking me if I could send him information about a huge amount of things. The questions that he sent were so interesting that I left everything I had to do in the dean's office of my medical school and sat down to answer his questionnaire. Apart from specific questions about accreditation programs in Mexico, Cory also wanted a list of the people that I thought could be contacted in Mexico to help him with the draft of a paper that we all hope to hear very soon.

A few minutes ago we were shown a video of cowboys herding a large number of cats, and when I saw this I was reminded a bit of my eight years as dean of a medical school. The take-home message of this video, given by the presenter at the end of the film was: "We were finally able to get them all in one piece to the other side." That, I think, is the concern we always have as deans: how we give our students, during their years of training, the best possible chances to become the best possible physicians, that is "to get them in one piece to the other side."

In difference to many other professions, medicine is the only one that has always had a large group of individuals dedicated to its educational aspects. Last year in Lisbon, the Association of Medical Educators of Europe had a meeting of over 2,000 people discussing one single subject, accreditation and evaluation of medical training programs. And just last week in Copenhagen, the World Federation for Medical Education (WFME) had one of its world conferences to talk, almost exclusively, about global accreditation of basic and post-graduate programs and continuous professional development. The WFME has developed a set of standards for these areas which, we hope, will be used in the future as a system of international accreditation to assess the quality of medical education worldwide.

And why is this important? Because we feel, as Dr. Guillermo Soberón said a few minutes ago, that the quality of medical education is directly related to the quality of health care. In that sense, our responsibility as officers of medical schools is to train future physicians in a way that enables them, first of all, to help their own populations and second, to allow them to work wherever they decide to do so. This is why we were interested in collaborating with the initiative that Mr. Arnoldo Torres presented to you before this talk related to the possibility for physicians trained in Mexico to work in the U.S. This initiative is in agreement with policy clearly defined by the president of our university, Dr. Juan Ramón de la Fuente, who as a former dean of our medical school and a former Minister of Health has insisted on our participation in programs designed to help Mexican populations living outside of our country. When the Mexican Consul in Sacramento talked to me about the initiative that Mr. Torres and his group were developing, we invited them to our medical school and heard what they had to say. We asked a lot of questions about the initiative and the future of the Mexican physicians who

would be involved in this project, and after hearing their answers, we decided that the project was something that would be interesting for us to participate in because of several reasons. One of these was to compare the quality of our students and their education with that of professionals trained in other parts of the world. This is something that clearly goes in the same direction as the initiatives of the WFME or of the International Institute for Medical Education (IIME) in White Plains, New York, that is trying to develop a system to evaluate global requirements for medical graduates that would allow the flow of qualified professionals from one part of the world to another.

In Europe, where a unified system for accreditation of medical schools does not exist, countries and local regulatory bodies have had the same concern. Under their current laws, there is a free flow of professionals, including physicians, from one country to another within the EU. Each country can make some rules, like the knowledge of English to practice in the U.K. for example, but they cannot stop anybody coming from Greece, Ireland, Italy, Spain, or Germany to practice medicine in the U.K., if they comply with the former requirement, after having graduated in any school in those countries. Given this background, our personal interest to participate in the initiatives of the WFME and the IIME has been to determine our capacity to comply with international standards in our basic and postgraduate programs.

A second objective was to determine how these international standards would compare with the ones that we had developed in Mexico for our own national accreditation program now in the hands of a commission headed by Dr. Soberón.

Throughout this exercise we have learned three basic things. One is that although we have, or have had in the past, a large intake of students in our public medical schools, this has not diminished the quality of our medical education. Second, that our national accreditation program is comparable to other international systems and that our graduates meet with international standards. And third, that through initiatives like the ones being discussed in this and other meetings the United States, we can be sure that Mexican physicians working in your country will not diminish your standards for health care.

Public universities in Mexico, especially UNAM, have the obligation to train good physicians to help our population. We do not prepare students to practice in other countries, we train them to be good doctors that can work wherever they think it is best for them and for the patients under their care. Thank you very much.

Amy Kirschenbaum: Thank you, Dr. Cravioto. Our next speaker is Dr. Jose Antonio Vela, who graduated with honors from the School of Dentistry at the National Autonomous University of Mexico in 1976. He continued his training and obtained his master's degree in the area of oral prosthetics in 1985. Over the course of his career, Dr. Vela has made significant contributions to the development of dentistry and especially at UNAM where he became a faculty member in 1975. Since then he has held several appointments: Chair of the Oral Prosthetics Masters Program, Coordinator of the Post-Graduate Research Division, and Associate Dean. He has been Dean of the School of Dentistry since 1997. He also holds several appointments with UNAM's university

senate. He has been speaker and author of more than 95 presentations and publications in Mexico and abroad. Please help me welcome Dr. Jose Vela.

Jose Vela: Thank you very much. I would like to say thank you to Dr. David Warner for this invitation. Also I would like to say thank you very much for this panel to Arnold Torres and Dr. Cravioto, and especially to the former president of my university, Dr. Soberón. When I was a student you were the president of my university, and I think we have a great leader here today. Thank you for all your work with the students back when I was there. Thank you very much, Dr. Soberón.

There is not much time, but I would like to talk about my dental school first of all. The dental school of my university in Mexico is going to be 100 years old next year. It was the first dental school in Mexico. From this dental school, a lot of students a long time ago proposed to make another dental school in the country. We have now 65 dental schools in Mexico. A lot of our students have also gone to Guatemala, El Salvador, Venezuela, Puerto Rico, and the Dominican Republic and created new dental schools.

I would like to talk now about this program. My dental school has 3,000 students. It's so different from a lot of dental schools in the United States. I would like to take a few minutes to talk about this, and I would like to speak now in Spanish to make it easier. [The following statements by Dr. Jose Vela were spoken in Spanish and translated into English.]

My students that graduate from dental school have an academic life of five years compared with a four-year life of those who graduate from medical school. The dental students today see approximately 800,000 patients per year, which demonstrates the dental students from UNAM see about 150 percent more patients than students from other schools, and this represents their great practical clinical experience. Why do I touch on this point first? Because the credibility of the preparation of dental professionals in Mexico didn't exist.

I want to comment on the creation of this law, and I want to recognize what Dr. Torres said in that there are eight areas in which our education differs. And I'm convinced that this situation in the administration of dental service differs from one country to another. Also particularly in the management of pharmacology we differ. But I think that these are two points that it's possible to address. The most important thing is to look for opportunities—there are great opportunities for both universities. I speak of universities because once the law was approved, it's clear to me that the dental faculty of UNAM needs to coordinate with a dental school from the state of California. If the dental schools in California close the gap and don't allow any relationship with any of them with UNAM, then there would be no possibility of having a program.

We can have the law approved, but we need just one point that today we're working on. We need to get to know for the first time the University of California. We need to get to know the universities and dental schools because these universities don't know the system of dental education in Mexico. We're trying to be understood so we can begin working together. And it's for this reason that with the University of Southern California

we'll begin a program of exchange between medical faculty and students. And visiting the dental school at UNAM, I'm convinced with time we will come to develop a relationship, even if there is disagreement now.

What we're looking for today is to get to know each other because I'm convinced that if we work together at the academic level then other policy points will follow. The success of this project is guaranteed, but we have to work a lot between universities. There's a big opportunity to treat thousands and thousands of Mexicans who need service. The cousins of my colleagues in Mexico are here in California and in Texas. So I believe that this law will be successful and that there will be hundreds more programs to assist both countries. We have a huge opportunity for scientific and academic and medical collaboration.

I want to publicly thank the work of Arnold Torres and recognize the efficient work of a huge group of people and thank Dr. Cravioto and his work. The road ahead of us is long. I don't know if it'll take a few months or many months, but it is work worth undertaking.

David Warner: This is the end of this session. Thank you very much.

The Dallas Nurses Initiative

David Warner: To introduce the next two speakers, we have a member of the class, George Rivas, who speaks Spanish and is originally from Edinburg. He went to high school in Austin and also speaks Russian and a little Romanian. He is in the joint program between the LBJ School and the program in Russian, Eurasian, and East European studies. I assume he will be introducing our next speakers in English.

George Rivas: Good morning. Michael Denis has served in the health profession for many years. He was a vice president of All Saint's Episcopal Hospital as well as the senior vice president of the Lubbock Methodist Hospital system. He just became the director of the Prairie Area Health Education Center at the University of North Texas. Please help me welcome Mr. Michael Denis.

Michael Denis: I'm going to be talking about the Dallas Nursing Initiative, and then Dr. Nelson will talk about another initiative. We're here to talk to you about things that are going on in the Valley and in the Dallas/Fort Worth metroplex. Let me say that regarding my project, I'm the least important person in the project. The guidance, the inspiration, the initiative comes from Steve Shelton and Mary Wainwright of the East Texas AHEC, headquartered in Galveston. April Robinette actually does all the work. I don't know exactly why I'm up here, except that I do care a great deal about this issue.

What are we doing in Dallas? Well, first we have a problem. We have a problem that is greater than just not having any nurses. We know America's running out of nurses. Here are some more facts that I'm sure you know. Less than 7 percent of the registered nurses in Texas have a Hispanic surname, and as Mr. Torres points out, that doesn't mean they can speak Spanish or Russian or German or anything else. Our estimate is that no more than 4 to 7 percent (and that's probably generous) of the nurses in Texas hospitals possess a conversational command of the Spanish language. I've had people say to me (newspaper reporters do this a lot), when we talk about making Texas nurses bilingual, "Well, what about Vietnamese? What about Croatian?" Here's the fact of the matter. If you're a hospital administrator or a nurse or a physician working in a hospital, you *might* have a patient today who speaks only Croatian. But you're *going* to have a patient today who speaks only Spanish. As we know here, teaching Spanish to adult non-Spanish-speaking nurses has had only limited success. And that's another one of those generous statements. We all know that Hispanics will be the dominate population group in Texas in 30 years. In fact it's going to be sooner than that. In the Dallas/Fort Worth area, Dallas County is becoming Hispanic at a faster rate than Tarrant County.

There are thousands of graduates of Mexican and other Latin American nursing schools currently living in Texas, and many more thousands being trained in Mexico. There are significant barriers that exist for those people seeking to practice their profession in the United States of America. To become a registered nurse in Texas, a Mexican nurse has to pass three tests. The TOFEL, which is the English competency test, the CGFNS, which is the Commission of Graduate of Foreign Nursing Schools (more about that in a

moment), and the INCLEX RN, which is the national licensing exams. The pass rate for Mexican nurses on all these exams is about 10 percent. We have something in Texas that I call—I don't know what the Board of Nurse Examiners would call this, but I call this—the 24-month rule. It says in the state of Texas that you have had to practice nursing for 24 of the last 48 months in either your country of origin or someplace else, but if you've been out of practicing nursing for 24 of the last 48 months and you were trained in a foreign nursing school, you have to start nursing school over under the rules in Texas. We don't do that with people who are educated in this state. You can go to a review course, you can prepare yourself to enter the profession again. But if you have somehow not practiced nursing for 24 of the last 48 months, you're out of business. And of course, we all know the immigration status of the average Hispanic nurse can be a barrier.

So what are the real issues? We deal with this every day, and we get all kinds of people telling us what the issues are. Here's what we believe they really are. The curriculum in Mexican nursing schools varies a little bit more than it does in Texas nursing schools. What's taught from nursing school to nursing school varies a little more than we have in the United States. And Mexican categories of nursing and Texas categories of nursing are not the same. It's difficult to have these communications, and I do this on a daily basis. It's difficult to talk to people in Mexico in terms of registered nurse and licensed vocational nurse, and it's difficult to make that conversation in the reverse.

Next, Mexican nurses typically lack both sufficient computer skills and sufficient English language skills in order to pass the examinations. The TOFEL's not enough. You're going to have to have a clinical command of the English language, which is different than a 550 on the TOFEL. In addition to that, we've got to have computer skills. Nursing examinations in the United States are given on a computer. If you're not used to that, it can be a very intimidating process.

We've already talked about the 24-month rule in Texas as a limiter. I have found that the regulatory process, whether you're dealing with the Immigration and Naturalization Service or others, can be inflexible. It's not always inflexible, and everybody's got the right motivation. Everybody wants to protect the safety of the community. But it's important to focus on the facts, because here's what's really going to affect the safety of the community. If I can scare you with this one, I'll tell you that the average age of a nurse in Texas is 46. Here's what you don't know. The average age of when nurses leave hospital nursing is 53. We have 20 years to fix the problem. So we've got no nurses who speak Spanish, and in addition to that our nurses, the vast majority of them, are going to walk out of the hospital in six years. I've just had some major surgery, and I was really grateful there were nurses there. If I have to go back again in six years, I want there to be somebody there.

What can we do right now? Well, if you're from another part of the state where this initiative may not have taken hold, you can do some things right now. You can find the Hispanic nurses currently living and working in your area of the state. April Robinette of the AHEC staff ran some meetings for Hispanic nurses in the Dallas/Fort Worth area and 600 attendees came. Now you'll get people who show up who are physicians and other

professionals, but 600 people came, and a good 200 of those were nurses living in the Dallas/Fort Worth area right now.

You can provide accurate information to all of these nurses. If you don't speak English very well, if you contact the usual places to get information about nursing, it can be very difficult and you can get misinformation. You can provide accurate information right now.

You can provide the following services to Hispanic nurses. You can provide review courses for those whose English language skills are sufficient. We have designed a course, we put people through it to prepare them for the CGFNS and the INCLEX RN. Get them ready to take the examinations. And we believe we're going to hit a 50 percent pass rate on the people who've gone through our course. That's our goal, 50 percent pass rate, up from 10 percent. You can arrange for English language training for those who have a need, and this has to be a more intensive English language training; this has to be a clinically based English language training.

You can assist people in securing part-time work in clinical settings. There are a lot of people working in hamburger joints right now who are trained as nurses and other licensed healthcare professionals. I don't have any problem with working in a hamburger joint; if that's what you want to do, it's good honest work. But if you were trained as a nurse and you're in that drive-in window because you can't navigate the process, we need to get you out, back into the profession for which you were trained in which you'll do an excellent job. I was one of the people who clapped when Mr. Torres said, "This is all about we're better than the other guy." These individuals were professionals in Mexico doing an outstanding job of taking care of people in Mexico, and we need to get them away from the burger joint and back to caring for patients.

You can assist in securing scholarships and loans. On one of the breaks, somebody said, "the hospitals are really behind this." I can guarantee you they are. If you start approaching and working with those in your area and say, "let's bring those Mexican nurses or those other Hispanic nurses out of the burger joint and get back them into the process. Will you help pay for it?" I guarantee you can get that done. And those are the things you can do right now.

What about the next step? Well, I would suggest that we either modify or eliminate the 24-month rule. This doesn't exist in other states. We've got to consider that, and I don't know exactly how to do that. I'm not interested in a big fight. I want to work collegially on this, but that's an issue.

The next point I'm not so even-handed about. We need to either achieve dramatic improvement of the CGFNS process or we need to eliminate that requirement in Texas for people who already live in the state. Fourteen states do not require this. I don't think it's required in California. I heard at one of the breaks the New Mexico board of nursing has just decided to cease requiring it. We have one individual who has taken the CGFNS exam who's a Mexican national, and he's done everything according to the rules. He's one year out, trying to find out if he passed the CGFNS. I called and spoke to the

executive director of the CGFNS myself in Philadelphia and got into a long discussion about the quality of nursing education around the world. I'm trying to find out if José passed the exam. We've got to do something to improve it or eliminate it.

We need to obtain approval, in my opinion, for the use of the Mexican National Identification Card for taking licensure examinations in Texas instead of a social security number. I noticed that there is a recent position taken by the California Board of Nursing that I believe concurred with the National Organization of Boards of Nursing that we ought to do something about that social security card requirement. And then we need to obtain some adjustments in immigration policies to include NAFTA issues. I'm not a lawyer, but I've seen that portion of the NAFTA treaty that addresses nursing, and I read English really well and I can read Spanish kind of well, but in the English translation it says that nurses from Canada, the U.S., and Mexico will be treated the same as far as I can see, and that's not happening. It's just not happening.

What about ultimate actions? Here's my favorite ultimate idea. Establish a formal partnership between Mexican schools of nursing and U.S. schools of nursing. We've discussed this with the Mexican government. We've discussed this with the Consul General for Mexico in Dallas and his employees and associates, and they love the idea. If we can get a situation where a portion of the nursing education is done in Mexico, the student transfers to the U.S. on a student visa, completes his or her training at a U.S. school of nursing, and graduates, then guess what? We don't have to have some kind of formal decision about the CGFNS. It no longer applies because the degree is granted from the U.S. university. And there's no requirement for the TOFEL because the degree is granted from a university in which the instruction is given in English, and some of the other differences can be worked out by coordinating the curriculums between the universities.

I'd love to see a standardized definition of nursing between Texas and Mexico. At one break I had a discussion with an individual who's a nursing officer. And we were talking about is an *enfermera técnica* a licensed vocational nurse, maybe? Well, not really. And what about an *enfermera general*? Is that like a registered nurse? Maybe yes. We need to standardize the definitions. We need to create a seamless border system. If we don't do these things, bad things are going to happen. The wheels are going to come off in general with nursing in Texas. We are going to run out of people in our hospitals. It's not the kind of job that you want to do when you're 56, 57, 58. I'm 53, so I don't think 57 is old, but I'm telling you, a crisis is coming in staffing in general. Thirty-five percent, 40 percent, 45 percent of our population are going to be primarily Spanish-speakers. We have an opportunity to work with our brothers and sisters in Mexico to take care of each other. We've got to do it. Thank you.

George Rivas: Next we have Dr. Eldon Nelson. Dr. Nelson is the Dean of the School of Health Sciences at the University of Texas at Brownsville/Texas Southmost College. Dr. Nelson received his B.A., B.S., and M.S. degrees in biology at East Carolina College and he received a Ph.D. in medical physiology from the College of Medicine at the University of Florida in 1974. Before joining UTB/TSC Dr. Nelson was among the inaugural

faculty that initiated the Oklahoma College of Osteopathic Medicine in 1975. Today he is going to describe an innovative program he and his associates have developed with the support of the hospitals in Cameron County.

Eldon Nelson: Good morning! It's indeed a privilege to be here with you and my distinguished fellow speakers at this most important conference focusing on providing health professionals from Mexico to meet the current and emerging health care needs of Texas and the U.S. I am very impressed by the good work that the students in the School of Public Affairs have done to develop, arrange, and present this most professional conference. I thank Dr. David Warner for visiting our institution last year and for his enthusiasm for our developing Mexican Nurse Education program at UTB/TSC. It was a special delight to have received his kind invitation to share with you what we believe to be a unique program to support Mexican nurses in gaining Texas licensure and employment in the Lower Rio Grande Valley.

Mr. Denis' excellent presentation provided a perfect *segue* to my chat with you today. Mr. Denis discussed the circumstance that there is a severe nursing shortage in the U.S. (and Texas) and that it is increasing. A 2002 report by the American Hospital Association estimates that there is a current shortage of 126,000 registered nurses in the U.S., and this number is expected to increase to more than 800,000 by 2020.¹ To complicate and exacerbate this issue, the enrollment in nursing schools has been declining since 1993,² and the production of nurse educators is insufficient to ameliorate that decline. The Southern Regional Education Board reported a survey of 275 of 525 nursing programs in 16 southern states and the District of Columbia, that shows ominous evidence of this decline in nurse educators.³ In 2000-01, there were 432 unfilled faculty positions and 971 positions filled by nurses without proper credentials. During that period, 144 nurses retired, while only 237 masters and doctoral degrees were awarded for nurse educators. The report estimated that by 2006, 784 nurse educators will retire. Simple math reveals that if this trend holds, and is reflective nationwide, we will have to employ even more inappropriately credentialed nurses as faculty in our nursing schools, threatening the quality of future nurse education.

The nurse educator shortage is affecting us at The University of Texas at Brownsville/Texas Southmost College (UTB/TSC). We have been unable to fill a nursing faculty position that has been vigorously advertised nationally, state-wide, and locally over the past year. We received two applications for the psychiatric nurse educator position, but neither have proper qualifications. The crisis, we have realized, is not just affecting "others," it's affecting "us." It's not a problem found only "over there"... it's here! Moreover, as my colleague deans tell me, it is everywhere in the U.S.

¹ American Hospital Association., "Trends Affecting Hospitals and Health Systems," *Trendwatch Chartbook 2002* (Washington, D.C.: The Lewin Group, November 2002).

² Ibid.

³ Aiken, E., *SREB Study Indicates Serious Shortage of Nursing Faculty* (Atlanta, GA: Council on Collegiate Education for Nursing, Southern Regional Education Board, 2002).

I believe that at this moment Mr. Denis' Dallas Nurses Initiative and our Lower Rio Grande Valley Mexican Nurse Education program may be the only programs in Texas initiating programs to educate Mexican nurses to become licensed in the U.S. I am delighted by his AHEC program that educates legal U.S. Hispanic immigrants, while ours is directed principally to Mexican nurses not having U.S. residency.

Area hospitals have tried to meet the shortage over the past years by recruiting nurses from other parts of the U.S., then eventually, outside the U.S. They have spent hundreds of thousands of dollars recruiting English-speaking nurses from Canada, Europe, and as far away as Australia. As the need has amplified, they have recruited from non-English speaking countries like the Philippines, Puerto Rico, and Spain. They have found that though foreign nurses are highly trained, there has been great difficulty in attaining licensure in the U.S., and many have left the Valley. Even Canadian nurses of long service have left the profession or the U.S. rather than attempt the national licensing examination. This history highlights the important difficulty non-English speaking foreign nurses have had passing the U.S. licensure examinations.

I arrived at UTB/TSC over two years ago. In the mid 1980s, I had started a program in Michigan that was needed because there was a shortage of medical students entering residency programs of the hospitals in Detroit. That program joined 12 very competitive hospitals together with Michigan State University to address the common issue of medical intern and resident shortage that was adversely affecting their providing services in the hospital. They formed the Consortium of Graduate Medical Education and Training with Michigan State University to address this issue. Over the next few years, the Consortium became so successful at attracting hospital staff that it was expanded statewide.

In that instance, several Detroit hospitals asked a regional university to address a health care professional (intern, resident) shortage problem. In Brownsville, the area hospital CEOs asked their "community" university, UTB/TSC, to help them meet their worsening health professional (nurses) shortage. The Consortium for Health Professional Education (CHPE) was formed. This consortium of four area hospitals and UTB/TSC has been working for the past 18 months to address many problems of nursing enrollment and graduation. The hospitals have been the primary resources supporting the 50 percent growth in our nursing programs. (The four hospitals are Brownsville Medical Center, Dolly Vinsant Medical Hospital in San Benito, Valley Baptist Medical Center in Harlingen, and Valley Regional Medical Center in Brownsville.)

Our work began to address the issue of nursing shortages by assessing the degree of the health professional shortage problem. The university conducted a survey (January to March, 2001) of the health professional needs of the four area hospitals. The following table presents only the nursing shortage data. The 2001 survey of the four area hospitals showed that there were 261 openings, 181 for RNs alone. These hospitals proposed that their future needs would likely increase to 556 open positions per year, including 289 RNs per year, over the next several years. The need for Certified Nurse Assistants and Licensed Vocational (Practical) Nurses are also reported to increase over the next few

years. If one considers that these data only reflect the need of the four area hospitals, and that the physicians offices, clinics, long-term care facilities, and home health care also will employ nurses, the number representing the need for nurses could easily double for the Brownsville/Harlingen area—nearly 600 openings for RNs alone per year.

Four Brownsville-Area Hospitals, January-March 2001			
<i>Nurse Type</i>	<i>Employed</i>	<i>Openings</i>	<i>Future Need per Year</i>
CNA	282	37	99
LVN	309	30	124
RN	355	181	289
BSN (also RN)	149	12	39
Masters (also RN)	18	1	5
Totals	1113	261	556

The UTB/TSC nursing program produces 40 to 60 RNs a year. I could double our graduating number, thus requiring more faculty and more facilities, and not begin to approach meeting the projected need in our area. Projected increases in all the RN programs in the Lower Rio Grande Valley, i.e., UTB/TSC, the University of Texas at Pan American, and South Texas Community College, if doubled today, would not meet that need present two years ago. And, doubling our graduation rate (which is limited by faculty, facilities, and fiscal resources) is frankly, not going to happen today nor any time soon. If we examine the predictions of the exploding population increase in Texas and the Texas/Mexico border region,⁴ we can only imagine that nursing will have to grow to four or five times its current number in the next 30 years. No one in the health sciences educational system that I know has been considering or planning to address those levels of need.

The Texas Workforce Commission has indicated that there will be a 22.2 percent increase in jobs for RNs in Texas by 2008, and by that time there will be 4,935 openings each year.⁵ An increase in the shortage for LVNs is nearly as threatening over that same period.

Being located along the Texas/Mexico border has another impact upon health care and health care delivery. Whereas the Hispanic population is increasing in many areas of the nation, in Brownsville, it's not a future event—Brownsville's population is currently 93

⁴ Murdock, S.H., White, S., Hoque, MD. N., Pecotte, B., You, X., Balkan, J., The Center for Demographic and Socioeconomic Research and Education, *The Texas Challenge in the Twenty-First Century: Implications of Population Change for the Future of Texas* (College Station, TX: Texas A&M University, Department of Rural Sociology, 2002).

⁵ Texas Workforce Commission, *Future Employment Outlook for Registered Nurses in Texas* (Austin, TX., 2002).

percent Hispanic. Our area must respond to not only the increasing population, but our health care system must provide health care to a predominately non-English speaking population. More Spanish-speaking nurses must become part of the Texas programs of nursing and health care delivery.

The question presents itself that if our nursing schools can't produce the nurses in the LRGV to meet our needs, and we've not been successful in getting foreign nurses from Asian, European, and Caribbean realms to come and stay in the Lower Rio Grande Valley, what can we do? For us, and perhaps others along the Texas/Mexico border, the problem is going to become worse. We must look to our immediate south—Mexico! The best and most likely source of nurses is in Mexico. There is an abundant supply of nurses, they are nearby, adequately skilled, and want to come to the U.S. Because of the Mexican-Hispanic presence in Texas and the border area it is likely that they would stay in the Valley. The problem is that few Mexican nurses speak English.

About a year and a half ago, subsequent to urging by the area hospitals and a few interested citizens from both Brownsville and Matamoros, the university formed a community taskforce to discuss developing a program to educate Mexican nurses to become successfully licensed and employed in the U.S. The taskforce decided that a basic educational program must be developed that will train Mexican nurses graduating from licensed nursing programs to 1) speak clinical English, 2) become knowledgeable of the U.S. healthcare system, and 3) be trained in the professional nursing role and current medical technology of the U.S. hospital system. To provide this program of education and training, the taskforce agreed that a unique partnership would have to be developed—a partnership involving the university, area hospitals, and a private entity that could manage and provide the clinical education program.

This partnership was necessary because the Mexican nurses could attend the university as part-time students, but they could not be entered into our university BSN program as they were not licensed to practice in Texas. The Texas Board of Nurse Examiners does not permit BSN programs to provide either clinical training or English training to foreign nurses not licensed by Texas. The university can, however, provide a program of coursework in the U.S. healthcare system and hospital and nursing processes.

The hospitals agreed to provide the clinical environment for the Mexican nurses to learn clinical English, experience the American hospital process, and observe advanced medical practice. However, they were not comfortable with having to develop or manage the special education program to provide this rigorous training. The hospitals, too, agreed to bear the costs of the initial pilot study, if the process involved the consortium in developing and managing the budget.

As the university BSN program was not permitted to provide clinical experiences or English training in nursing program coursework, a local health education agency, The Partnership Institute, is involved to develop and manage the clinical and clinical English training components and the general Mexican nurse education program.

The Partnership Institute, in collaboration with the university and the area hospitals, developed a pilot program for training Mexican nurses to become licensed and employed in the U.S. The Partnership Institute created the Fellowship of International Nursing Development (F.I.N.D.) program. It is the pilot program for the Mexican Nurse Education Program that will provide educated, English-speaking Mexican nurses help with becoming successfully licensed and employed in the U.S. Project FIND is composed of three phases, with the pilot program being Phase III—a six-month program leading to successful employment as licensed nurses in Texas. Phases I and II establish the English-speaking Mexican nurse student “pipeline” for Phase III. Phases I and II will involve Mexican universities and nursing schools.

Phase III is a six-month program defined to prepare 25 specially selected Mexican nurses to pass three required examinations for Texas nursing licensure: Test of English as a Foreign Language (TOEFL), the Commission on Graduates of Foreign Nursing Schools (CGFNS), and the National Council Licensure Examination for Registered Nurses (NCLEX-RN). The program is a minimum of 40 hours per week for 24 weeks. Training may occur in the evenings and weekends as the program schedule requires. The students will not be permitted to have outside employment, and they are not employed in this program. It is an intensive program of education and training to assure their success on the licensing examinations. They will be in the classroom a half-day each day for most of the program learning about the U.S. health care system and the nursing process and relationships.

Phase III will provide nine semester credit hours of junior/senior level academic coursework (half-day every day for 16 to 24 weeks) at UTB/TSC or at our Mexican university partner, Universidad del Noreste de Mexico, across the river in Matamoros, Mexico. The academic coursework focuses on the U.S. healthcare system and American nursing procedures and relationships. They will spend a half to full day in the hospitals learning clinical English and new technologies and methodologies by observing patient care under the direction of an assigned nurse educator.

Phases I and II will be developed over the first year to provide a “pipeline” of English-speaking Mexican nurses to the Phase III program. This program is aimed at providing one or two years of English training in the Mexican nursing schools (Phase I) and providing continuous English training in the subsequent years of practical experience required by Texas regulations and the BNE (Phase II). This training program will be developed and managed in cooperation with partner nursing schools in Mexico and the Universidad del Noreste de Mexico in Matamoros. UNM will also serve as a principal site for TOEFL training and testing. The level of success on the TOEFL examination will define a program of English training to prepare the students for competitive entry into Phase III of our program. UTB/TSC will assist in English program development and delivery as the program design defines. University participation may be through distance education technologies or by direct classroom coursework on campus or in Mexico.

The pilot program (Phase III) will pay all expenses (housing, meals, tuition/fees, and examinations). It will pay for prior TOEFL preparation (Test of English as a foreign

language), as well as provide a small stipend for living expenses. The program plans to house and feed the students at the Universidad del Noreste de Mexico (five miles from UTB/TSC) and transport them to/from their classes and hospital experiences daily. Currently, two of the four consortium hospitals will sponsor the 25 students in the program.

For admission, a student should be a Mexican national having residence in Mexico and be an RN-equivalent nurse in Mexico who has worked for at least two of the last four years. The candidate must have scored at least a 540 on the written TOEFL examination and be able to commit to the full six-month program of study away from the family. The candidate cannot be employed during the training program and must be willing to sign a three-year contract with the sponsoring U.S. (Brownsville/Harlingen) hospital. Also, the candidate must provide \$500 at the time of admission as a deposit in commitment that he/she will meet the stated regimen of training of the program. The deposit will be refunded to the student upon completion of the program regardless of his/her success on the licensure examination. Deposits will not be refunded to those leaving the program before its end. Twenty-five Mexican nurses meeting the admission criteria will be selected for the program. Selection criteria will involve academic success, an interview, English writing skills, and nursing skills.

The program has been well received in discussions with Mexican officials, Mexican physicians, and faculty and administrators of nursing schools in Mexico. All have agreed that the program would offer new opportunities to Mexican nurses. Most have agreed that there is unemployment and underemployment among health professionals in Mexico. Mexican officials have applauded the program for the impact it will have on Mexico. They have agreed that it supports the thrust of Mexico's President Vicente Fox to encourage Mexican employment in the U.S. and the return of U.S. dollars to the needy families and economy in Mexico. Most persons have expressed that this program supports advancement of Mexican nurses, provides substantially increased incomes to Mexican families, and promotes enhancement of medical/clinical knowledge and awareness of Mexican nurses that will enhance the Mexican healthcare system in the future. Additionally, the program brings together U.S. and Mexican health professionals and institutions of higher learning to develop programs and pathways that will enhance the Texas/Mexico border region.

However, some believe that the program (or the threat of the potential expansion of similar programs in the U.S.) may draw from Mexico its most talented nurses in too large a number that will diminish availability of healthcare to Mexican citizens. Some have argued that these programs promising jobs in U.S. hospitals in the past have misled many Mexican nurses. Many have paid thousands of dollars and/or invested many months of training to programs that told them of successful licensure and employment in the U.S. hospital system. Most ended without success on the essential examinations, most not passing the first level TOEFL examination, and most losing their investments.

This program is a pilot program. It is designed based on the lack of success of other programs attempted in the area. It depends heavily on the selection of licensed Mexican

nurses, who will first have demonstrated high-level English ability and success in nursing. This six-month design is purely speculative in its origin. It suggests only that six months of intensive and rigorous exposure of Mexican nurses to classes on the U.S. healthcare system and nursing processes, complemented by a minimum of 20 hours per week clinical exposure to clinical English and hospital processes, should be sufficient for examination and licensure in the U.S. Only the conduct of the program will tell if it was wisely designed and will reveal the design that can lead to success.

The program is overseen and evaluated monthly by an advisory board made up of representatives from each of the program partners. Modifications are expected in both design and budget as the progress and success of the students is monitored and measured through formative evaluation methodologies. Special assistance will be offered to individual students as their academic, English, or clinical needs are discovered. The program will be carefully examined at mid-point to assess if program design and length will be adequate. The advisory board will be the agent to determine if the program needs to be changed, lengthened, or terminated as the level of program success is defined.

All those involved are excited about the potential of this unique program. We believe strongly that a program for training Mexican nurses for licensure in the U.S. is essential to meet the nursing needs of the Valley, and likely the nation. We have confidence that the combined efforts and dedication of the university, the hospitals, private enterprise (The Partnership Institute), and our Mexican partners will define a program of success. The program is tentatively scheduled to begin in the fall semester, 2003. Thank you.

David Warner: Thank you very much, Dr. Nelson.

[Lunch and Concurrent Breakout Sessions]

Discussion of Breakout Sessions and Final Comments

George Rivas: I was in the nursing breakout session, and I thought it was really productive. We started off discussing some of the issues, basic nursing cross credentialing that we are looking at. We started off brainstorming some of the barriers for collaboration. These barriers included some of the things that we had mentioned here earlier, for example, some of the biggest barriers were assumptions about Mexican nursing education. Because on the U.S. side, there was a feeling that not many people knew much about nursing education in Mexico. There were also issues related to a potential “brain drain.” What would happen if we started recruiting Mexican nurses? Would there be a shortage of nurses in Mexico?

Towards the end of the session, we started to propose possible solutions for areas for further collaboration. For example, the Texas Board of Nurse Examiners is going to be looking at the 24-month rule when the board meets in April 2003. At that meeting they will also look at whether Mexican nurses in the U.S. will have to take the CGFNS exam. There are also some questions about interstate compatibility because the issue is not only with compatibility among nursing credentials between the U.S. and Mexico, it is also within the United States. There is an entity called the Compact of Twenty—20 states have agreed to establish standardized core licensing requirements.

Another proposal that was discussed was to examine English requirements for Mexican nursing curricula. A lot of nursing schools in Mexico are beginning to establish English as a required language as well as computer literacy. Another opportunity for further collaboration is that a number of nursing textbooks are used in Mexico and the United States. So there is a lot of overlap in the education, already as we speak. We also began to look at opportunities for further collaboration between nursing schools and certification bodies. We all agree that there would be benefits from communicating best practices in training Mexican nurses within the United States. For example, with these model programs that we discussed earlier in the morning, we just need to get the word out that programs like this exist. We also began to look at the state of nursing education. What do we need to do to get more nursing educators in nursing schools?

These are pretty much the main points that we talked about in the nursing breakout session. I would be happy to take any questions once the other summaries have been presented. Thank you.

David Warner: Is there anything else anyone would like to add about the nursing breakout session?

Stephanie Tabone: I just want to make one clarification on the licensure compact. What that is actually is that for the 20 states that are currently in the compact, a nurse licensed in any one of those states could practice in any of the 20 states. The goal is for all the states to sign onto the compact so that nurses can practice with their license, wherever

their resident license is, in any of the other compact states. Just like driver's license compacts.

David Warner: Okay, good. Shall we do physicians next?

Adela Valdez: We had a very lively discussion that initiated first with some presentations, and I'd like to have Cory proceed with bullet points of that discussion.

Cory Macdonald: Basically, we put up a statistic. The statistic was that only 1 percent of people who receive ESFMG Certification, which an international medical graduate must have to get into U.S. residency, were Mexican citizens. The question that I posed to the discussion group was are there explanations for this, and would it be a good idea for the U.S. and Mexico to try and do things to increase this percentage? We had a lot of people in the room that had different ideas about whether it would be a good idea or not, and how to do it if it is a good idea.

Adela Valdez: I then opened up the question as to whether there were other obstacles that had not been addressed in the papers. Obviously, we did have some input from the people from Welcome Back, the physicians there. They mentioned that English definitely is a major obstacle, as well as understanding of the U.S. healthcare system. And the economic challenge is for those physicians and nursing health professionals that live in the U.S. that are Mexican-trained to be trained in the U.S. They'd have to give up their jobs, and they can't do that, or work two or three jobs, while they continued with this kind of training. So that would be a very difficult undertaking for them.

In looking at philosophies though, and especially with the group that we had, it was very clear that one of the main things we need to focus on is the fact that it is a U.S. problem, the fact that we have a low workforce as far as Mexican-Americans coming into our system. We are not doing the kind of work that we need to do within our own healthcare system to become culturally competent. We are not becoming diverse. We have a population that obviously begs for this, but our systems are not addressing it, and now we are looking to Mexico to help us with that. That was very clear.

Cory Macdonald: One thing I'd like to add is that a consensus seemed to emerge that the solution to this problem, even though it lies on U.S. shoulders, could be mutually beneficial to both countries, because there is a problem of a negative stereotype in the U.S. towards medical education in Mexico. If a possible solution is getting some doctors in here that can show that they know what they are doing, then that may do something to disprove that stereotype. So although it is the U.S.'s problem, the solution may be mutually beneficial.

Adela Valdez: There are some win-wins. Obviously, there are a lot of new immigrants. Some of them are not even documented. And Mexico does see that as their responsibility, and in fact, it's part of their constitution. They do not want to ignore this problem, and they want to see how they can address it. Certainly, they are willing to work with whatever outcomes we come up with to help those immigrants get the healthcare they need. So they actually really applauded the California initiatives, very

much so. We'd like to add the biases towards medical education in Mexico, and there was definitely a lot of time spent on how the licensing people don't quite understand the Mexican education system. Again, we talked about the certain biases that the U.S. system has against the Mexican physician, even with how many we are recruiting as foreign medical graduates.

Also, we have a student representative that is currently an internal medicine physician in the residency program in Harlingen. He has been a medical student in Mexico and now is a professional cardiologist. He had to say the same things, that the system itself did not prepare him for the U.S. system. There are some English language issues, but a lot of it has to do with the lack of information given to the students because obviously they don't want a brain-drain. They don't want to introduce this information, and they say very obviously that there might be a lot of physicians out there, and a lot of them are unemployed, but those that are the most bright and the most promising are usually the ones that they don't want to get trained in the U.S. and stay in the U.S. So I think there was some very important dialogue in reference to that. I think for the bottom line, we came down to what we felt could be some very important outcomes.

What came out of it, I think, is that there very much needs to be dialogue at the very upper echelon levels first. It seems that when that doesn't happen, there is a lot of friction politically and otherwise. So the universities need to talk to universities first about programs and getting consensus about the results. Once that happens, and there is open dialogue and initiatives, the biases that they are concerned about hopefully will start melting away. There was talk about interchanging faculty, exchanging students, and preventing that brain-drain and at the same time sharing brains. So I thought that was a very good way to approach this. Again, they focused a lot on the pilot projects that are already ongoing because they felt that that would be a good way to focus on something that's been successful.

Besides that, one of the other most important things that was brought up is again the global licensing agency, and how this could help unite certification globally of different medical schools and prevent this problem of exchanging and the problem of professional bias. There is also the idea of interchanging of faculty—I think the main focus was that although Mexico does not have a lot of technology in some areas, they are very rich in culture, very rich in their clinical skills, and as such, could add a lot to the education of physicians in the U.S. That interchange would be very much looked for, and especially now with the ACTME requirements of core competencies that require a lot of those to be integrated into the learning process.

So we look forward to working with these initiatives. These initiatives will be placed on the website as well as the transcript of this meeting. What we also obtained was, I thought, a good network. I think one of the goals was to try and have dialogue and meet each other, and we have. I think individually, all of us have some plans of what we want to do with the information we've gotten and certainly the people we've met. Our group took everybody's names and email addresses, and we are hoping that will be on the web, as well as the article that deals with the global credentialing.

Sarah Davis: I just wanted to add one interesting thing that was brought up about technology. One of the gentlemen from the Welcome Back Initiative mentioned that when you learn medicine and you are trained without such a focus on technology, it's kind of like learning to drive on a Volkswagen. When you start to drive a Mercedes, it's very easy because you've learned all of the basics and you've really learned how to drive with care, etc. So when you change and purchase a Mercedes, it's much easier. But you have that foundation of driving. So I thought that was a really nice analogy to bring it all together.

Cory Macdonald: I'd like to add one last thing. We talked about the California Initiative and a lot of people thought it was a good idea, but the problem, of course, is that it was an unfunded mandate. So I think part of what was said is that maybe a possible solution was getting the universities to work together on residency programs before a bill is created in the legislature so there is not a problem with ending up with an unfunded mandate afterwards.

David Warner: Good. I think we are going to wait for questions until after we present the dental summary.

Ben Bosell: For the dental session, we talked about a number of issues. We raised one question at the beginning of the session, and we never got to the next question. So that's how much we talked about that one issue, and that is trying to define whether or not Texas has a problem with access to care.

Emily Blosser: And with shortages of dentists as well. One thing, it seemed like the perceptions were a little bit different for some of the members in the session about whether there is indeed a shortage in the border, and of access to care in the border. Some of the dentists were saying that as far as children who have Medicaid, something like 85 percent of dentists on the border take Medicaid. These are the statistics that were coming up, and there was some argument about whether there really is an issue of access to care and shortages of dentists.

Ben Bosell: So one of the common themes that keeps coming up is mal-distribution: whether or not there are actual shortages of dentists in Texas, or if it's just mal-distribution. We talked about how some of the statistics are skewed because they don't take into account perhaps the cross-border utilization of dental services.

Emily Blosser: One camp was saying that there is a shortage, and one camp was saying that there's not really as much of an issue with access to care. So we did have two diverging opinions on that.

Audience member: What was the resolution to that? Was there a methodology of resolution?

Jon Brown: That is still unresolved.

Ramón Baez: Unresolved, yes. But in general it seems to be that the problem is more serious with the adult population than with the children, because adults are not covered under the Medicaid programs.

Emily Blosser: There was a lot of talk about AB 1045, and could something like this work in Texas? Do we need something like this in Texas?

Ben Bosell: Yeah, we talked about the California bill quite a bit, and Arnolando Torres outlined it in detail. We talked about whether or not Texas and California are in similar situations, and whether Texas, with limited funding, could implement something like that.

Emily Blosser: We talked some about the Mexican education system. There were some questions from some of the American dentists wanting to know about how the system works in Mexico. There were some comments from the American dentists about poor dental work they had seen coming out of Mexico. Some of the Mexican dentists responded by saying that you have good and bad work everywhere. We talked some about the dental school in León.

Ramón Baez: Yes, the quality of work is not a unique problem in a country. It's a problem that can be seen in any country. The doctor from Mexico, for instance, said that he has had the opportunity to see patients that were on vacation in Mexico, and he had seen that the work that has been done by the dentists in the United States was not really satisfactory. So the conclusion is that you have good work and bad work everywhere.

Ben Bosell: One solution that we came up with was increasing enrollments at dental schools. The number of students has actually gone down. I think a gentleman who went to Baylor brought that up, that the school has actually expanded its facilities, but the number of students has decreased. So there is room to increase the number of students at the schools.

Emily Blosser: Another recommendation regarding addressing unmet need was that maybe dental graduates in the United States should have a one-year social service requirement, like they have in Mexico, where dental graduates after they complete their education would have to go into rural areas or border areas and serve for a year in order to address the need in those areas. But some concerns were raised about linguistic and cultural competency, and how do you take that into account. So that was one issue. We touched briefly on the accreditation system in Mexico, but maybe you want to talk about that some?

Ramón Baez: Well, it seems to be that the accreditation system exists, but years ago it apparently was corrupted. According to Dean Vela, there have been some changes in the committee that is in charge of the accreditation system. He explained the composition of that committee, that it is a representation of two dental associations, the Association of Dental Schools, and the Commission of Evaluations, which is another organization that operates in Mexico. According to him, the new members of this committee will probably make this work. We didn't have an opportunity to discuss how the accreditation system

compares to CODA, which is the accreditation system for the United States. Again, the time was definitely short. Even though we didn't cover all the questions that we had prepared, I think it was very informative. I think a lot of the doubts that have been in the minds of several were clarified. If not, I think this can be an opportunity to do it again. But I think it was important. There were a lot of misconceptions about the bill, 1045, and about the agreement with the Universidad de la Salle that was accredited by the California Board of Dental Examiners. So I think the session that we had was very useful.

As I mentioned at the very end of the session, I think that we are going to have the students do a little bit more work, and they are going to be mailing out some of these questions, and with the information that you gained today and with your experience and expertise, we can provide some recommendations as to what we need to present.

David Warner: Right. The problem is the students are only in this class another month, and I'm only in this class another month. In other words, we're going to get the proceedings out. I'll work on that over the summer. But essentially, any fresh information we need to have within the next week or ten days, frankly, because things need to be edited and so forth.

The other thing, although we will all stay passionately interested in all this, this should be treated as something that is going to go and have a life of its own and it's up to you to carry the flame and develop cooperative arrangements and figure out how to do these things. In other words, the LBJ School of Public Affairs is in the business of getting things to this level, but we're not in the business of implementing things. I just want everybody to be very clear about that, should they feel it incumbent on themselves to carry the torch to the next hill or whatever.

Eldon Nelson: David, is there an intent to have another meeting next year to see how we progressed, perhaps?

David Warner: I don't think so. Next year, I'm going to be working on cross-border health insurance and portability of Medicare to Mexico for people who have retired there. So are there any more questions?

Gloria Alvidrez: [Question asked in Spanish and translated.] I'm a professor from the nursing school in Chihuahua and recently have moved to New Mexico. One of the concerns that I had since I came here and thought that I would be able to practice nursing is the different visions of the health systems that our two countries have. In Mexico, we consider health a constitutional right and a service and I think that here, health is considered a business. In particular in the profession of nursing, one of the characteristics of our profession is that we give first level care and there is a lot of physical contact with the patient, both at the community level and at the hospital level of care. In the practice here, it's different. I suppose it's because of regulations, but I've noticed that there is this difference. We are professional, and we have a lot of communication with the patient. But there is a characteristic of care that's distinct from the care here.

David Warner: Yes. Does someone else have a question?

John Brand: We kind of got stuck on questions in the dental group, but there was something we didn't address that I figured we should have. We didn't get to talk about other professionals in dentistry and expanding their scope. When the Institute met and did a report on the future of dental education ten years ago, at that time they couldn't really determine whether there was going to be shortage of dentists. It seemed unclear to them. They said that if there was, that would be the way we would solve this problem in time. We know there is a shortage of dentists in the U.S. because dentists are now getting extremely concerned that they won't be able to sell their practices when they retire. That has happened.

So one of the issues we didn't deal with that ought to be somehow incorporated in the formula is this issue of how do we expand the number of professionals in dentistry other than dentists, and their scope and their conditions and places of work. We have large adult populations, for instance, with no access. Texas has no Medicare coverage for dental care. There is no safety net for dental care. Whereas you have 47 million people in the United States with no health insurance, you have 150 million people in the United States with no dental insurance. There is also the question of nursing homes, where a tremendous amount could be done prophylactically and preventively for people who are unable to care for themselves—have all their lives, but in their declining years no longer can—and they have very restricted access indeed. The same would apply to homebound and possibly to some incarcerated populations.

Arnoldo Torres: A point that I made earlier in the discussion on dentistry, and it's a point I'd make about the physicians and nurses as well, is I don't think that the right approach to take is scope of service changes. There's only so much dental hygienists can do. I think you must pursue that under certain circumstances. I think it amounts to a salvaging job, where you are stripping everything away because you are really not addressing a fundamental problem. A fundamental problem is that you have millions of people in Texas and California and along the border who do not speak English, and who do not have the culturally dominant society. All of the dentally hygienists practicing, all of the PAs operating possibly as doctors, all of these things are not going to address the fundamental problem. There is no connection between the provider profile and the population profile. Until you address that problem, which can be addressed in many ways, you are going to have that problem constantly there.

I also don't think that any policy that is designed to simply create opportunity for practicing assures you that those individuals are going to practice in the communities that you need them to practice in. So if the Texas dentist community and medical community now feels that there isn't enough money in the budget to do any of these things, I will accept that. If these entities are arguing that there isn't an infrastructure, it may not be necessary to do things with Mexico, I'm even willing to accept that. But I think what I would not be willing to accept under any circumstances, and I don't think our communities regardless of where they are in this country are willing to accept, is that the profession do nothing except to say that we need more money. The profession needs to

heal thyself and recognize that it must require some degree of competency in culture and language. That does build some degree of access. That builds a greater degree of access than you currently have.

So I think at a minimum that there should be a law in the state of Texas that says there is a definition for cultural competency, there is a definition for language competency. Here is the standard and here is the means by which we are going to go and accomplish it within our own profession. I think that would be the first step that no other state in the union has ever taken. I think that is a very simple thing to do. If people don't want to deal with Mexico, I guess it won't happen. But you are not going to be able to deny the reality of the growing number of people who do not speak English in the state of California, in the state of Arizona, in the state of New Mexico, in the state of Texas. It is a reality that is simply getting worse. And it's not just along the border; it is 150 miles to the interior. So I would hope that at a minimum, that that would be something that this conference would instill in the Texas community, that that's something that can be done and should be done, and I think as a consequence of that, a great deal more consciousness will rise up. I think there are other things that can maybe be done together. That to me is the bare minimum initiative that should be pursued that doesn't require any money. Thank you.

David Warner: I really appreciate everybody's participation. We really do hope that you all will carry a lot of these things on further because I think there is a lot of potential in well-done collaboration with Mexican institutions and developing some joint entities. Essentially, if you compare the amount of integration in medicine, dentistry, and nursing between the two countries to the amount of integration that exists in automobile manufacturing and virtually every other area of enterprise, you'll see it really has been a lot slower and a lot more difficult, and I think probably does impede high quality care in both countries. Thank you very much.

Summaries of Concurrent Breakout Sessions

Dentists Breakout Session

Facilitator: Ramón Baez, Associate Professor, Dental School, UT Health Science Center San Antonio

LBJ School PRP Students: Ben Bosell and Emily Blosser

Participants: Dr. Jon Brown, Dental School, UT Health Science Center San Antonio

Dr. Jose Antonio Vela Capdevila, Dean, Dental School, UNAM

Dr. Carolyn Cassels, DETA San Antonio

Dr. Jose Cazares, McAllen

Dr. Javier Fuente, Dental School, UNAM

Dr. Javier Hernandez, San Antonio

Dr. Nana Lopez, Austin Travis County Health Department

Sylvia Moreno, Welcome Back, San Francisco

Diane Rhodes, Texas Dental Association

Arnoldo Torres, Torres and Torres Policy Consultants

Dr. Glen Walters, Texas Dental Association, San Antonio

The following summarizes the presentation by Ben Bosell and Emily Blosser at the beginning of the dental break-out session, then an overview of the ensuing discussion is presented. Dental statistics in Texas reveal a shortage of dentists. There were 7,286 dentists in Texas in 1998 and 37 dentists per 100,000 population. This is well below the national average of 48.4 dentists per 100,000 population. Texas ranks 41st in the nation in dentists per capita. Regarding access to care, 76 out of Texas' 254 counties are designated as dental Health Professional Shortage Areas (HPSAs). In Texas, 14.2 percent of residents live in a dental HPSA compared to the national average of 9.7 percent. To resolve the shortage of dentists in Texas, the state would need 361 additional dentists to remove all HPSA designations.

The border appears to be especially affected by the shortage, as many people in this region do not have adequate access to care. Along the Texas border, 41 of 43 counties are federally designated as HPSAs. Without Bexar County, the border region has about half the state average of 37 dentists per 100,000 population. In terms of insurance, Texas has more children and non-elderly who are uninsured compared to the rest of the country. Also compared to the U.S. as a whole, Texas has more people living in primary care and dental HPSAs. Reviewing statistics concerning Hispanics is pertinent to this inquiry as well. Thirty-two percent of Texas residents are Hispanic, and 85 percent of the border region's residents are Hispanic. One thing to note is that many people who live in the border region seek cheaper dental services in Mexico.

Looking at statistics regarding dental graduates, one sees that as the Texas population from 1985 to 1996 increased, the number of dental graduates decreased. Likewise, the dental workforce decreased while the Texas population increased. These statistics

illustrate the fact that the dental workforce has not kept up with the increasing population. The trends in the dental workforce have been very constant with little change from 1981 to 2001. There is also a difference between the race/ethnicity makeup of the Texas population and the race/ethnicity of dentists in Texas.

In the U.S., dentists are licensed at the state level and the three requirements for licensure consist of an educational requirement, a clinical exam, and a written exam. In the U.S., 32 states refuse to grant licensure to foreign-trained dentists. Texas, in particular, requires specialty training, and a general practice residency does not fulfill this requirement. California and Minnesota take a different approach. The state of California has passed new legislation that is unique in regards to dental licensure. The first piece of legislation (AB 1045) allows for 30 dental graduates from the UNAM dental school to receive a license to work in California community health clinics for three years, after which they'll return to Mexico. A second piece of legislation has enabled the California Dental Board to grant the University de la Salle Dental School provisional accreditation in California. Some students at the University de la Salle attend English courses and a preparatory course for the National Board Exam in the U.S.

In Mexico, dental education starts after preparatory school, usually when the dental student is 18 years old. The student often chooses biology as his/her focus during the last year of preparatory school. Dental school lasts either 4 or 5 years, followed by one year of social service. To practice in Mexico, the dental student must either write a thesis or take the licensure exam. The bodies governing dentistry in Mexico are CONAEDO (accredits), FMFEO (education structure), ADM and CNCD (dental associations), and CENEVAL (exam administrator).

The presentation concluded with potential solutions involving Mexico. There could be individual accreditation of Mexican schools similar to the agreement between California and University de la Salle. There could be a reciprocal agreement between Texas and Mexico. Texas could try to pass legislation similar to California's AB 1045 allowing for 30 Mexican dentists to practice in the underserved areas in Texas. Also, dental schools in Texas could attempt to recruit more minority students, particularly Hispanics. Lastly, Texas dental graduates could be required to work in an area of need for one year similar to the Mexican system of requiring one year of social service after graduating from dental school.

Following the presentation a discussion ensued in which participants discussed a wide range of topics regarding access to care and collaboration with Mexico. One participant began by saying that if Texas collaborated with Mexico, the focus should be on addressing need and not just making it easier for Mexican dentists to practice in the U.S.

The discussion then progressed towards perceived need, dental demand in Texas, and how to accurately define this. One dentist mentioned that many minorities do not see dentists and that 60-70 percent may not get regular dental care according to a behavior risk surveillance survey compiled by the Department of Border Health.

The three As were brought up, which stand for Accessibility, Availability, and Acceptability. These points need to be addressed when discussing unmet needs. It was stated that dental care is not always accessible.

Several participants claimed that accessibility is not a problem in the Rio Grande Valley because 85 percent of dentists take Medicaid at the 40 percent reimbursement rate. They stated that affordability rather than accessibility is the problem. It was then pointed out that non-legal children do not have access to care and cannot get Medicaid or CHIP.

One dentist also mentioned efforts in the Valley to see patients by offering free services via a mobile van. Dentists Who Care was brought up as a group that aids in this effort but it was pointed out by a few participants that many people do not avail themselves of this opportunity.

Dr. Jon Brown refuted any claims that a majority of the population has access to care. He discussed the study he carried out concerning children's access to care and outcomes of Medicaid and determined that in no region of any state do more than one-third of the population get access. Therefore it is highly unlikely that in Texas two-thirds to three-fourths of children are getting care. Texas Rural Legal Aid brought a case to court and they proved that Medicaid access is inadequate. He made it very clear that experts agree there are many barriers to care.

Some participants believed this was then a funding problem not a manpower problem. Some contended that shortage numbers do not apply because people seek care in Mexico. Dr. Nana Lopez again refuted the claim that access to care is not a problem because she mentioned she can only take care of 11,000 people but there are 250,000 who are actually uninsured in Travis County. She would therefore conclude that there is an access issue and a maldistribution of dentists.

Concern was expressed that the problem is now getting worse, because in the current legislative session there might not be funding for the CHIP program, and funding for Medicaid might be decreased. Furthermore, Medicaid does not even cover adult dental care. One participant mentioned that teledentistry has had some positive outcomes under the auspices of Baylor but there was not enough funding for it to continue.

Dr. Javier Fuente stated that the same problem of access to care in Mexico exists, and they are also trying to address the problem of an abundance of prosperous dentists in certain areas and no dentists in rural areas.

Some participants proposed implementing loan forgiveness programs as a constructive means to fill positions in rural areas. One member challenged the opinion, questioning whether this would take into account the need for Spanish-speaking dentists.

Arnoldo Torres said experts agree that it is necessary to be linguistically competent. Mr. Torres talked about the bill he coauthored in California (Assembly Bill 1045), which will recruit Mexican doctors and dentists to work in underserved areas. He said that the dentists from Mexico will be affiliated with nonprofit clinics in rural underserved areas

and said the dentists will be reimbursed by Medi-Cal and will be employees of clinics. He said California has many dentists, they just aren't working in the right areas. He went on to say that his bill will determine if the system in Mexico is different than the U.S. and that the bill specifically states that the dentists who participate in the program must go back to Mexico after three years. Torres then suggested introducing similar legislation to 1045 in Texas and building a relationship with the dental school in Monterrey. He went on to say that there is widespread ignorance in the U.S. about the Mexican system and that the two countries needed to work together and that his legislation will function as a test and then everyone can decide if it works.

When asked by members of the group what was in it for Mexico, he responded by saying that the Mexican government realized that many Mexican nationals lived in the U.S. and were not getting access to care. The Mexican government wants to do something to solve this problem since it affects their own citizens. He explained that health care in Mexico is a constitutional right and while the government cannot provide for everyone adequately health-wise, this is only because they lack the resources, not the will.

Dr. Fuentes said any questions about the success of 1045 will be answered after it is implemented but that the school had chosen the best of the best to come to California. The dentists will have to work with the dental school in California to coordinate a training course for the Mexican dentists. He said there were no deficiencies in the educational system at UNAM but differences existed between California dental schools and UNAM.

Questions were raised about the Mexican dental system and how it compared to the U.S. Some participants were concerned that the capabilities of Mexican dentists were not standard across the country. Dr. Vela explained that it usually takes four or five years to complete a dental degree in Mexico. He said that the CONAEDO was the most important body in Mexico, the Mexican National Council of Dental Education.

FMFEO is another body in Mexico but his school is not accredited by this organization because he questions its credibility—the organization accredited five dental schools in five hours, therefore he did not trust it. Dr. Vela is trying to work with the ADM to find new accreditation systems but there is no standardized system and he said this needs to improve.

The conversation moved back to fulfilling unmet need in Texas, with Mr. Torres emphasizing again the need for the two countries to work together to develop a common agenda. Dr. Brown brought up the point that if Texas wants to cooperate with Mexican dentists for this purpose there is no path to licensure for them like there is for nurses, for example. It was mentioned that in Texas the board exams were not open to foreign-trained dentists until 1983.

Arnoldo Torres told the group that his bill allows for foreign-trained dentists to practice in California by granting them a license and talked about the fact that the professional organizations opposed the dentists taking the licensure exams, although the dean at UNAM was confident they could pass. He said the issue became a sort of moving target

because the professional organizations were worried about the dentists' qualifications but did not want to let them take the professional tests.

The representative from the Texas Higher Education Coordinating Board said that they are looking into seeing if the workforce in Texas needs dentists and the prospect of opening a new school. It would appear so but people do not agree on the statistics because different organizations report the dentist-to-population ratios differently and may not always give a clear picture of the real situation. If indeed they determine there is a shortage of dentists she said the strategy would be to keep existing schools but increase the number of dentists produced there. She said that part of the problem with this is the lack of dental faculty at dental schools, because the faculty is not paid as much as dentists in private practice, so it is not an attractive option for most dentists.

Once again a participant claimed that many people have access to care and don't utilize it. Dr. Brown mentioned that cost was one reason why people don't seek care.

Members of the group said that they believe there is a two-tiered system of dental work in Mexico and that they see a lot of bad work come from Mexico. Dr. Fuente said this type of two-tiered work exists everywhere in the world and the border is a region where there are many unskilled dentists.

Mr. Torres encouraged the group to push for adult access to Medicaid and start to work towards solving access issues. Dr. Brown again stated that there is an access problem and that the TDA wasn't seeing a representative sample. He went on to say that the profession was not taking care of the people who need it and that licensure confers a monopoly.

Participants also said that when attending dental school in the U.S., the entire cost is not paid by the student and therefore they have a responsibility to the state and the community to give back. The suggestion came up to introduce a program in Texas that would make it mandatory for dental students to do a year of social service in an underserved area. The discussion was ended by a slide show of the University de la Salle dental school in León, Mexico.

Nurses Breakout Session

Facilitator: Steve Shelton, East Texas AHEC

LBJ School PRP Students: Gina Amatangelo, George Rivas, Sonja Scott, and Andrea Tirres

Participants: Donna Carlin, Texas Higher Education Coordinating Board
Camille Pridgen, Texas Higher Education Coordinating Board
Michael Denis, Dallas Fort Worth AHEC
Edilma Guevara, UTMB Nursing School
Wendell Oderkirk, New Mexico State University
Gloria Alvidrez, nursing faculty, Chihuahua University
Douglas Best, Partnership Institute
Eldon Nelson, UT Brownsville and Texas Southmost College
Teresa Hines, HETCAT, San Antonio
Karen McAfee-Deckard, UT School of Nursing
Melba Pria, Ministry of Foreign Affairs of Mexico
Tatiana Azuara-Leadbetter, Coordinator for Mexico Community Program,
Consulate of Mexico, Austin
Stephanie Tabone, Texas Nurses Association
Mary Wainwright, East Texas AHEC
Pam Danner, WT AHEC
Kathy Thomas, Texas Board of Nurse Examiners
Bonnie Adams, California Community Colleges, (RHORHC - Welcome Back)
Nora Frasier, CHRISTUS Spohn Health System
Sr. Carol Ann Jokerst, Christus Spohn Health System

Discussion Part I

Steve Shelton: Representatives from a variety of backgrounds including state agencies, faith-based organizations, and academic institutions are present in this breakout session. The basic assumption that all participants agree on and are trying work towards is the potential relationship with Mexican nurse education, practice, and solutions to address the nursing shortage.

Stephanie Tabone: Wants to clarify the following: The Texas Nurses Association called together a task force to look at foreign nurse issues. A formal letter was drafted to the Texas Board of Nurses Examiners (TBNE), though she is unsure if the letter has been sent to date. The letter includes these notable points for TBNE consideration: changing the 24-month rule regarding work practice, and allowing nurses to use visa screen.

Melba Pria: It is important to recognize the assumptions that we're working from. One of these assumptions is the reality of Mexico and their nursing supply, which is not necessarily accurate. People assume that nurses flourish in every backyard in Mexico and in reality, this isn't the case. Also, the idea of "brain drain" is a real concern and it is a concern for virtually every country in the world, not just between Mexico and the U.S. For example, the Minister of Philippines was very concerned about the hundreds of

thousands of Philippine nurses who have moved from the Philippines over the last decade to work in other countries.

Another issue that needs to be addressed includes opportunities for foreign nurses who are already in the U.S. We have to find ways to give possibilities to Mexican nurses who are already here and at the same time realize that this would only solve the present, and maybe, very near future nursing shortage problem. What is happening with the future is not so far away.

Another issue that needs attention is the high school drop-out rate. The majority of Latino students who drop out of school are undocumented—though they are not considered undocumented until they turn 18. We need to ask, “how can we address this gap of continuity of education?”

We should be asking ourselves, “why haven’t we been able to attract more young people to the nursing profession?” It is important to create interest in the nursing/health professionals as a career. What are we doing as a society and health-related professionals in attracting young people who are already here, that are bilingual, but who just say, “Nurse? Who wants to be a nurse? I prefer to be a computer technician!”

Gloria Alvidrez: There’s a Federal Association of Schools of Nursing in Mexico. It is important to contact them; I have the email addresses of those contacts and can pass them out to anyone who is interested.

Bonnie Adams: With regard to addressing the drop-out rate, there are health academies in high schools that have been met with limited success. Pipeline programs have also been met with limited success.

Eldon Nelson: It is important to work with high schools, even middle schools, in a variety of ways. The dilemma is that academic institutions can’t get more teachers and more clinical training sites to meet the need. At least one of the barriers is the very fact of providing educational programs for the students who are applying to them.

Wendell Oderkirk: As for attracting faculty in the medical profession, the case is worse on the U.S./Mexico border. Faculty don’t come to our (NMSU) doors.

Stephanie Tabone: When considering how to attract more people to teach nursing, consider the pay differential. Nursing faculty are paid less than a two-year experienced staff nurse. In addition, the workforce environment and pay is much worse than other professions. Even an executive secretary could expect a 100 percent return on their investment.

Mary Wainwright: There is limited capacity with training the workforce. What kind of solutions are there for big system issues? The education system doesn’t have the capacity to address current shortages.

Over the next 25 years, the need for a global workforce will be a very important issue. The need for nurses to move about from all countries in the world is a matter of global health. Thus far, there has been no real attempt to standardize education, or share education. The nursing profession is very aware of this. Nursing schools will have to be recognized globally to meet the need.

Douglas Best: I have been working on a few paradigms looking at at-risk populations. There needs to be more paths for people to enter nursing, such as how the military addresses gaps in training (e.g., patient care technicians, signing bonuses from hospitals).

Hospitals don't have an entry-level work career ladder. This could change for the better. For example, a CNA could be given additional skills, and could be viewed as a stair-step job position to the LVN. Hospitals don't have an entry-level position now but could do this.

Nora Frasier: Most health care systems are doing that. Those things exist fairly prevalently.

Mary Smith: With regard to the education program, if it is not designed from the very beginning, it is very difficult to retrofit them.

Melba Pria: What are the real numbers that we are talking about?

Nora Frasier: Maybe rejuvenating the J-1 Visa to designated areas is the way to go.

Melba Pria: The problem regarding English proficiency is that we're asking nurses to be English proficient when most of his/her patients will not need to use English. Do these nurses need a TOEFL of 540 or do they need a test of English proficiency? Providers in areas where English is not the dominant language need nurses who speak other languages. Regarding computer literacy, there are still a lot of patient cases that are hand-written. The challenge for nurses is in being able to adapt to the setting of the workplace. Another area that needs discussion is regulatory reforms. For example, why do Texas-born and trained nurses go to Illinois to work?

Kathy Thomas: Some good news is that now 20 states have passed a licensure compact which is an agreement to recognize licenses of other states. In two of the states, the governor is getting ready to sign them. The core requirements for licensure are the same with some modifications, e.g., criminal background or mental illness guidelines. Keep in mind that these nurses are licensed to provide care anywhere, they are not restricted to work in hospitals or health centers, etc.

Teresa Hines: On March 27, 2003, there was a charge to the Border Health Commission (BHC) from the secretaries of the U.S. and Mexican divisions to make it a priority of the BHC to start to look at workforce issues within three categories: doctors, nurses, and dentists. There are currently 20 strategies under Healthy People 2010. This priority came about through a discussion yesterday from the kickoff day in El Paso for International TB Day.

List of issues identified by participants:

A CGFNs alternative was proposed in which an internationally trained nurse could circumvent the CGFNs testing process. Additionally, better language in NAFTA could be implemented that provides greater support to establishing portability of services specific to nursing.

Among the more subtle barriers to cross-licensure are assumptions about Mexican nursing education and a strong interest to ensure the standards of care across borders. There is an assumption among many nurses and nursing organizations in the United States that Mexican nursing education is sub par to that of the United States. These assumptions need to be addressed by providing a more accurate picture of Mexican nursing education, documenting standards and education. Of course, there is also the issue of Mexican workforce drain. There is always the possibility that by easing the restrictions that provide barriers for Mexican nurses to practice in the United States, we may create a nursing shortage in Mexico, if many nurses move here in order to practice. The need for English proficiency was also debated. While many argued if there was a need for English proficiency among Mexican nurses who would be working with Mexican patients, almost everyone agreed that such a need would indeed be critical as a nurse would need to communicate with a doctor and other medical staff as well.

Advances in Mexican nurse education should be emphasized as many schools, most notably The Autonomous University of Nuevo León, are upgrading their curriculum to include such topics as computer literacy and English proficiency. It would also help to emphasize that Mexico is in the process of developing national nursing education standards.

At one point, someone identified that a greater issue that affects the nursing profession overall was the challenge of recruiting career decision-makers into nursing. Many people felt that policy makers were not willing to take a proactive hands-on approach in addressing issues related to nursing as it was not glamorous.

Of course, many participants also felt that measures to fix the inadequacies in nursing education programs don't work well when programs are retrofitted, and this needs to be addressed as well, with more than one participant calling for curriculum challenges and changes in order to address inconsistencies among nursing curricula. The need for nursing faculty (and a demand for more slots in nursing programs) was also considered as not only is there a dwindling supply of nurses in the United States, but there is a diminishing cadre of nursing faculty as well. Perhaps the underlying cause of the lack of nursing educators is that the salaries for nursing faculty are not competitive. Furthermore, the merger of education and industry was called for as a way to verify that nursing education was addressing the needs of practice.

In order to address immediate solutions, participants called for regulatory reforms. Specifically, there was an interest to revisit the 24-month rule that prohibits a nurse from taking the NCLEX if he or she has not consistently worked as a nurse for 24 of the last 48 months, as well the requirement that a nurse has to take the CGFNS exam prior to being

allowed to take the NCLEX. The TBNE will consider action on these items in the coming months.

Workplace conditions were seen as impeding the retention of nurses in the U.S. If better working conditions were enacted, such as shorter shifts for example, perhaps there would be more people willing to continue their careers as nurses. In addition to working conditions, low salaries for nurses are a persistent concern. Though many people find the work rewarding, low salaries may encourage people to leave nursing. Many nurses feel that barriers exist in career advancement. Thus, many nurses leave as they feel there is no room for career advancement.

Discussion Part II

Cathy Thomas: The Texas Board of Nurse Examiners is in the process of looking at these issues:

- Does everyone need to take CGFNS?
- Unlimited chances to pass NCLEX: Right now if individual fails exam, he/she has to wait 90 days to take it again.
- Develop technology for people who have no option to take written exams. But also realize, one doesn't need to be computer literate to take exam. Only six keys have to be used for the test and an individual can take a tutorial on the computer before the test.
- Two of four years requirement of practice for foreign trained nurses is being reconsidered.

Sr. Carol Ann Jokerst: Need to realize that we will have fewer people that are going to be able to enter the workforce, attributable to lower birth rates and the aging population.

Stephanie Tabone: There are 130,000 Mexican nurses at all levels (licenciada, nurse aides, technical) (noted in Trilateral agreement).

Was corrected by someone who said: In Texas, there are 160,000 licensed registered nurses to take care of considerably lower population.

Melba Pria: Consul said there are 200,000.

Edilma Guevara: This 130,000 figure is not true. It's cited from an old document and in addition, there are other ways to measure the amount of need that's being met. In Mexico, there are excessive numbers of physicians who are taking the positions of nurses, even in primary health care. Look at a document published by Susana Salas on the PAHO webpage. It's not about numbers, it is about the job market.

Another point to bring up relates to testing and the subsequent wait period to find out one's results. If you are taking a predictive test (CGFNS), it doesn't make sense because you're waiting so long.

Gloria Alvidrez: Mexican nursing schools have developed a program that asks, “what would be the ideal school?” This program is called “Window to 2020.” Currently, Mexican nursing programs have English as a second language and have computer literacy (such as PowerPoint training). A Mexican nursing student has to have a certain level of English proficiency to graduate. Nursing programs are very comparable to programs here in the U.S. The authors of books they use in Mexico are North American authors and the models include patient care models. There are two systems of education in Mexico: public and private. Private nursing schools are hospitals that have their own nursing schools. Public schools are less expensive. I am a teacher and I am trying to find ways to unify the different systems, along with the federation that oversees all the nursing programs. I hope that all nursing schools would be functioning in the ideal situation.

Michael Denis: If we look more closely at education and curriculum in Mexico, we may find that we are not so far away from standardized curriculum as one might think we are.

April Robinette: It’s not just the computer skills itself. It’s the test-taking process itself (e.g., a multiple choice exam is something many Mexicans are not accustomed to).

Douglas Best: It has been shown that a multiple choice test works well for English proficient test-takers.

Edilma Guevara: The real problem is in applying to CGFNS and subsequently waiting for two years for the results. I agree that the exam needs to be given in English. We need to promote people. As a foreign nurse, we are not to used to ways that exams are presented, as with the way that NCLEX is presented. There is a need to learn to use critical thinking.

Melba Pria: One of the positive things that has happened is the merger between education and industry.

Douglas Best: Just like with doctors, we’re beginning to see people going to Mexico for their educations and coming back to the U.S. to work.

Karen McAfee: Nurses need something to help with tuition. Maybe even do an exchange between schools. For example, get a Ph.D. in one place but teach at another.

Possible Solutions and Options for Success Identified by Participants

As the nursing breakout session came to a close, Steve Shelton, the facilitator, asked the participants to propose solutions to some of the issues identified earlier. The solutions were divided into five categories: career options, nursing education, collaborative strategies (deemed as crucial), practical, and regulatory.

Career options included suggestions that were primarily aimed at developing professionals in the nursing profession. One such suggestion was a mentor program in which nurses were assigned a more experienced member of the profession. Mentors could cross a wide variety of boundaries including nationality, experience, or

professional field. Such a relationship would facilitate an exchange of ideas. Additionally, it would build on an already existing career of a nursing professional.

Nursing education solutions were primarily aimed at addressing issues pertaining to nursing curricula holistically. In order to address the nursing shortage, one participant proposed an alternate entry program. Such a program would enable other entry routes to those wanting to become nursing professionals. As a way to address the diminishing supply of nursing faculty, another participant proposed a stipend/contract program for those who wanted to become nursing faculty. Nursing students who wanted to become professors of nursing would be offered incentives to attend a nursing school and stay on as faculty. Yet another alternative was distance education. Distance education would allow a nursing student to take classes at his or her own pace, in addition to allowing access to those who did not live near a nursing school and were not in a position to relocate in order to attend one. All participants agreed that there was a need to share best practices in nursing education and other learning resources as well. Developing international communication in the nursing community was also seen as a priority, thus exchange programs between the United States and Mexico were proposed to address this need in an academic, professional, and regulatory context.

At this point, a number of key collaborative strategies were suggested. In a general sense, all agreed that three underlying concepts that should be included in any collaborative solutions were consensus building, communicating best practices, and increased partnerships/ sponsorships.

A number of important initiatives were suggested in order to address certain issues in the practical realm of nursing. Prior to addressing some of these issues, the participants suggested that there is a need to first identify some of the factors and conditions that deter people from entering the nursing profession, for example, 12-hour shifts that some hospitals require of their nursing staff. As a follow up to this suggestion, a participant brought up the model of a magnet hospital as something that could be adopted industry-wide. Additionally, employers should consider being more flexible about the number of hours that nurses are required to work. To address the immediate need of nursing professionals in communities along the United States/Mexico border, another participant suggested that the value of a bilingual, culturally competent nurse be emphasized. Finally, participants emphasized the need to address the exploitation of internationally trained nurses working in the U.S.

Physicians Breakout Session

Facilitator: Dr. Adela Valdez, Associate Dean, University of Texas Health Science Center San Antonio, and the Presiding Officer of the Health Disparities Task Force

LBJ School PRP Students: Cory Macdonald and Carlos Cantu Mireles

Participants: Miguel Fernandez, M.D., Director, South Texas Poison Center, UTHSCSA
Jacob Vuperszloch, Ph.D., Centro Comunitario Mexicano
Gustavo García, M.D., Medical Resident, Regional Academic Health Center
Harlingen
Guadalupe Mungia-Bailona, M.D., M.P.H., University of North Texas, School of
Public Health
Jennifer Jones, Primary Care Office, Texas Department of Health
Connie Berry, Primary Care Office, Texas Department of Health
Stacey Silverman, Universities and Health-related Institutions, Texas Higher
Education Coordinating Board
Alejandro Cravioto, M.D., Former Dean of the School of Medicine UNAM,
México, DF
Guillermo Soberón, M.D., Ph.D., Executive President, Mexican Health
Foundation (FUNSALUD), President, Mexican Council for the
Accreditation of Medical Education (COMAEM), México, DF
Zeta Melva Triana, M.D., Dean Health Science Division, Universidad de
Monterrey
Antonio Ugalde, Emeritus, Department of Sociology, UT Austin
Nuria Homedes, M.D., UT-H, HSC, SPH, El Paso
Robert Wood, Regional Center for Health Workforce Studies, UT Health Science
Center San Antonio
Oralia Bazaldua, Pharm. D., BCPS, Associate Professor, UTHSCSA-Family and
Community Medicine
Rosemari Johnson, M.D., U.S./Mexico Border Health Commission, San Diego
Lauren Jahnke, M.P.Aff., LRJ Research & Consulting, Austin, Texas
Anjum Khurshid, LBJ School student
Jeff Hamilton, LBJ School student
Jesus Oliva, Director of Welcome Back, I.H.W.A.C.
Francisco-Javier Alejo, Mexican Consul General, Austin, Texas
José Ramón Fernández-Pena, M.D., M.P.A., Director, Welcome Back Initiative
Adila Gonzales, Ph.D., M.P.A., Vice President for Strategies and Institutional
Affairs, University of North Texas, Health Science Center at Fort Worth
Adela S. Valdez, M.D., UTHSCSA, Presiding Officer of Health Disparities Task
Force

Introduction

The session began with opening remarks by the facilitator, Dr. Adela Valdez. Then Dr. Valdez introduced LBJ School student Cory Macdonald, who made a brief presentation

regarding research done in the policy research project and possible discussion topics for the breakout session.

Student Presentation by Cory Macdonald

As you all know, one of the main issues that we have come together to discuss at this conference is the need for culturally appropriate health care faced by Hispanic populations in the U.S. The demand for culturally appropriate physicians, in particular, was formally recognized in a March 2001 report by the U.S. Department of Health and Human Services. As part of this project, Carlos Cantu, Sarah Davis, Don Lucas, and I looked at the possibility of whether physicians from Mexico could help fill this unmet need.

In doing so, we learned that in 2001, only 1 percent of the 4,500 non-U.S. citizens who received ECFMG certification, making them eligible for U.S. residency programs, were Mexican citizens. This percentage struck us as low, especially in light of the expectations for border transparency raised by NAFTA. We hope this session will provide, among other things, an opportunity to discuss whether it would be in the best interest of Mexico and the U.S. to increase this percentage, and to discuss ways this could be accomplished.

In order to find ways to accomplish this goal, it may be useful to discuss the reasons behind the low number of Mexican citizens receiving ECFMG certification. Carlos, Sarah, Don, and I examined this issue, but I'm sorry to say that we did not find the answer to this difficult question. However, I'd like to offer a couple of possible explanations that we came up with and that we hope will serve as starting points for the discussions that will take place here.

For example, we wonder if the costs of preparing for and taking the tests required for ECFMG certification play a role in preventing some Mexican medical graduates from applying to U.S. residencies. The two portions of the USMLE, the Clinical Skills Assessment and the TOEFL, together cost almost \$3,000, and this doesn't include the cost of traveling to Philadelphia or Atlanta for the Clinical Skills Assessment. Then, there are the prep courses for the tests which also cost thousands of dollars. Some of you may have opinions regarding whether this is an obstacle or not, and we would like to hear about that.

We would also like to discuss possible obstacles that stem from differences between the medical education systems in the U.S. and Mexico. Unlike the U.S. system, the Mexican system is not designed around the USMLE tests. Mexican ECFMG applicants typically do not take the USMLE tests until the end of six years of medical education and one year of required social service. This means that when they take step one of the USMLE, which covers basic medical sciences, they are often about four or five years removed from the courses they took in this area. We also wonder whether differences in curricula, language, and technology play a role in preventing more Mexican medical graduates from entering U.S. residencies.

Along with this issue, we can also discuss related topics. For example, what will be the effect of changes in accreditation and education policy currently taking place in Mexico that we learned about from Dr. Soberón this morning? Ultimately, we hope this break-out session will provide an opportunity to collaborate in coming up with realistic steps that can be taken towards solving the unmet need in Texas and the U.S., and to work towards the promises and expectations of NAFTA in the area of physicians.

Discussion

Barriers to Residencies and Practice in the U.S. for Mexican Physicians: Differences between the U.S. and Mexican Medical Education Systems

Members of Welcome Back, a project based in San Francisco that helps immigrants in the U.S. trained in the health professions in their home countries enter the health workforce, began the discussion on barriers. One of the organization's directors stated that he believed there were several key barriers that prevent Mexican doctors trained in Mexico from becoming doctors in the U.S. These barriers are lack of English proficiency, lack of understanding of the U.S. health system, the red tape involved in certification, doubt that the efforts and costs involved with certification will be worth the eventual rewards, and economic/time barriers that stem from many of these individuals working more than one job. A director from the organization also said that ECFMG certification was the easy part of the process compared to actually gaining entrance into a U.S. residency program. It was also mentioned that Welcome Back has 34 ECFMG-certified participants, and that they believe that Mexican IMGs are up to the same standards as other IMGs.

A Mexican-trained physician who is currently in a residency program in the U.S. said that he did not see differences between U.S. and Mexican medical students. Rather, the difference is in the focus of their training, as Mexican physicians have been trained to deal with the health problems faced in their country. He said that Mexican training is superior in the area of contact with patients, which stems from there being less liability risks in Mexico. He also said Mexican medical schools do not train students for the USMLE and that in order to pass the USMLE he had to invest time and money in relearning the basic sciences that he had learned early in his educational process.

Another participant said that Mexican and other Latin American physicians are more clinically competent and that there is too much reliance on technology in the U.S. In regards to technology, another participant said that technology does separate the U.S. from other countries, but that community medicine is not too reliant on technology, so this should not necessarily be a barrier.

Dr. Alejandro Cravioto, former Dean of UNAM, said that Mexican medical students take the USMLE for two reasons. One is to compare themselves with other medical students, and the other is to gain a different level of training both in terms of quality and perspective. There is specialized training and equipment that is available in the U.S. but not in Mexico. He discussed some of the problems encountered by Mexican medical graduates who have gone to the U.S. and then had trouble finding spots in public

hospitals upon returning to Mexico. He also said that the private schools in Mexico train physicians to go to the U.S., that he thinks the gap in quality control is closing between the U.S. and Mexico, and that he would like to see an accreditation agreement between the U.S., Canada, and Mexico. He predicts that the program in California to bring in Mexican physicians to work in community clinics will be successful.

Dr. David Warner said that some U.S. residency programs think that their school will appear to be of lesser quality if they take ECFMGs. He said that some Mexican and U.S. training programs should explicitly develop high-quality residency programs that will include U.S. and Mexican graduates. Perhaps such programs could then be certified both in the U.S. and Mexico.

A director of Welcome Back said that Mexican medical students are considered under-trained because they enter medical school directly after finishing high school. However, many of these high school students took classes in basic science that would not be taken in the U.S. until undergraduate school. Then, their education in medical school includes a great deal of hands-on experience, perhaps more than is received in the U.S. He considers learning how to use U.S. technology to be less difficult than it is commonly perceived to be.

A participant suggested that differences in medical education in Mexico and the U.S. stem from Mexico ensuring health care as a right of citizenship, and the U.S. tendency to teach defensive medicine in response to legal liability. These cultural nuances lead to a perception of Mexican medical incompetence that is unfounded.

Stacey Silverman of the Texas Higher Education Coordinating Board said that there is a limiting mechanism in the U.S. whereby each state lets in only a minority of students from other states and other countries into their medical schools. She said that the licensure body in Texas has some very restrictive rules in place. Connie Berry from the Texas Department of Health said that barriers were not specifically imposed against Mexicans. Dr. Rosemari Johnson of the U.S./Mexico Border Health Commission pointed out that high test scores do not necessarily mean that a physician will be good. However, the first thing that schools/residencies look at is test scores, followed by letters of reference.

Dr. Cravioto discussed a conference that he attended in Copenhagen in which seven domains of global requirements for medical education were discussed. He suggested looking on the website of the University of Dundee to learn more about this conference and the suggestions that were made for creating international standards for medical education.

Unmet Need in the U.S. and Responsibility for the Problem

A participating U.S. physician stated that leaving emergency medicine out of the definition of primary care has led to a national multicultural crisis in emergency departments. For many non-native Hispanic patients, the ER is the primary source of medical care, and there are not enough doctors who are trained for this role.

At this point a discussion developed regarding the responsibility for the problem of unmet health needs for Hispanics in the U.S. A director of Welcome Back said that it was a U.S. and a Texas problem, not a problem for Mexico. The focus should be on the Mexicans who have already migrated to the U.S. and have medical training, rather than taking physicians from Mexico. He suggested asking non-native U.S. cab drivers what they did in their home country, because many have extensive professional experience and training.

Another participant said that there was insufficient training in U.S. medical schools regarding Mexican culture, and that we probably should train U.S. physicians to care for this population. Dr. Valdez said that UTHSC in San Antonio has some courses that address these issues.

Dr. Alejo asked whether we could afford to continue ignoring the increasing Mexican population in the U.S. Dr. Valdez said that we are looking to Mexico to help us with our problem, and that U.S. physicians do not want to compete with culturally competent physicians. Dr. Alejo said that a bilateral solution may be necessary because there is a group of Mexican nationals in Texas that are not receiving the care they need. Dr. Valdez asked whether a program like the one devised in California could be done in Texas.

There was a sense of agreement regarding the fact that both Mexico and the U.S. have not learned how to care for indigenous communities. In Mexico medical students are not trained in this area, although many spend a year in rural areas during their year of social service and thus have direct experience with these communities. Many of the Mexicans in the U.S. are from these indigenous communities, and perhaps U.S. students could spend time in Mexican indigenous communities to learn how to better care for these populations in the U.S.

The “Brain Drain” Issue

A participant then raised the issue of brain drain. They asked why we should pull nurses and doctors from Mexico when it is not as wealthy of a country and cannot train doctors just to see them go to the U.S.

Dr. Guillermo Soberón, President of COMAEM and FUNSALUD, said that although there is a shortage of nurses in Mexico, there is no shortage of physicians. He said that Mexico faces the same problem as the U.S. in that physicians do not locate in rural areas. He said that a general rule of thumb is that there has to be at least a branch bank in a community for it to be able to support a physician.

Connie Berry said that India sends many physicians to the U.S. and then invites them back to share their knowledge. India also seeks to demonstrate the high competence of their doctors.

Collaboration between U.S. and Mexican Medical Schools

Dr. Cravioto said that there were not enough relationships between U.S. and Mexican medical schools, and that steps should be taken to overcome the types of difficulties that have been encountered in negotiations between Mexican and Californian schools. It was mentioned that an important step for greater collaboration is breaking down the stereotypes about medical education in Mexico, and that building more cross-border rotations into curricula may aid in doing this.

A director of Welcome Back said that the problem in California is that academic institutions will not come to the table to discuss collaboration, even though regulatory agencies will at least do this. He also said that exchange programs will not solve all of the problems. Mentoring and pipeline programs are also needed.

A participant mentioned that interchange between Mexico and Australia and Mexico and the U.S. have decreased greatly, despite the programs having been quite successful.

Biographies of Speakers

Ramon J. Baez, D.D.S.

Associate Professor, School of Dentistry, University of Texas Health Science Center at San Antonio

Ramon Baez is an Associate Professor at the School of Dentistry, University of Texas Health Science Center at San Antonio. He has extensive experience in research methodology, testing of biomaterials, project development and analysis. In particular, he focuses on the use of pure cast titanium in dentistry and titanium processing equipment along with dental porcelain and glass ceramics, tooth-brushing abrasion testing, thermal cycling, and color attributes of esthetic materials. His publications have focused on fluoride excretion in children and trends in dental cavities within the Americas.

Marilyn Biviano, Ph.D.

Acting Director, National Center for Health Workforce Analysis, Health Resources and Services Administration

Marilyn Biviano is the Acting Director of the National Center for Health Workforce Analysis at the Bureau of Health Professions in the Health Resources and Services Administration (HRSA). The National Center includes health professions shortage designation and health workforce analysis activities. She has been directing the workforce analysis portion of the National Center for over four years and has directed the development and implementation of the first health workforce analysis strategic plan and research agenda. She manages five Regional Centers for Health Workforce Studies and has directed the development of 50 State Health Workforce Profiles and many other health workforce studies. In addition to directing the health workforce activities at the Bureau of Health Professions, she has been instrumental in the development and implementation of the health professions training program performance measures which are used in developing the Bureau's Congressional budget justification. Before working for HRSA, she directed the U.S. Geologic Survey (USGS) program on sustainability and represented the USGS at the President's Council on Sustainable Development.

Alejandro Cravioto Quintana, M.D., Ph.D.

Former Dean, Medical School, Universidad Nacional Autónoma de México/ National Autonomous University of Mexico.

Dr. Alejandro Cravioto is currently Professor of Public Health at the Faculty of Medicine of the National Autonomous University of Mexico in Mexico City (UNAM). Returning to Mexico City after obtaining his doctorate at the London School of Hygiene and Tropical Medicine, he worked for years at the National Institute of Health and Technology for Child Health, first as Head of the Research Department and then as Deputy Director. From 1989-1991 he collaborated as Director of the Division of Microbiology in the National Institute of Public Health in Cuernavaca, Mexico, and in 1991 was invited as Professor and Chair of the Department of Public Health in the

Faculty of Medicine of the National Autonomous University of Mexico (UNAM). In 1995 the Board of Governors of UNAM appointed him Dean of the Faculty of Medicine for a four-year term and renewed this appointment for another four-year period in 1999. His main interests in research have been the study of the interaction between infection and growth in Mexican infants, as well as the pathogenic capacity of bacteria able to cause disease in humans. His laboratory and field study areas have been the training ground for over 30 people with different academic backgrounds. He is the author of more than 50 papers published in international journals and two textbooks, one on pediatric diarrhea and another on vaccines.

Michael Denis, M.S.

Executive Director, Area Health Education Center, Dallas-Fort Worth

Michael Denis is currently the Executive Director of the Prairie Area Health Education Center at the University of North Texas. Previously, he has held positions as Vice President of All States Episcopal Hospital, Senior Vice President of the Lubbock Methodist Hospital System, and Chief Executive Officer of the Parker County Hospital District. Denis has been active in developing health networks, leading a team that organized a 15-hospital rural health system in the area surrounding Lubbock, while emphasizing a coordinated system providing a complete continuum of care.

Edwin Dorn, Ph.D.

Dean and J. J. "Jake" Pickle Regents Chair in Public Affairs, Lyndon B. Johnson School of Public Affairs, University of Texas at Austin

Edwin Dorn became dean of the LBJ School in 1997. He previously served for four years as Assistant Secretary and then as Under Secretary of Defense for Personnel and Readiness. In that capacity, he was the Defense Secretary's senior advisor on recruitment, training, pay, and benefits for the Defense Department's total force of more than three million people (active duty military, reservists, and civilians). He also exercised control over the Defense Health Program, the Defense Equal Opportunity Management Institute, and other human resource programs. Before joining the Department of Defense, Dr. Dorn was a Senior Staff Member at the Brookings Institution, where he developed executive education programs for government and private sector managers. From 1981 to 1990, he served as Deputy Director for Research at the Joint Center for Political and Economic Studies. He also has been Director of Executive Operations for the U.S. Department of Education, Special Assistant in the U.S. Department of Health, Education, and Welfare, and Deputy Director of Evaluation for the Model Cities Program of Houston. His publications include *Rules and Racial Equality* (Yale University Press, 1979); *Who Defends America?* (Joint Center Press, 1989); and more than 50 articles, reports, and op-ed pieces. In addition to his duties as dean, Edwin Dorn is also a board member or advisor to several nonprofit organizations, including the Institute for Defense Analyses, the Kettering Foundation, the Children's Defense Fund, and the Capital Area United Way. He received his Ph.D. in Political Science from Yale University.

Antonio Furino, Ph.D.

Professor of Economics and Director, Center for Health Workforce Studies, Center for Health Economics and Policy, The University of Texas Health Science Center at San Antonio

Antonio Furino is a Professor of Economics in the Department of Family and Community Medicine of The University of Texas Health Science Center at San Antonio where he directs the Center for Health Economics and Policy and the Center for Health Workforce Studies. He teaches medical and dental economics and leads research on the health professions and the care of underserved populations. Dr. Furino is a Senior Research Fellow at the IC² (Innovation, Creativity, Capital) Institute of The University of Texas at Austin, where he participates in studies of human resource productivity, technology transfer, community health planning, and grassroots entrepreneurship. His publications are interdisciplinary with emphasis on national economic and health policy and its impact on minorities and the Hispanic/Latino population.

Eldon Nelson, Ph.D.

Dean, School of Health Science, Area Health Education Center, University of Texas at Brownsville

Eldon Nelson currently serves as Dean of the School of Health Sciences, The University of Texas at Brownsville/Texas Southernmost College in Brownsville, Texas. Previously, he has served as Dean of Instruction and Student Services at the College of Health Sciences in Roanoke, Virginia, where he developed and initiated the first Physician Assistant program in the Commonwealth of Virginia and started a two-year health sciences college to a four-year nationally accredited baccalaureate health profession institution. In addition, he has authored over 25 publications in national journals and noted scientific texts in topics as broad as the basics of hypertension, fluid regulation, hypothalamic function, and research success among medical colleges.

Steven R. Shelton, M.B.A., PA-C

Executive Director, East Texas Area Health Education Center, University of Texas Medical Branch at Galveston

Steve Shelton is the Executive Director for the East Texas Area Health Education Center at the University of Texas Medical Branch at Galveston (UTMB), a program developed in 1991. Mr. Shelton is Associate Professor in the School of Allied Health Sciences, and Clinical Assistant Professor in the School of Medicine, Departments of Family Medicine, and Preventive Medicine and Community Health, The University of Texas Medical Branch at Galveston. Mr. Shelton trained at UTMB as a physician assistant and worked for three years in rural family practice before returning to UTMB in 1978 as a faculty member in the Department of Physician Assistant Studies. He also continued his clinical work in the Department of Family Medicine during this time. Mr. Shelton completed his Master of Business Administration at the University of Houston Clear Lake in 1983.

Guillermo Soberón, M.D., Ph.D.

President, Consejo Mexicano para la Acreditación de la Educación Médica (Mexican Council for Accreditation of Medical Education); Executive President, Fundación Mexicana para la Salud (Mexican Foundation for Health)

Guillermo Soberón is currently serving as Executive President of the Mexican Health Foundation and Secretary of the National Human Genomic Council, as well as President of the Mexican Council for Accreditation of Medical Education, and Coordinator of the Consortium for the Mexican Institute of Genomic Medicine. He obtained his medical degree at the Universidad Nacional Autónoma de México (National Autonomous University of Mexico, UNAM) in 1949 and his Ph.D. in Physiology at the University of Wisconsin in 1956. He has occupied the highest posts at the UNAM: he has served as Director of the Institute for Biomedical Research, Coordinator of Scientific Research and, on two separate occasions, has held the office of president of the university. He has also held the following positions: Coordinator of Health Services for the Presidency of the Republic (1981-1982); Minister of Health (1982-1988); and Coordinator of the Advisory Council of Sciences, an advisory body for the President of the Republic (1988-1994). Dr. Soberón has written or co-authored 18 books, has participated in another 51 books, and has conducted more than 300 conferences and seminars.

Arnoldo S. Torres, M.P.A.

Executive Director, California Hispanic Health Care Association

Arnoldo S. Torres is currently a policy consultant and partner at Torres & Torres Policy Consultants in Sacramento, California, where he primarily represents non-profit organizations providing health and education services to California's minority and indigent communities. He is also Co-Chair of the Coalition for Equity for Minorities, a local coalition that functions as a watchdog group on issues related to treatment of minorities and serves as a part-time consultant to Movimiento Solidaridad Nacional, the Salvadoran centrist political party. Mr. Torres represented the National Hispanic Leadership Conference and the Arizona Farmworkers Union concerning the Immigration Reform and Control Act of 1986 in Washington D.C. He has also served as the Executive Director of the League of United Latin American Citizens. He received his Master's degree from American University's School of Government and Public Affairs in Public Administration in Urban Affairs in 1977.

Adela Valdez, M.D.

Assistant Regional Dean, Regional Academic Health Center, University of Texas Health Science Service Center at San Antonio

Adela Valdez currently serves as the Coordinator of the Regional Academic Health Center for the Valley Baptist Health Systems and also the Assistant Regional dean for the Regional Academic Health Center. She helped initiate the Valley Baptist Medical Center's Family Practice Program and was the first Interim Medical Director from 1995 to 1996. Dr. Valdez was in private practice from 1990 to 1996, as well as the Medical Director of Ultra Fit, a preventive medicine clinic, from 1995 to 1998. She was Hospital Administrator of the South Texas Hospital from 1985 to 1987 and Area Health Education

Center Director from 1990 to 1991. Dr. Valdez holds a governmental appointment as a Commissioner for the Texas Commission on Jail Standards. She is a Board member of the Valley Baptist Health Systems Foundation, a previous member of the Southwest Physician Network, a past N.Y.U. Fellow in Healthcare Policy through the National Hispanic Medical Association and is a class of 2000 graduate of Leadership Texas. She also serves on the Advisory Board for Valley Baptist Healthcare Network, a Physician Hospital Organization, and also chairs several committees within the Valley Baptist Health Systems.

Jose Antonio Vela Capdevila, D.D.S.

Dean, School of Dentistry, National Autonomous University of Mexico (UNAM)

Dr. Jose Antonio Vela Capdevila graduated with honors from the National Autonomous University of Mexico School of Dentistry in 1976. He continued his training and obtained his master's degree in the area of oral prosthetics in 1985. Over the course of many years, Dr. Vela has made significant contributions to the development of dentistry in Mexico and especially at UNAM, where he became a faculty member in 1975. Since then, he has held several appointments: Chair of the oral prosthetics master's program, Coordinator of the post-graduate research division, and Associate Dean. He has been dean of the school of dentistry since 1997. He has been speaker and author of more than 95 presentations and publications in Mexico and abroad. Dr. Vela is former president of the Mexican Academy of Prosthodontics and of the Mexican Association of Dental Research. He is a member of the editorial board of several dental journals.

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David Warner is a professor at the Lyndon B. Johnson School of Public Affairs. His major teaching and research interests are in economics, health policy, and health finance. A graduate of Princeton University (B.A.) and Syracuse University (masters in international public administration and Ph.D. in economics), he formerly taught at Wayne State University and Yale University and was Deputy Director of the Office of Program Analysis of the New York City Health and Hospitals Corporation. Professor Warner has served as a consultant to a number of organizations in the health sector, and for six years was a member of the Board of Directors of Austin's Brackenridge Municipal Hospital. In addition, he was Chairman of the Texas Diabetes Council from January 1985 to December 1989. Among his publications are *Toward New Human Rights*, more than 40 articles and book chapters, and 16 books, monographs, and policy research project reports. He is currently working on projects related to improving health insurance coverage, the integration of the U.S. and Mexican health care systems, diabetes policy, public health funding, and U.S.-Mexico border health.

Section II. Background Papers

Chapter 1. The Impact of International Trade Agreements on Services: An Examination of Cross-border Medical Services between Mexico and the U.S.

by Amy Kirschenbaum and Jessie Kempf

Introduction

After World War II, policymakers realized that they could no longer afford to maintain isolationist foreign policies. The Allied nations recognized that they needed a more open system of investment and trade if they were to recover fully from the war and enjoy economic prosperity. This led many countries to negotiate and agree to the General Agreement on Tariffs and Trade (GATT) in 1947 in an effort to regulate the international trade of goods. The GATT members met periodically over the next 40 years to negotiate lower trade tariffs and address the needs of specific sectors such as coal, steel, and agriculture. In 1986, the Uruguay Round of Negotiations convened and expanded GATT to include services, investments, intellectual property rights, and other interests outside of goods. In 1993, the Uruguay Round concluded. The updated agreement included the General Agreement on Trade in Services (GATS), and created the World Trade Organization (WTO) to serve as a forum for future negotiations and rule-making. The WTO now represents 135 countries; more than 30 other nations are currently seeking membership.¹

In addition to expansion within the WTO, the past 15 years have witnessed an explosion in the number of regional trade agreements. A majority of world trade now occurs through organized trading blocs. Nearly every country in the world is a member of at least one trade agreement. The most common form of regional trade agreement is the free trade area where the member states agree to abide by a set of regulations, but each country maintains its own trade policies toward non-members. GATS, NAFTA, and the proposed FTAA are three of the most prominent and influential trade agreements of recent times.

The health care sector is one of the fastest growing segments of the world economy in both developing and developed nations.² Globalization has already led to a modest growth in the cross-border delivery of health services in recent years, including increases in joint ventures and the mobility of medical personnel and consumers.³ However, health services trade has not yet been singled out for special attention in any of the major trade agreements. Perhaps this is because other industries account for a greater proportion of international commerce, or because people do not regard health services as particularly worthy of special protection.⁴

In light of the growing visibility of global health issues, many policy experts agree that globalization will have much more dramatic impacts on the cross-border trade of medical services in the next century. The first section of this paper will examine GATS, NAFTA,

and the proposed FTAA as they pertain to trade in services and, more specifically, health care. The second section will analyze economic obstacles to the international trade in services. This paper will argue that the current international trade agreements establish a solid framework for liberalization, yet still require further clarifications to have a greater impact, particularly when it comes to the trade of health services.

Summary of the Issues

General Agreement on Trade in Services

At the conclusion of the Uruguay Round of multilateral negotiations in 1993 the first trade agreement of its kind, the General Agreement on Trade in Services emerged, which bound over 130 member countries of the World Trade Organization to liberalization efforts in trade in services. Using lessons learned from earlier agreements such as the General Agreement on Trade and Tariffs, which applied only to goods, GATS established rules affecting access to the global service markets.

At the Uruguay Round, a great deal of time was dedicated to defining exactly what trade in services embodied. “Services,” according to the negotiators, would mean anything that is not physically tangible, transportable, and storable. They are invisible commodities that are both produced and consumed simultaneously.⁵ Negotiators referred to the “classic historical example” of the service “provided by a lighthouse, but the concept subsequently extended to such public health services as water and sanitation systems, health education, and information.”⁶

In Article I of GATS, the framework for definition and discussion of trade in services was categorized into four modes of supply:

1. *Cross-border trade*: Electronic or physical transactions across borders, such as air or maritime transport and financial trading. This is similar to traditional ideas of trade with goods where both the consumer and producer remain in their respective home countries (e.g., a British university provides courses to citizens of Malaysia).
2. *Consumption abroad*: Movement of the consumer to a foreign country for reasons such as tourism or education (e.g., an Argentine citizen purchases plastic surgery in Costa Rica).
3. *Commercial presence*: Direct investment for the purpose of delivering services such as local telecommunications or electricity (e.g., a U.S. health service organization operates a hospital in Saudi Arabia).
4. *Presence of natural persons*: Temporary movement of a producer to provide services such as business consulting or construction (e.g., Cuban nurses travel to Sierra Leone to supplement scarce nursing services).⁷

For the purposes of this project, the mode that most applies is Mode 4 trade, involving presence of natural persons. However, it should be noted that, while the four modes offer a useful framework for discussion, the lines frequently become blurred and can overlap. For example, in the case of this research project, Mode 2 may also apply to the ability of medical students, or even medical residents, to study in programs across the border from their native countries. In a less significant way, Mode 3 may also come into play as foreign investors financially support the creation of private hospitals (or private medical, dental, or nursing schools) in the United States and Mexico.

The approach to trade agreements of this nature can encompass two basic structures:

1. The “positive list” or “bottom-up” approach of sectors that can trade services.
2. The “negative lists” or “list-or-lose” technique whereby, unless exceptions to trade liberalization are listed, all sectors are opened.⁸

GATS employs the “positive list” approach by allowing member countries to opt for or against liberalization in certain sectors. NAFTA and the FTAA, on the other hand, will build off of a “list-or-lose” approach so that, unless otherwise noted in the agreement, all sectors will open up to free trade. Federal social services are one example of a sector that was listed in NAFTA’s negative list approach to remain closed to trade liberalization.

In the trade policy community, there has been much debate over the pros and cons of the different approaches. There seems to be consensus that the negative list offers three key advantages. First, a negative list approach will foster greater transparency, as the global community will know instantly which sectors are open and which are not. On the other hand, from a positive list, one can automatically deduce which sectors remain closed and transparency concerns can be addressed in more depth within the actual agreement. Second, the negative list approach provides a greater pro-liberalization environment, by allowing countries to avoid naming a long list of exceptions. Lastly, a negative list approach assumes that any new developments or technologies would be considered by existing trade provisions.⁹

In addition to adoption of the positive list approach, GATS has a series of core principles that define its potential range of influence. The hallmark of these principles is the most-favored nation (MFN) provision in Article II. This principle of international trade requires member countries of an agreement to give the most favorable treatment “accorded to any of their trading partners to all the other members immediately and unconditionally.”¹⁰ Exemptions to this rule may be included within the body of the agreement. Nonetheless, a strong commitment to comply with this principle lessens the possibility of any preferential treatment by one country to another and, at the same time, bolsters transparency in trade. The MFN obligation is “a powerful guarantee, in particular for small and less economically developed Members, allowing them to participate automatically in any liberalization that Members with more negotiating leverage may be able to achieve.”¹¹ The underlying logic behind the provision is that arrangements of this sort will eventually lead to even greater liberalization in the global trading system.

Through her work, Sherry Stephenson, deputy director of the Trade Unit of the Organization of American States, has examined potential areas of conflict with the MFN provision. Within GATS, Article V allows for participating countries in GATS to also engage in regional trade agreements. Exemption from MFN treatment, however, must be based on the rules outlined in Article V. As Stephenson notes, currently there is considerable “confusion and lack of clarity surrounding the interpretation of these requirements.”¹²

GATS Article V called for “economic integration,” whereas its counterpart in GATT is called “Customs Unions and Free Trade Areas.” The Committee on Regional Trading Agreements (CRTA) was established in 1997 by the WTO to explore the issue of regional trade and economic integration agreements and to develop a consistent interpretation of both GATT Article XXIV and GATS Article V.¹³ Although discussion had been taking place on numerous levels with this issue in relation to GATT, very little exchange had taken place with respect to the trade of services. The pertinent provisions of GATS Article V are summarized as follows:

Article V—Economic Integration:

1. This Agreement shall not prevent any of its Members from being a party to or entering into an agreement liberalizing trade in services between or among the parties to such an agreement, provided that such an agreement:

(a) has substantial sectoral coverage, and

(b) provides for the absence or elimination of substantially all discrimination, in the sense of Article XVII, between or among the parties, through:

(i) elimination of existing discriminatory measures, and/or

(ii) prohibition of new or more discriminatory measures, either at the entry into force of that agreement or on the basis of a reasonable time-frame except for measures permitted under Articles XI, XII, XIV, and XIV.

(c) In evaluating whether the conditions under paragraph 1(b) are met, consideration may be given to the relationship of the agreement to a wider process of economic integration or trade liberalization among the countries concerned.

(d) Any agreement referred to in paragraph 1 shall be designed to facilitate trade between the parties to the agreement and shall not in respect of any Member outside the agreement raise the overall level of barriers to trade in services within the respective sectors or sub-sectors compared to the level applicable prior to such an agreement.¹⁴

The three main requisites established in Article V that must be met by all regional trade agreements that provide preferential treatment on trade in services are that such agreements must do the following: “cover ‘substantially all trade’ (with respect to number of sectors, volume of trade, and modes of supply); result in the removal of ‘substantially all discrimination’ between the parties to an agreement; and not raise the overall level of barriers to trade in services to services suppliers from countries outside the agreement.”¹⁵

A critical requisite of all economic integration agreements on services must allow for liberalization in “substantially all sectors.” Stephenson and others raise the issue of whether this “substantial sectoral coverage” refers to sectors or sub-sectors or both. It is also unclear whether GATS Article V permits the exclusion of a mode of supply for only one service sector.

An equally important consideration is whether or not a regional trade agreement covers investment from other countries. Since GATS defines investment as a critical mode of supply for trade in services, one could conclude that any agreement that excluded investment would not be consistent with the multilateral rules. Nevertheless, some service sectors maintain noteworthy restrictions on investment conditions. Despite trade agreement language not requiring local presence, governments tend to require foreign suppliers to establish local presence before allowing services transactions to take place with local customers.¹⁶ It is questionable whether this can be considered a violation of Article V provisions.

Another key requirement established in GATS Article V calls for integration agreements to provide for the “absence or elimination of substantially all discrimination.” This is analyzed in terms of “GATS Article XVII on national treatment, which provides that treatment granted to service suppliers from other parties to an integration agreement be no less favorable than that accorded to domestic service suppliers.”¹⁷ In essence, this calls for no discriminatory barriers for domestic or cross-border suppliers. Article V lists specific other GATS articles where measures are exempt from eliminating “substantially all discrimination.” These articles are: Articles XI (IMF Provisions on Payments and Transfers), XII (Balance of Payments), XVI (General Exceptions related to health, safety, taxation, and public order), and XIV (National Security). Not included are Articles VII (Recognition), X (Emergency Safeguard Measures), XIII (Government Procurement), and XV (Subsidies). The question then remains as to “whether such exclusions to the agreement make it impossible for members of an integration agreement to discriminate against each other in important areas such as the licensing of professional service suppliers, the granting of domestic subsidies, and government procurement of services.”¹⁸ In the case of professional services in the Western Hemisphere, no agreements on services have managed to eliminate or smooth out licensing requirements. GATS specifies that the elimination of “substantially all discrimination” by members to economic integration agreements be reached within a reasonable time frame. According to interpretations of this language in GATT at the Uruguay Round, a “reasonable time frame” has been taken to mean no longer than ten years for goods. This issue has not yet been resolved for services.

Article V is also not clear about how to interpret the meaning of its requirements not to raise the barriers to trade in services for parties outside an integration agreement in individual service sectors or sub-sectors. Barriers to trade for goods may be more easily measured and evaluated; however, in the case of services, one is at a loss for measuring overall levels of trade barriers.

Lastly, GATS Article V has some problems related to notification of regional and economic integration and hesitation of developing countries to participate in the process. In general, there is a reluctance to report to the WTO when new economic and regional trade agreements are signed. "A study done by the WTO Secretariat for the purpose of drawing a global picture of RTAs identified more than 130 such agreements (not a comprehensive count), of which only 60 had been notified to GATT/WTO. This leaves 74 non-notified RTAs."¹⁹ Several of these RTAs had important provisions on trade of services, but there is no enforcement mechanism or incentive to comply with the WTO's notification and review process.

At the end of 1999 in the Western Hemisphere, ten bilateral or regional integration agreements discussing the trade of services had been signed.²⁰ These agreements are the following:

1. North American Free Trade Agreement (United States, Mexico, Canada): January 1994
2. Group of Three Free Trade Agreement (Mexico, Colombia, Venezuela): January 1995
3. Mexico-Bolivia Free Trade Agreement: January 1995
4. Mexico-Costa Rica Free Trade Agreement: January 1995
5. Chile-Canada Free Trade Agreement: July 1997
6. MERCOSUR Protocol on Services (Argentina, Uruguay, Paraguay, Brazil): December 1997
7. Central America-Dominican Republic Free Trade Agreement: April 1998
8. Andean Community Decision 439 on Services: June 1998
9. Mexico-Nicaragua Free Trade Agreement: July 1998
10. Chile-Mexico Free Trade Agreement: August 1999.²¹

The WTO had been notified of only two of these ten agreements by the year 2000. There are a number of potentially troublesome issues that arise here. For example, several countries or regions are party to multiple multilateral agreements. Overlapping membership to such agreements may invoke additional rules to which each country must comply and, thus, running counter to the intended purpose of trade liberalization. Additionally, some countries have joined forces through multilateral agreements that are sector-specific. To date, the legal status on such accords is unclear at best. Also troublesome is the fact that WTO members have claimed sweeping exemptions for preferential trade agreements "through notifying these under Annex II or their list of

MFN exemptions, rather than having their agreements examined by the WTO Committee on Regional Trade Agreements. Presumably their purpose is to avoid the examination process under GATS Article V because of uncertainty over whether such agreements would be deemed compatible with multilateral obligations.”²²

The Committee on Regional Trading Agreements (CRTA) was established in 1997 by the WTO to explore the issue of regional trade and economic integration agreements and to develop a consistent interpretation of both GATT Article XXIV and GATS Article V.²³ Although discussion had been taking place on numerous levels with this issue in relation to GATT, very little exchange had taken place with respect to the trade of services.

Health Services in GATS

Of all the services sectors encompassed in GATS, health care and education are the two that have had the fewest number of binding agreements drawn. Health services is typically divided up into four sub-sectors: medical services, dental services, hospital services, and services provided by nurses and midwives. Of the four sub-sectors, “medical and dental services are the most heavily committed (54 Members), followed by hospital services (44 Members) and services provided by nurses, midwives, etc. (29 Members).”²⁴ This data suggests that it is easier to facilitate liberalization in capital-intensive and skills-intensive sectors than labor-intensive activities.²⁵

Under Article XIV of GATS, member states are entitled to take any measure necessary to protect human, animal, or plant life or health, regardless of their obligations under the Agreement. Such measures, however, cannot discriminate between WTO member trading partners or constitute a disguised restriction on trade in services. To employ such an exemption, the measures may be subject to scrutiny by a dispute panel regarding what is “necessary” to protect health. Some guidance as to what WTO dispute panels would require in determining the necessity of a given health measure can be gleaned from the WTO ruling on a ban on asbestos imports. In that case, alternative measures that were less trade-restricting were not demonstrated as practical and would not have eliminated the risk to health, which was the level of health protection to be achieved by the import ban.²⁶ However, as this case involved a product (good) that had a clear health effect and so fell under the GATT, it remains uncertain whether a similar test would be applied to a service with a health impact covered under GATS.²⁷

In the future, some sectors such as accounting have more fully addressed issues of domestic regulation, one of the primary challenges facing trade in health services. In 1999, the Working Party on Domestic Regulation began developing ways to handle issues of licensing requirements and procedures, technical standards, and qualification requirements. One document that emerged from the efforts of the Working Party on Domestic Regulation was the Disciplines on Domestic Regulation in the Accountancy Sector. This constituted the first major step in the development of GATS disciplines on domestic regulation. This new measure advised different industries and governments to ensure that current regulations did not constitute significant barriers to trade.

The accounting profession, in addition to transparency requirements and other general provisions, contains provisions on the administration of licensing requirements, qualification requirements and procedures, and technical standards. The critical message of the disciplines is that measures instituted for these regulatory purposes should not be more restrictive than absolutely necessary and only go so far as to fulfill the legitimate objective (consumer protection, quality assurance, assurance of professional competency, etc.) of the measure. In a similar fashion then, guidelines of this nature could be established for the health professions, advising regulatory bodies to review their professional requirements and procedures to ensure that they fulfill their intended objective, but do not create excessive barriers to entry.

North American Free Trade Agreement (NAFTA)

Overview

In 1994, the U.S., Canada, and Mexico entered into the North American Free Trade Agreement (NAFTA) to “eliminate barriers to trade” and “promote conditions of fair competition between the three nations.”²⁸ Though much of NAFTA focuses on the trade of goods, a handful of sections deal with the trade of services, including medical services. The impact of NAFTA on the cross-border movement of patients, medical professionals, and investments has been relatively small so far, leading many in the health care industry to wonder if NAFTA is being violated or if it is simply ineffective. Many health policy experts believe that the agreement may have a more pronounced effect on cross-border health services in the future.

Like GATS, the “Services Chapter” of NAFTA imposes the following norms on service sectors. Note that these norms apply across the board unless they are specifically exempted through “reservations:”

1. *National treatment* (Article 1202): Each nation must treat service providers from the other countries as favorably as it treats its own providers.
2. *Most-favored-nation treatment* (Article 1203): Each country must treat service providers from the other NAFTA countries the same as it treats those from any other NAFTA or non-NAFTA country.
3. *No requirement of local presence*: A NAFTA country cannot require a service provider from another NAFTA country to have a “local presence” such as a representative office.

The “Investment Chapter” of NAFTA (Chapter 11) contains these same norms and adds the following:

1. *No requirement of local membership in senior management* (Chapter 11): A NAFTA nation cannot require a foreign investor to include a certain number of nationals on its senior management team.

2. *No performance requirements* (Chapter 11): A NAFTA country cannot require another NAFTA provider to purchase a certain percentage of its supplies or services from it.

Reservations in the Areas of Health Care

NAFTA allows its members to exempt themselves unilaterally from certain provisions in the Services Chapter through general exceptions or specific reservations. The drafters of NAFTA opted not to include health services in the general exceptions found in Chapter 21, which include exceptions for broad areas such as national security, taxation, and cultural industries. Instead, the drafters provided a way for the members to insert reservations for “existing nonconforming measures” in Annex I, and allowed make reservations for entire sectors or sub-sectors in Annex II.

Under Annex I, all of the nonconforming measures that were in existence on March 31, 1996, remain unaffected by NAFTA through a series of “bounded” measures. Article 201 of the agreement defines “measures” as any “law, regulation, procedure, requirement, or practice.”²⁹ However, determining whether something is or is not an existing reservation has proven troublesome in real life because there is no master databank of these laws and regulations. Though Annex I does not explicitly say whether it protects the reservations of states or provinces in addition to those of national governments, the member nations and many trade policy experts have agreed that state and provincial reservations listed in Annex I are protected.³⁰

While the countries may amend the legislation and regulatory laws that were in effect at the time the Annex I reservations were made, they may no longer amend the measures in a manner that is more restrictive for foreign investors or service providers. The existing measures in Annex I initially referred to the laws, norms, and regulations that were in effect on January 1, 1994. However, NAFTA grandfathered all of the existing nonconforming measures for a two-year period ending on January 1, 1996. This deadline was extended to March 31, 1996, by an exchange of letters from the three nations’ trade ministers, but no further extensions have been made.³¹

In addition to establishing reservations for existing laws and regulations, the Canadian government and the United States Trade Representative specifically set aside a handful of health care reservations in Annex II of the agreement. The Annex II reservations shield the health care sector from NAFTA’s full impact whenever health care is “a social service” maintained or provided for a “public purpose.” The words “social service” and “public purpose” have been ambiguous and troublesome, and have caused many Canadians to worry that U.S. providers would be able to interfere with Canada’s public health system.³²

Because the Annex II reservations are considered “unbounded,” these reservations allow the member states to pursue new legislation that is more restrictive of the rights of foreign investors and service providers as long as the new measures do not violate public policy or the legal parameters laid out in the reservation itself.³³ Formal amendment of Annex II is typically too cumbersome and difficult to obtain. Therefore, nations or states

that wish to alter the annex generally enter a “letter of understanding” with the other members to clarify the existing wording in Annex II.

NAFTA sets forth a series of mechanisms for arbitrating disputes over reservations. As a general rule, the text of the NAFTA agreement will be construed broadly and liberally, while the language of a country-specific reservation will be construed narrowly.³⁴

Chapter 11, Section B stipulates that foreign investors must solve their disputes before international arbitration panels. This provision, Article 1120, specifies that the panels must operate under the auspices of an institution such as the World Bank, and that they must use international commercial law rather than domestic legal principles and procedure.

Canadian attorney Steven Shrybman has criticized NAFTA’s dispute resolution procedures for being “antithetical to the principles of open, participatory and democratic decision-making” because the rules of international arbitration often provide that tribunals must act in privacy and secrecy. Shrybman also criticizes the arbitration process because international institutions appoint the parties that choose the arbitrators even though these parties typically have no experience in health care services. While Articles 1131 and 1132 allow the NAFTA Commission to issue binding interpretations of contested provisions to ensure some measure of consistency among panels and tribunals, the commission has not exercised this power on a broad scale. Because dispute resolution panels are not bound by the decisions of other panels, the principle of *stare decisis* (standing by previous decisions, or precedent), does not apply to the arbitration panels’ decisions, and many of the provisions in the services and investment chapters of NAFTA remain unclear.³⁵

Streamlining Professional Standards

Article 1210 of the agreement suggests that the “relevant bodies” must “negotiate mutually acceptable professional standards and criteria for licensure and certification of professional service providers,” and “provide recommendations on mutual recognition.” The three countries are supposed to establish transparent professional standards that are no more burdensome than necessary to ensure professional competence. The agreement also suggests that the nations streamline their education, examination, experience, ethics, professional development, language, and consumer protection standards.³⁶

So far, private umbrella groups such as the Center for Accreditation of Higher Education and the Council on Licensure, Enforcement, and Regulation (CLEAR) have controlled the efforts to standardize licensure requirements. Private organizations have assisted regulatory agencies through conferences, funding incentives, and development projects.³⁷ CLEAR, for example, serves as a clearinghouse of resources and information to help government officials and agencies involved in the field of professional and occupational regulation improve administrative and regulatory practices and sponsors an annual conference dedicated to the globalization of professions. Accrediting bodies, certification organizations, licensing agencies, trade associations, and corporate providers of

professional education have participated in networking and strategic planning at these conferences.³⁸

In addition, the Trilateral Initiative for North American Nursing, launched with the support of the Kellogg Foundation and other private contributions, published *An Assessment of North American Nursing* in 1996 that describes the three countries' nursing systems and contrasts the significant differences in their credentialing processes.³⁹ While private organizations continue to discuss and debate the streamlining of licensure requirements, little formal action has been taken. It is not clear how uniform the licensure standards must be under the regional trade agreements, but it will realistically take time to bring licensure standards in closer alignment with each other.

In addition to asking the member nations to negotiate acceptable licensure standards, the agreement requires the NAFTA countries to eliminate citizenship and residency criteria for occupational licensing by 2002. Because the most-favored nation principle does not apply to professional standards, regulatory authorities may still develop unilateral or bilateral agreements that recognize another country's licensing criteria.⁴⁰

New Immigration Visas that Allow the Movement of Medical Professionals

Many health care experts have speculated that the movement of health professionals across the border could lead to better health care in the U.S. and Mexico. Proponents of cross-border medical services have suggested that the movement of medical professionals might improve the cultural match between consumers and providers in the U.S. and Mexico. These people have suggested that Mexican Americans residing in the American Southwest might be more comfortable with Mexican medical professionals, while the growing population of American retirees in Mexico might be more at ease with U.S. doctors and nurses.⁴¹ Many health policy experts have also suggested that the cross-border movement of professionals might improve the transfer of knowledge and clinical procedures across the border by fostering collaboration between U.S. and Mexican providers.⁴²

While NAFTA has not been as successful in the cross-border movement of medical professionals as hoped, the agreement has allowed a small number of medical professionals to gain temporary "TN" visas to work across the border. The number of doctors and dentists arriving from Mexico under TN visas each year is so small that the U.S. Immigration and Naturalization Service (INS) does not keep count of these entries. The INS has compiled statistics on the entry of RNs from Mexico, but the U.S. Department of Labor reports that these statistics are inadequate because they only account for a small portion of the professionals who enter from Mexico under TN visas each year. In 1998, the INS recorded the occupations of 46 percent of the Mexicans entering the U.S. under NAFTA, and found that only ten RNs entered from Mexico that year. In 1999, the INS surveyed the occupations of only 24 percent of all Mexicans entering under NAFTA, and found only six RNs. Out of the 9 percent of entries it surveyed in 2000, the INS only found one Mexican RN entering under the agreement. It recorded nine RNs in 2001 and three in the first half of 2002, but has not reported the

number of people who entered from Mexico during this time period. There is no other U.S. data on this issue.⁴³

Professionals may stay for up to one year on a TN visa, and are subject to the national regulations of their host countries. NAFTA stipulates that a citizen of a member country may gain temporary TN status provided that 1) the profession is on the State Department's "NAFTA Professional Job Series List," 2) the person possesses the specific criteria laid out in the job series list, 3) the prospective position requires someone in that professional capacity, and 4) the person is going to work for a U.S. employer. Doctors, nurses, and dentists must have one of the following credentials to enter on a TN visa:

1. Physician (teaching or research doctors only): M.D., Doctor en Medicina, or state/provincial license
2. Dentist: D.D.S., D.M.D., Doctor en Odontología, Doctor en Cirugía Dental, or state/provincial license
3. Registered nurse: state/provincial license or Licenciatura degree.⁴⁴

The application requirements for Canadian and Mexican citizens differ because Canadian citizens only need TN status, and are not required to obtain visas to come to the U.S. To apply for a TN visa, a Mexican citizen must: 1) ask his or her prospective U.S. employer to fill out a labor condition application, 2) have the employer fill out an I-129 "Petition for Non-Immigrant Workers" with the INS, and 3) apply for a non-immigrant visa at a U.S. embassy or consulate in Mexico after the petition has been approved.⁴⁵

An alien entering on a TN visa is not considered an immigrant. The person's spouse and unmarried, minor children are entitled to derivative status, but they may not accept employment in the United States. Mexican citizens may apply for an extension of their temporary stay by having their employers renew their labor certifications and file another I-129 with the regional INS office.⁴⁶

NAFTA allows its members to place numerical limits on the visits from foreign medical professionals each year. Article 1207 allows the member nations and their provinces or states to maintain existing "quantitative restrictions" so they can limit the number of licenses issued in an area. A nation, state, or province may create new quantitative restrictions if they are listed in Annex V of NAFTA, but no restriction is permissible if it discriminates against a certain nation's providers. A nation that places new quantitative restrictions must negotiate to reduce or remove the restrictions upon the other nations' request, and must subsequently engage in negotiations every other year.

The Movement of Patients

While NAFTA has not affected the ability of nationals from one country to travel to another nation for care, the agreement has indirectly fostered cross-border medical services. NAFTA has led to increased travel across the border, triggering an increase in the number of patients who seek medical services away from their home countries. Hospitals and doctors' offices on the U.S. side are seeing increases in the demand for

health services from Mexican nationals who travel for specialized care or emergency treatment while they are staying in the U.S. Dentists and pharmacies line the streets of the border towns in Mexico, waiting for U.S. customers who would rather pay the lower prices south of the border. As trade liberalization continues to increase the flow of people across the U.S./Mexico border, the need for health services along the border will grow and the movement of patients across the border will continue to increase.⁴⁷

A 1994 article in the *American Journal of Public Health* predicted that two problems would arise from the increased movement of patients across the U.S./Mexico border. First, the article predicted that “inadequate channels of communication, referral, and follow-up” between providers in Mexico and the U.S. would likely have a negative impact on the “continuity, quality, and costs” of medical care. Second, the article predicted that the non-portability of insurance would have serious repercussions on the accessibility, equity, and efficiency of medical care in the border region.⁴⁸ It is too soon to know whether the spirit behind NAFTA will ultimately lead to transnational health insurance and better communication between physicians in both countries.

Foreign Investments

Chapter 11 of NAFTA authorizes foreign companies to invest in and manage local activities. The agreement does not, however, authorize the “import” of foreign labor to carry out investment activities.

Some health experts believe that NAFTA has not had a dramatic impact on the establishment of cross-border health services or investments because of disparities in the health care systems of the two countries. U.S. providers have generally had an edge over local Mexican providers because there is a common belief in Mexico that the Mexican private sector possesses outdated technology, uneven medical care, and limited financial capacity for growth compared to the U.S.⁴⁹ However, U.S. providers have been slow to enter the Mexican market because of negative images associated with health care in Mexico.⁵⁰ The impact of NAFTA on U.S. investments in Mexico is largely unknown because the Bureau of Economics of the Commerce Department aggregates much of its official trade statistics, suppressing the detail to much of the sector-specific information. In addition, many private sector entities do not want their activities disclosed, so the statistics that are available are so general that they are not helpful for industry-specific analysis.⁵¹

Some people believe that the NAFTA agreement will ultimately have its greatest impact on foreign investments. Mexican providers have opportunities to establish Mexican health care units in the U.S., as many members of the growing Hispanic population in the U.S. cannot afford the costly medical care and health insurance provided by U.S. companies.⁵² However, policy experts have suggested that Mexico will need to strengthen its private health care infrastructure if it wants to deliver health care services to U.S. consumers.⁵³ Barriers to Mexican health care providers practicing or even receiving post-graduate training in the U.S. remain substantial to date.

The Outlook for NAFTA

Despite NAFTA's limited impact on health care thus far, the three governments are all reasonably satisfied with the agreement on the whole. Trade among the NAFTA nations has expanded far more rapidly than trade in the rest of the world.⁵⁴ Consequently, many policy experts have suggested that NAFTA should be expanded within the medical service sector. Others argue that the text of the agreement is sufficient, and that the services sector will remain largely unchanged until the NAFTA members establish institutions to enforce the text of the agreement.⁵⁵ Ultimately, the "spirit of NAFTA" may provide the impetus for the member countries to expand cross-border medical services and increase the migration of health care professionals in the future.

MERCOSUR: Protocol of Montevideo on Trade in Services

Another regional trade agreement that has received much attention and praise for taking great strides in regional integration is the Southern Cone Common Market, or MERCOSUR. MERCOSUR provides for a free trade area between Argentina, Brazil, Paraguay, and Uruguay; Chile and Bolivia are affiliate members of the agreement.

The 1991 Treaty of Asunción creating MERCOSUR agreed to establish a common market with the free circulation of services. Based on this event, the Protocol of Montevideo on Trade in Services was agreed to and signed in December 1997 to gradually liberalize trade in services through annual rounds of negotiations. MERCOSUR took a positive-list approach, similar to GATS, in which these annual negotiations are intended to add more sectors and deepen the degree of market access. Unlike GATS, however, MERCOSUR members agreed that their goal was to completely eliminate all restrictions affecting services trade in all sectors within 10 years from the time the protocol took effect. At this time, the Montevideo Protocol has not yet been fully ratified by all four member states.⁵⁶ By contrast, NAFTA, the Central American Common Market (CACM), and CARICOM foresee the maintenance of restrictions on national treatment, some but not all of which may be phased out. In addition, the Andean Community agreement aims for complete regulatory harmonization for key sectors, while most others do not. In all cases, however, countries retain the right to make exceptions to protect human life or health.

These differences among the regional agreements make it important to sort out which provisions apply to trade in health services between countries. The differences are also significant in the context of FTAA negotiations, as they complicate the task of creating a common set of rules applying to services trade throughout the Western Hemisphere.

The Case of the European Union

Background

In many areas, the European Union (EU) process of trade liberalization in the services area serves as a paradigmatic test case for wider international integration. It gives an idea of the economic benefits and rewards, but also of the challenges associated with

multilateral liberalization. In health care services, the EU's experience has not been entirely positive to date. Cross-border investment is hampered by discrepancies between institutional structures, limiting the scope for private market participation, while labor mobility suffers from cultural and language barriers. On the other hand, however, there are recent rulings by the European Court of Justice that may enhance consumer mobility across national borders and, at the same time, limit the ability of national insurance regulators to block access to health care services.⁵⁷

To understand the harmonization problems of healthcare credentialing within the EU it is necessary to first understand how the present-day EU came into being in 1957 with the signing of the Treaty of Rome, consisting of six original member states forming the European Economic Community. A growing number of members led, therefore, to a greater group of member legislative systems to incorporate European directives and regulations.

Health policy has historically been left to the member states to decide, which was made explicit in the 1997 Amsterdam Treaty. However, EU health care policy has affected states indirectly through the EU's core idea of free movement of goods, services, people, and labor within the borders of the EU. Present-day European Commission legislation intends to ensure the free movement of health service professionals, based essentially on mutual recognition of professional qualifications. Developments on cross-border trade of services for doctors, nurses, and dentists advanced at different times, so discussion of negotiating progress most easily divides along professional lines.

Nurses

Discussions concerning cooperation for trade in nursing services in Europe began in 1957 with a special forum of the Public Health Commission of the Council on Europe. Through this forum the Western European Nursing Group was founded and helped in securing legislation through subsequent decades to homogenize the nursing standards in the EU. In 1967, a European agreement on the instruction and education of nurses was signed. However, this agreement was not ratified by all member states. This agreement points to an early example of the difficulties in standardizing professional qualifications. The agreement culminated in the 77/452/EEC Directive, which provides for mutual recognition of diplomas awarded in other member states, and the 77/453/EEC, which set out the requirements of theoretical and practical instruction for general nursing. This in turn led to the 1979 nursing sectoral (professional specific) directive becoming effective. The Advisory Committee on training in nursing (ACTN), which was formed by the European Council in 1977, recommended in 1998 that there be an acceptance of certain general nursing entry level competencies, but that the definition should be in broad terms and that member states should be entitled to insist on further requirements.

An example of an EU law that favors nurses from within the EU region is that they are able to practice in another member state without having to prove linguistic competency in their destination country. However, nurses from outside the European Economic Area do have to prove linguistic competency. Despite serious nursing shortages, labor mobility has been slow in progressing.

Doctors

European Directive 75/362/EEC and 75/363/EEC, passed in 1975, aimed to facilitate the entry of doctors into member states. This directive was consolidated into the 1993/16/EEC (The Doctor's Directive):

1. A doctor may practice in accordance with citizenship and training requirements in any member state.
2. Member states must recognize as specialists doctors who meet the criteria.
3. The implementation of vocational training programs lasting at least two years for general practice.
4. The establishment of competent authorities to supervise training and to issue certificates as well as issue and verify diplomas and certificates to enter different member states. In the United Kingdom, the General Medical Council (GMC) is an example of such a body.⁵⁸

Until 1996, the GMC had issued certificates for specialist training within the minimum requirement laid down by the 1996 directive. The minimum requirement was accepted in the mainland EU countries, but not within the United Kingdom, which resulted in a two-tier system of training. However, a certificate of completion of specialist training (CCST) was implemented, meaning that there was a required uniform completion in the standard of training. Although the CCST should have clarified differences, many EEA doctors have cited a lack of continuity in the CCST as a problem because of differences between training institutions.

Dentists

European directives concerning dental practice were implemented in 1977, enabling a dentist to work in another member state. Before joining the EU, Spain and Italy had no formal educational qualification for dentistry, while Austria requires a medical degree prior to practicing dentistry. Spain and Portugal have reciprocal agreements with Latin America countries to practice, but this excludes the visiting practitioners from working within other EU member states. In contrast to the mobility of doctors and nurses, dentists do not appear to migrate nearly as much, and, when it happens, it seems to be for economic reasons as is the case from Denmark and the Netherlands to Germany, and from Eire to the United Kingdom.

Transitional Problems for the European Union

The European Directives state the particular policy desire of the EU, but do not articulate the procedural requirements as regulations would do. Because of this legal ambiguity the directives can often be perceived as distant and not necessarily binding. The United Kingdom appears to be a prime example of this, and not only in the case of health care.

The National Health Service funded a survey that found that labor mobility of health care professionals within the UK is a subject of great concern. Eighty-nine percent of people

from the EU found it easy to train in the UK, but only half found it easy to find a job. A primary reason to move to the UK is because of better training given in the UK to health professionals. In some nations, there is a shortage of graduate medical education spaces available, driving medical students to seek employment outside their home countries. In addition, the medical unemployment rates within their respective home countries also spurs a great deal of mobility. Between 1993 and 1998, there was a significant drop in the number of EU doctors due to reduction in unemployment on the continent.

Despite directives in place on qualifications and training, there is a lot of skepticism over the equitable application of such directives. The survey conducted by the NHS also points out that there is a so-called “olive line,” leading to discrimination of southern European health workers within other member states. Cultural difficulties were cited as an important factor in the cases of workers surveyed who wanted to leave the UK. Only a quarter of those interviewed wanted to continue working in the UK. Perhaps because of this issue, EU workers are often seen as a “transient resource”—a short-term solution to filling vacancies in the UK.

Other evidence from the European Commission provides data over the last decade on the number of EU members who seek recognition to practice medicine in another member state. In the year 2000 about 17,000 doctors, 3,600 nurses and 2,000 dentists who were registered in one member state obtained recognition from another member state. The total number of people in the period from 1992 to 2000 was about 52,000 for doctors, 16,000 for nurses, and 5,000 for dentists.⁵⁹

Third country nationals (for example, from the United States) whose qualifications are recognized by one member state do not have the right of recognition by any other member state. The commission is putting up a proposal that after five years’ residence in one member state and three years of practice there, they would be eligible for “Directive” rights.⁶⁰

Even under the proposed combined directive, the basis for recognition for each profession is not changed and will remain not comparable, varying among member states according to their own laws. Thus, there is minimal harmonization at this point, but instead mutual recognition of the equivalence of different education and training, syllabi, levels, systems, and institutions. This basis goes on changing as such laws evolve.⁶¹

The European Commission agreed at the 2001 Stockholm European Council meeting that there needed to be a more uniform, transparent, and flexible regime of recognition of qualifications and periods of study. Also, the EU and member states should assign more priority to increasing the speed and ease of professional recognition including conditions supporting more automatic recognition in the regulated professions by 2005.

Free Trade Area of the Americas

At the Summit of the Americas, held in Miami in December 1994, it was agreed to begin working toward the creation of the Free Trade Area of the Americas (FTAA), with negotiations due to conclude in 2005. The FTAA would allow for free trade throughout

the Western Hemisphere. Recent world events and concerns in the hemisphere regarding trade liberalization may slow the process down slightly; however, negotiation is still very much underway. Under the FTAA framework, nine negotiating groups have been established. One of these groups is a Services Negotiating Group, which is charged with the responsibility to “establish disciplines to progressively liberalize trade in services, so as to permit the achievement of a hemispheric free trade area under conditions of certainty and transparency; To ensure the integration of smaller economies into the FTAA process.”⁶²

Experts in trade negotiation expect provisions in the FTAA related to trade in services to draw mainly from commitments already in place through WTO with the idea that the FTAA will go beyond GATS in its scope. In fact, discussion has already been framed around the four-modal approach used in GATT and GATS and similar MFN language is expected to be adopted. In addition, the FTAA will not override current regional agreements already in place. Negotiators have already decided on the broad areas the agreement will address: scope, sectoral coverage, most-favored nation treatment, national treatment, market access, transparency, and denial of benefits. However, “it remains uncertain whether and to what extent other matters will be included, such as domestic regulation, quantitative restrictions, safeguards, subsidies, monopolies, the treatment of smaller economies, and dispute settlement.”⁶³

Several major decisions currently confront FTAA negotiators on service issues, which were to be submitted to the Trade Negotiations Committee by April 1, 2002, in order to initiate negotiations no later than May 15, 2002. The first concerns which modes or forms of supply will be included in the services chapter. Some regional agreements, such as NAFTA and those that follow its model, treat investment aspects of services together with goods under common rules, while MERCOSUR and others follow the GATS model by including investment (mode 3) under the services agreements.⁶⁴ Similarly, NAFTA and others treat the temporary movement of natural persons under separate chapters rather than including them in services chapters under mode 4.⁶⁵ Which of these options is chosen will determine how different aspects of health services trade are treated.

Another key decision involves which approach to use for market access negotiations. In other words, negotiators need to decide whether to formulate the agreement using positive-listing or negative-listing. According to trade experts, the choice has implications for greater or lesser transparency for service providers.⁶⁶ Other major issues for FTAA negotiators concern how to address the overlap between the services and the investment negotiating groups, and “whether the final objective should be total liberalization, or whether reservations and exceptions—including those for health—may be needed on a permanent basis.”⁶⁷

The United States has published a position paper articulating its stance on the development of a free trade agreement for the entire Western Hemisphere. The U.S. defines cross-border services in three parts: “from the territory of one Party into another Party; in the territory of one Party by a person of that Party to a person of another Party; and by a national of a Party in the territory of another Party.”⁶⁸ The U.S. also believes

that the FTAA countries should negotiate liberalization according to a top-down (“negative list”) approach. The U.S. has indicated the need to identify, where appropriate, supplementary disciplines for specific sectors, and that specialized provisions need to be developed for financial services, for example. Such disciplines and provisions would be most effectively pursued in a combined fashion for both the services and investment chapters of the FTAA.⁶⁹

The United States also has an official opinion on most-favored-nation status and national treatment. MFN treatment should apply, in principle, to all service sectors and service suppliers. However, the American government recognizes that FTAA countries may need flexibility for a limited number of sectors or measures. They maintain that “flexibility should not be extended to broad preferences such as might be accorded in a bilateral or regional free trade agreement.”⁷⁰ With regard to national treatment, the U.S. believes that national treatment is an integral part of the development of a hemispheric free trade agreement and should apply, in principle, to all service suppliers. National treatment would mean treatment that is no less favorable than the treatment an FTAA country provides, in like circumstances, to its own service suppliers. However, the U.S. does recognize that FTAA countries may need flexibility for a limited number of sectors or measures.

While the United States lays out important positions on MFN status and national treatment, it posits that these provisions alone are insufficient to ensure effective market access for service suppliers. The U.S. seeks additional “market access” provisions to complement MFN and national treatment. The U.S. market access position provides for “an obligation for an FTAA Party to: 1) remove non-discriminatory quantitative restrictions; 2) guarantee access to and use to publicly-provided telecommunications networks; and 3) not to impose local presence requirements (for example, a representative office or any form of company) in its territory as a condition for the cross-border provision of a service.”⁷¹

Transparency is also of critical importance to the United States. The U.S. believes that FTAA countries should promote the widest possible application of transparency commitments in domestic regulation of services whenever possible. Where a license or qualification is required to provide a service, FTAA countries should address obligations to specify and make publicly available measures relating to the criteria to obtain such a license or qualification and the terms and conditions under which it is offered or revoked. The U.S. believes that, where feasible, it would be appropriate for FTAA governments to make administrative licensing procedures publicly available.⁷² The issue of domestic regulation is important and will be given further consideration as to what might be appropriate provisions for a hemispheric trade agreement.

The possibility of the ratification of the FTAA poses an incredible opportunity for the countries of the Western Hemisphere to be at the leading edge of reform in multilateral agreements. The countries that form part of the FTAA represent “23.5 percent of world-wide services exports.”⁷³ Even though the average level of hemispheric services and goods exports is “similar to the global average (27 percent for the FTAA countries, 26

percent globally), these figures vary substantially *among* the FTAA countries.”⁷⁴ Therefore, the impact of such an agreement might effect developing and developed countries differently in the region.

Trade Flows, Market Access and Barriers to Trade in Health Services

Trade Flows

In order to discuss some of the key economic influences in trade in health services, a backdrop must be painted of the current global flow of trade. The organization that perhaps most closely tracks this type of information in its member countries is the Organization of Economic Cooperation and Development (OECD). Both industrialized and developing countries have seen the relative importance of trade in services increase in recent years; however, services account for a larger share of the total trade in OECD countries. In 1992, OECD countries “accounted for 82 percent of global exports of commercial services, up from 79 percent in 1982.”⁷⁵

Data is not as readily available on trade in services as it is for trade in goods. Only a few developed countries track and report statistics on services trade. Most developing countries report statistics on trade in services, but in a very disaggregated way. Data on trade is typically broken into the following: “‘transport’ (largely freight and passenger transport by sea and air), ‘travel’ (expenditures by nonresidents—mostly tourists—while staying in a foreign country), and ‘other services.’”⁷⁶ The main source of data on trade in services was established by the International Monetary Fund (IMF) in their balance of payments (BOP) schedules. Recently, that format for data collection and reporting has been clarified in a *Manual on Statistics on Trade in Services* published by the OECD.

Though the BOP schedules have provided useful information, there are still some weaknesses to this reporting scheme. First, consistency in reporting among countries is very difficult to regulate. Often, this results in biased figures “when data is added across countries to arrive at regional totals and discrepancies when comparing world imports and exports for a category.”⁷⁷ Second, countries do not frequently track comparable and detailed information with regard to origin and destination of trade. Third, BOP data does not quantify the volume and type of trade in each category. This makes measurements in growth in any one category or time period difficult. Fourth, at any given time, different countries may be using different methodologies to measure trade in services. Definitions of terminology may also vary between nations. Finally, data on sales of foreign affiliates established in a country are rarely collected. BOP conventions “imply that if factors of production move to another country for a period longer than one year, a change in residency status is considered to have occurred.”⁷⁸ The trade generated as a result and consumed in the foreign market will not be registered on BOP schedules.

Market Access

In conjunction with MFN provisions within GATS, there are also market access restrictions mentioned which allow for some qualifications to the MFN standard. They consist of the following:

1. the number of service suppliers allowed
2. the value of transactions or assets
3. the total quality of service output
4. the number of natural persons that may be employed
5. the type of legal entity through which a service supplier is permitted to supply a service
6. participation of foreign capital in terms of a maximum percentage limit of foreign shareholding or the absolute value of foreign investment.⁷⁹

Because services do not face trade barriers in the same way that goods do with tariffs and taxes, countries restrict market access through discriminatory treatment dictated by legislation, regulations, and laws. Since trade in services is quite different in this way, changes to national laws and regulations are required in order to open up markets. This process tends to be progressive but lengthy in bringing about change.

Barriers to Trade

Since trade in services often links the producer and consumer by immediate contact, tariffs and taxes do not typically serve as economic barriers to trade in the realm of services trade. Therefore, constraining trade policies will typically limit access of foreign services and service suppliers to domestic consumers. The following categories are traditionally used to distinguish different types of limitations to trade:

1. Quantitative restrictions such as quotas, local content, and prohibitions
2. Price-based instruments such as visa fees and entry and exit taxes
3. Licensing or certification requirements may be imposed on foreign providers of professional and business services
4. Discriminatory access to distribution and communications networks such as telecommunication services or insurance policies.⁸⁰

The measurement of barriers to trade in services is more complex than similar exercises for trade in goods. Services barriers must take into account the different modes of supply of services, which includes cross-border trade as well as the movement of consumers to producers, foreign direct investment, and temporary international movement of labor.⁸¹

Rupa Chanda of the World Health Organization has compiled a list of barriers to trade in services, specifically geared towards health issues. These include:

1. Restrictions on entry and practice by foreign health service providers:
 - Immigration and labor market regulations
 - Authorization requirements in home and host countries
 - Economic needs, local market needs, manpower planning tests

- Certification and licensing requirements, recognition requirements
 - Residency and nationality conditions
 - Rules imposed by professional associations
2. Restrictions on foreign investment in health and related sectors:
- Foreign equity ceilings/prohibition
 - Tax, land procurement, and discriminatory policies
 - Economic needs and other tests, authorization requirements
 - Restrictions on movement of health care practitioners and managers
 - Foreign investment regulations in insurance, telecommunications, and education services
3. Domestic constraints that are regulatory, infrastructure, capacity related:
- Absence of regulatory framework for enforcing standards, monitoring quality
 - Poorly functioning professional bodies
 - Inadequate telecommunications facilities
 - Poor quality and inadequate healthcare infrastructure
 - Shortage of financial capital for investment.⁸²

Final Analysis

Assessment and Future Challenges

The multilateral agreements have made significant strides in opening up dialogue and setting a framework for further liberalization. At the same time, several key areas of improvement must be addressed in ensuing agreements of trade in services.

Transparency

Transparency is critical for ensuring the just implementation of trade agreements, particularly with trade in services. Clear information in the form of domestic laws, regulations, administrative rules, and procedures must be provided to foreign service providers. In the absence of such information, foreign service providers are “handicapped in their access to their markets and crippled in their practices.”⁸³ In addition, once some level of transparency is established, “impartial administration of such laws and regulations and the right of review of decisions taken under them” must be enforced.⁸⁴ This point for improvement is paramount in a constantly changing services environment where the need to be kept apprised of the latest developments is key to maintaining accessibility to foreign services markets.

Defining Specific Commitments in Terms of Modes of Supply

To a certain extent, the modes of supply framework that have been adopted in GATS and NAFTA are also used for scheduling purposes. Two problems arise from this dual purpose: 1) confusion due to the overlap between different modes, and 2) the possible acceptance of trade because it is provided by a different mode but provides the same product to a host country.

E-medicine

As globalization continues to spread to all corners of the world, trade in services via electronic means will become more common. E-medicine refers to the use of “emerging information and communication technology, especially the Internet, to improve or enable health and health care.”⁸⁵ The term has been used widely over the past couple years to describe “the application of information, computer, or communication technology to some aspect of health or health care.”⁸⁶

E-medicine, also called telemedicine, has been successfully deployed in rural and other medically underserved areas. In addition, e-medicine addresses the needs of many in the medical profession and serves to reduce or contain health care costs. At the same time, however, quality assurance and improvement are critical issues to be emphasized as the e-medicine sector grows.⁸⁷ In addition, with the advent of globalization, the audience for e-medicine has become increasingly global, representing communication and cultural challenges.

One example of this type of collaboration takes place at the University of Texas Medical Branch’s (UTMB) campus in Texas where numerous e-programs have been established with schools in Mexico, Brazil, and Colombia.⁸⁸ A proposal for an online program with Egypt is also under consideration. In addition, UTMB has established telehealth programs with Antarctica, prisons, and oil rigs. In the case of e-health, faculty at UTMB’s campus comment that “money is the key for international collaboration.”⁸⁹

Future multilateral trade agreements should take these cross-cultural challenges into consideration when developing further provisions for trade in this area. For example, in the health care profession, efforts to promote cross-border trade in telemedicine have become increasingly common. The purpose of this new form of service is to enhance national capacities and skills related to work force as well as combat barriers to trade such as quality standards and accessibility of service infrastructures.

Telemedicine and tele-education offer a variety of potential benefits to the health care community, particularly when it comes to “professional training, continuing medical education, information sharing, and disease surveillance, although its impact is restricted by limited internet-connectivity in most developing countries.”⁹⁰

Equity: Accessible Health Care

The free market is wonderfully designed to produce diverse and inexpensive goods, but it provides no answers to the collective problems that inevitably emerge from the market's failures, or even its successes.⁹¹

Future drafters of trade agreements will be confronted with issues of equity and fairness as public health costs continue to soar and private health care takes a more prominent role in the international arena. While some worry that increased medical services trade between the U.S. and Mexico will lead to the privatization of health care and less accessible services for the poor and middle class in both countries, others think that the liberalization of health care trade will stimulate the economy and lead to higher-paying jobs, better-qualified health professionals, and a higher caliber of medical services.

Pro-trade policy experts believe that international trade agreements such as NAFTA will lead to improved health services in both countries. These proponents suggest that trade agreements will promote foreign investment and create better-paying health care jobs. Dr. Miguel Angel Gonzales Block has surmised that the intensified exchange of medical services may even increase the transfer of clinical knowledge among physicians and lead insurance companies in the U.S. to cover medical care in Mexico.⁹²

Other experts fear that trade agreements will lead to more expensive care and an even wider rift between those who are able to afford medical care and those who are not. These people have argued that trade agreements like NAFTA may lead to even greater inequity because health care providers will be more free to target higher-income populations for their services.⁹³ Some critics have argued that U.S. health care providers could potentially peddle out-of-date technologies to Mexico under NAFTA. However, there is little evidence to suggest that any of these scenarios has happened or will happen in the future.

The "brain drain" of qualified medical professionals remains a more troubling issue for many health care professionals. Some health care experts have worried that trade agreements like NAFTA could eventually lead to a "brain drain" scenario, causing Mexico to lose its top physicians and nurses to higher-paying jobs in the U.S.⁹⁴ A 1998 United Nations conference on trade and development and WHO study confirmed that 56 percent of all migrating physicians move from developing countries to more industrialized countries, while only 11 percent flow in the opposite direction. The survey found that the imbalance was even greater for nurses, but did not have any data to suggest that the trade agreements have caused the current disparities in immigration patterns.⁹⁵

A variety of solutions have been proposed to counteract the "brain drain effect." Trade scholar Rupa Chanda has concluded that the brain drain will ultimately not be an issue "as long as the source country raises standards, improves infrastructure, and creates more domestic employment opportunities in the sector." Chanda proposes that the source and host countries might be able to negotiate short-term bilateral agreements based on the supply and demand for health care professionals; these programs might contain special visa provisions and recruitment programs. The host country might consider providing the

source country with technical and financial assistance. Source countries could introduce “negative incentives” such as migration taxes to ameliorate the brain drain effect. Positive incentives such as income-tax exemptions and measures to improve working conditions and professional development might also keep qualified professionals in the source country.⁹⁶

Regulation

Liberalization of services providers is limited by the absence of weak multilateral guidelines on regulations that affect services trade by movement of natural persons.⁹⁷ The nature of trade in services is more complex than other types of trade because it is subject to strong government involvement. Trade in services has changed more slowly in the health services sector than, for example, in the telecommunications or financing arena. GATS “clearly distinguishes between external access liberalization and governments’ rights to regulate for quality purposes.”⁹⁸ While domestic regulation is still permitted under the multilateral trade agreements, regulatory measures are not supposed to unduly restrict trade or unreasonably bar providers.

The trade-restricting nature of most regulations already legislated gives rise to the so-called “necessity test.” This test “essentially leaves governments free to deal with economic and social problems provided that any measures taken are not more trade restrictive than necessary to achieve the relevant objective.”⁹⁹

Because the regulation of medical professionals falls to the states’ jurisdiction in the U.S., the United States faces complex regulatory issues. Identifying and analyzing the “plethora of standards, procedures, and criteria in every jurisdiction” has proved to be a daunting task thus far. Mexico’s regulatory processes, on the other hand, are simpler but problematic because they are comparatively less developed. The Mexican government is more directly involved in the financing and delivery of health services than the U.S. government, but Mexico’s abilities to regulate the private health care market are weak.¹⁰⁰

Conclusion

Major trade agreements of the last 50 years have coincided with increased globalization and liberalization of trade. The health care sector has figured prominently in the new world economy and now accounts for a substantial portion of the world’s gross product. This sector has expanded largely due to a shift toward private rather than public sector care, technological advances, the liberalization of non-health sectors like insurance and telecommunications, and the increased mobility of health providers and consumers.¹⁰¹

Trade agreements such as GATS, NAFTA, and the proposed FTAA have “sown the seeds for future negotiations through extensive bindings and added transparency.”¹⁰² While GATS, NAFTA, and the proposed FTAA have had a limited impact on cross-border medical services, the trend toward globalization and economic integration may lead to a greater incidence of cross-border health care in the future. Parties to future agreements will face economic, regulatory, and equitable challenges as they try to expand the free trade of medical services. They will also have a chance to build on the spirit

behind the GATS, NAFTA, and FTAA agreements in their efforts to work toward economic growth and more accessible, higher-quality health care.

Notes

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Chapter 2. Physicians: Certification and Licensure Options and Processes

by Don Lucas and Sarah Davis

The demand for culturally appropriate physicians was formally recognized in a March 2001 report by the U.S. Department of Health and Human Services, Office of Minority Health, entitled “National Standards for Culturally and Linguistically Appropriate Services in Health Care.” This paper will discuss several ways in which international medical graduates (IMGs) may obtain certification and licensure in the United States and specifically Texas. It analyses the trends in Mexican physicians entering U.S. residency programs as compared to other international medical graduates, as well as exploring some options for increasing the representation of Mexican-trained physicians in these residency programs. Finally, this paper examines legislation in California that, if adopted by Texas, would prove very helpful in the facilitation of IMGs practicing in underserved, potentially border, areas and increase the much-needed supply of culturally appropriate doctors in the state.

Certification Processes for International Medical Graduates in the United States

Hispanics, Blacks, and Native Americans constitute 25 percent of the U.S. population but only 6 percent of the practicing physicians. Hispanics make up 11.8 percent of the population but only 3.5 percent of U.S. medical college graduates and 5.5 percent of the resident physicians. Twenty-five percent of resident physicians are international medical graduates, but only 2.3 percent of IMGs are Hispanic.¹ Given the need for culturally and linguistically competent care, our demographics demand that the number of Hispanic physicians increase.

One method of increasing the number of Hispanic physicians in America is by increasing the number of Hispanic IMGs entering U.S. residency programs. A portion of this paper will examine the processes by which IMGs, focusing on those from Mexico, are licensed to practice medicine in the U.S.

In order for an IMG to become a practicing physician in the U.S., one must pass licensing exams, and in most states, complete a residency program in the U.S. Residencies are specialized training programs where physicians gain expertise in a particular area of medicine. Successful completion of a residency, in addition to a specialty board examination process, results in a specialty certification. In contrast to IMGs, U.S. and Canadian medical graduates only are required in most states to finish one year of graduate medical education before taking Part III of the licensing examination. However, the vast majority of these finish residency programs.²

Canadian medical graduates receive special treatment in the U.S. medical system. This is because the U.S. and Canada have a unified system of medical education. The Liaison Committee on Medical Education (LCME) has certified U.S. and Canadian allopathic medical schools since 1942. The American Osteopathic Association (AOA) certifies U.S. osteopathic schools. The Accreditation Committee on Graduate Medical Education (ACGME) certifies U.S. residency programs. A graduate of an LCME or AOA school is certified to attend an ACGME residency program.³

In order to apply for a U.S. residency position, an IMG must be certified by the Educational Commission on Foreign Medical Graduates (ECFMG) or complete a Fifth Pathway program. This paper examines both of these programs in detail.

The Educational Commission on Foreign Medical Graduates

ECFMG Certification

An IMG must fulfill several requirements to receive a Standard ECFMG Certification. A candidate must pass a Medical Science Examination, an English Language Proficiency Test, and a Clinical Skills Assessment, and must show appropriate medical credentials from his/her home country.⁴

Medical Science Examination

To fulfill this requirement, applicants must pass Steps 1 and 2 of the United States Medical Licensing Examination (USMLE). Step 1 is the basic medical science component. It evaluates understanding of scientific principles and their application to the study of medicine. Topics include anatomy, biochemistry, cell biology, microbiology, genetics, immunology, nutrition, molecular biology, pathology, pharmacology, physiology, and psychology.⁵

Step 2 is the clinical science component. This component is disease-specific and tests knowledge in four areas: preventative health, mechanisms of disease, diagnosis, and treatment.⁶

In Mexico, to take Step 1 costs \$770 and Step 2 costs \$780. The tests are taken on a computer and the format is multiple choice. The tests are offered only in English. Step 1 takes eight hours and Step 2 takes nine hours. Tests can be taken on any day and are offered at three centers in Mexico: Mexico City, Guadalajara, and Monterrey. In addition, the tests are offered in many U.S. border cities.⁷

The ECFMG releases IMG performance data in its annual report.⁸ Passing rates for U.S. and Canadian medical students are available on the USMLE website.⁹ No data specific to Mexican IMGs are available. Performance figures are summarized in Table 1.

Table 2.1.
Pass Rates for USMLE Steps 1 and 2, 2001

	Step 1		Step 2*	
	First Takers	Repeaters	First Takers	Repeaters
<i>U.S. and Canadian Medical Schools</i>				
Allopathic (M.D.)	91%	58%	95%	66%
(U.S. only) Osteopathic (D.O.)	69%	31%	93%	42%
<i>International Medical Schools</i>				
U.S. Citizens	55%	33%	72%	47%
International Citizens	68%	36%	76%	48%

Adapted from: Educational Commission on Foreign Medical Graduates (ECFMG), *2001 Annual Report* (Philadelphia, 2002), p. 8; and United States Medical Licensing Examination (USMLE), *USMLE Performance Data*. Online. Available: <http://www.usmle.org/news/perfdata.htm>. Accessed: November 20, 2002.

* Step 2 data is from the July 1, 2000, through June 30, 2001, testing period.

Pass rates for IMGs are much lower than those for U.S. and Canadian medical students. However, non-U.S. citizen IMGs have approximately the same success on Step 1 as do U.S. and Canadian osteopathic students. For all groups, pass rates for Step 2 are higher than for Step 1. This is because many of the students who fail Step 1 do not attempt Step 2.

English Language Proficiency Test

Currently, the ECFMG uses the Test of English as an International Language (TOEFL) to test proficiency in English. This test is administered by the Educational Testing Service (ETS). The TOEFL evaluates listening, reading, writing, and grammar. The fee for the examination is \$150. The test is given both in paper and computer formats and lasts four hours. The paper format is offered six times a year at ten locations in Mexico, while the computer test can be taken at any time in Mexico City, Guadalajara, and Monterrey.¹⁰

Candidates who achieve a passing score must submit a request for ETS to send the results to ECFMG. Consequently, no data are available on IMG pass rates for the TOEFL because the ECFMG only sees passing scores. However, pass rate data are available on a slightly different English examination. Before 2000, candidates had an option of taking either the TOEFL or the ECFMG English Test. Since the ECFMG administered the latter directly, pass rates are available. Performance data from the last administration of this test are shown in Table 2.¹¹

Table 2.2.
Pass Rates for ECFMG English Test, 1999

	First Takers	Repeaters
U.S. Citizens	97%	81%
International Citizens	68%	57%

Adapted from: ECFMG, *1999 Annual Report* (Philadelphia, 2000), p. 11.

The ECFMG did report, however, that 12,789 passing TOEFL scores were received in 2000, followed by 11,642 in 2001.¹²

It has been noted that program directors will markedly downgrade or even reject applicants who have difficulty with written and/or spoken English, or English comprehension. They have learned that regardless of clinical competency, an applicant's performance is materially impaired by language difficulties.

Clinical Skills Assessment

The Clinical Skills Assessment (CSA) tests a candidate's ability to gather and analyze clinical patient data as well as their spoken English capability and interpersonal skills. Candidates are presented with a series of 11 role-play situations in a medical examination room. Actors present a variety of illnesses and injuries and the IMG must gather data, diagnose the condition, and lay out a treatment plan. These encounters test knowledge in the areas of internal medicine, surgery, obstetrics and gynecology, pediatrics, psychiatry, and family medicine.¹³

The CSA is offered throughout the year but only at ECFMG facilities in Philadelphia and Atlanta. The examination costs \$1,200 and lasts eight hours. IMGs must pass Step 1 before taking the CSA. The ECFMG only releases rough performance figures for the CSA. They give approximately 7,000 exams a year and pass around 80 percent of candidates.¹⁴

Medical Credentials

IMGs must show proof of having graduated from a four-year medical college listed in the International Medical Education Directory (IMED). The candidate must hold the final medical diploma from the country of their medical school. In the case of Mexico, this means that the IMG must not only graduate from medical school but also complete a yearlong internship and a year of social service.¹⁵

Analysis

Candidates can take the tests in any order, with the exception that they must pass Step 1 before attempting the CSA. However, performance data from ECFMG examinations suggest a standard test-taking pattern. These data are presented in Table 3.¹⁶

Table 2.3.
ECFMG Performance Data, 2001

	Number
Took TOEFL ¹	17,000
Passed TOEFL	11,642
Took Step 1	14,055
Passed Step 1	7,923
Took Step 2 ²	10,355
Passed Step 2 ²	6,867
Took CSA ³	7,000
Passed CSA ³	5,600
ECFMG Certifications	5,934

Adapted from: ECFMG, *2001 Annual Report* (Philadelphia, 2002), pp. 8-9, 12; and ECFMG, *1999 Annual Report* (Philadelphia, 2002), p. 11.

¹ Estimated using 1999 ECFMG English Test pass rates.

² Step 2 data is from the July 1, 2000, through June 30, 2001, testing period.

³ Approximate numbers for CSA.

These data suggest that candidates proceed from the TOEFL to Step 1 to Step 2 to the CSA. Along this progression, the number who pass one test roughly approximates the number who take the next. Small discrepancies are most likely due to candidates from other years taking tests and to candidates failing some tests but attempting others. It was not possible to assemble these figures for years previous to 2001 because of variation in data collection methods and major changes in test formats.

Further supporting the TOEFL-Step 1-Step 2-CSA testing sequence is the fact that the tests become progressively more inconvenient, expensive, and comprehensive in this order.¹⁷

History of the ECFMG

Organizational History

In the 1940s, residency programs in the U.S. were being flooded with IMGs. No framework was in place to evaluate the quality of these physicians, so residency directors were required to make their own judgments. Often, residency programs developed

relationships with certain international medical schools and only accepted IMGs from those institutions. In the early 1950s, a large number of international schools requested recognition, and the difficulty of certifying that many medical schools around the world became very clear. Curriculum and quality varied widely between medical schools. It was decided that individual IMGs should be evaluated rather than international medical schools. As a result, the American Medical Association (AMA), the American Association of Medical Colleges (AAMC), the Federation of State Medical Boards (FSMB), and the American Hospital Association (AHA) established the Cooperating Committee on Graduates of International Medical Schools (CCGFMS) in 1954 to study the issue and develop concrete recommendations.¹⁸

The CCGFMS recommended the creation of an independent IMG evaluation board, and in 1956 the Educational Council on Foreign Medical Graduates (ECFMG) was formed. The ECFMG had two goals: to preserve high standards of care in the U.S. by assessing the quality of individual IMGs and to facilitate the entry of those that qualify. Testing began in 1958 and within a few years all state medical boards required ECFMG certification before an IMG could enter a residency.¹⁹

IMGs receiving ECFMG certification increased rapidly and soon visa problems arose. Many IMGs entered the country on J-1 visas through the Exchange Visitor Program. The Commission on International Medical Graduates (CIMG) was created in 1970 to study issues related to immigration, and in 1971 the State Department designated this commission to serve as visa sponsor for all IMGs on the J-1 visa. In 1974 the CIMG and the Educational Council on Foreign Medical Graduates merged to become the Educational Commission on Foreign Medical Graduates (ECFMG). The ECFMG became a full-service gateway for IMGs to enter U.S. residencies, providing testing, certification, and visas, and it has continued in this function to the present.²⁰

Testing History

The ECFMG has used a variety of tests over the years, but the areas of testing have remained relatively constant. There has always been some form of Medical Science Examination and English Language Proficiency Test. The Clinical Skills Assessment was added later.²¹

The first examination used was the American Qualification Examination (AMQ). This test evaluated both medical science knowledge and English proficiency. The AMQ was used from 1958-1962. In 1962 the name was changed to the ECFMG Examination but the content remained the same. In 1974 the English language section was removed from the ECFMG Examination and candidates were required to take a modified version of the TOEFL instead, called the ECFMG English Test. A 1977 change in immigration law required that IMGs requiring a J-1 visa take the Visa Qualifying Examination (VQE), instead of the ECFMG Examination. Candidates who did not require the J-1 visa continued to take the ECFMG Examination. In 1984, the International Medical Graduate Examination in the Medical Sciences (IMGEMS) replaced both the VQE and the ECFMG Examination. In 1989 the National Board of Medical Examiners (NBME) Examination (Parts I and II) were offered in addition to the IMGEMS. In 1992, medical

science examinations were unified between IMGs and U.S and Canadian medical graduates (USMGs). All were required to pass Steps 1 and 2 of the USMLE. This examination continues today.²²

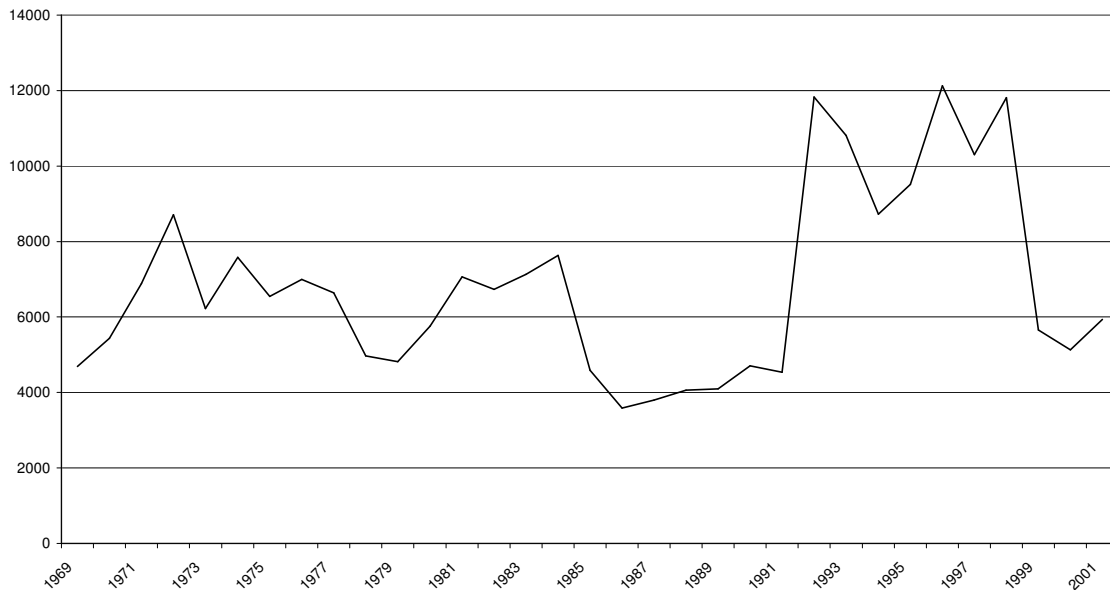
Since the 1980s, the ECFMG has been aware of deficiencies in the clinical skills of IMGs compared to USMGs. After a series of studies and trials, the ECFMG developed the CSA and began testing in 1998.²³

Overall, ECFMG testing has become more comprehensive over time and now closely resembles USMG testing. This is to ensure that IMGs entering U.S. residencies are as competent as their USMG counterparts.²⁴

Trends in ECFMG Certifications

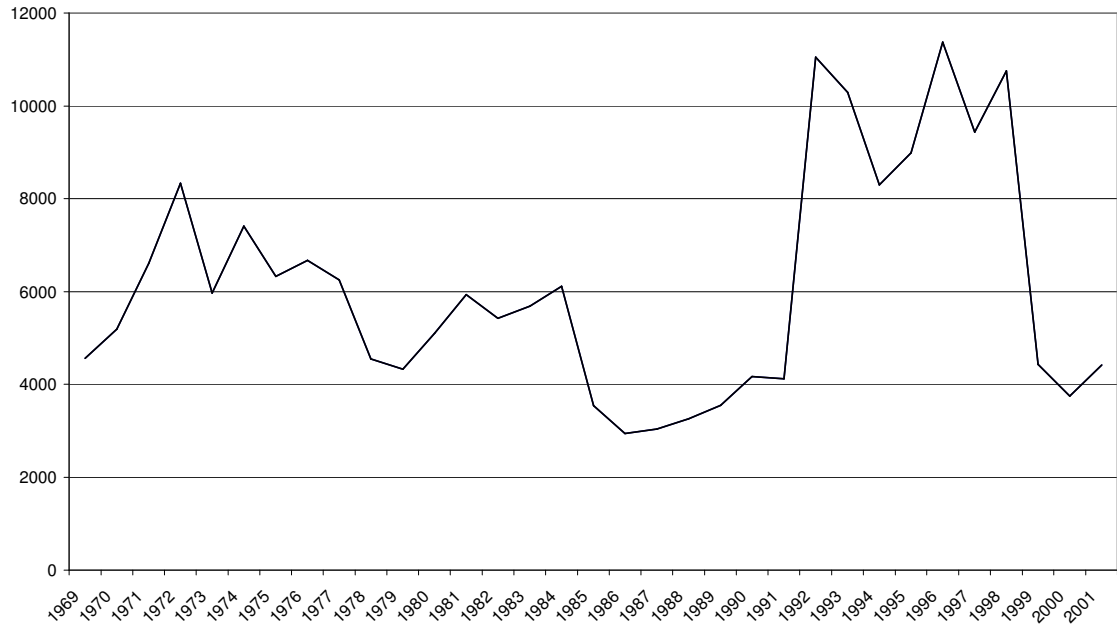
The ECFMG releases data on the number of certifications it issues every year. Most IMGs who receive certification enter a U.S. residency program. Complete data are available yearly from 1969-1971. Figure 1.1 shows the total number of ECFMG certificates awarded. Figures 1.2 and 1.3 show the number awarded to International citizens and the percentage of the total; Figures 1.4 and 1.5 present this information for U.S. citizens.

Figure 2.1.
Total Number of ECFMG Certificates Awarded, 1969-2001



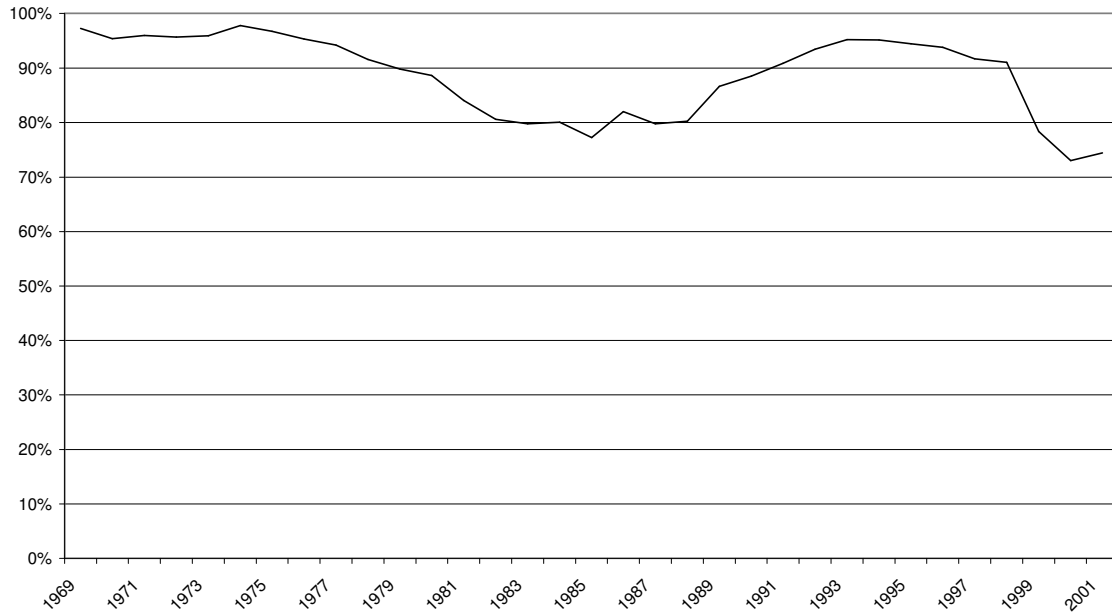
Adapted from: ECFMG, *1969-2001 Annual Reports* (Philadelphia, 1970-2002).

Figure 2.2.
Number of ECFMG Certificates Awarded to International Citizens,
1969-2001



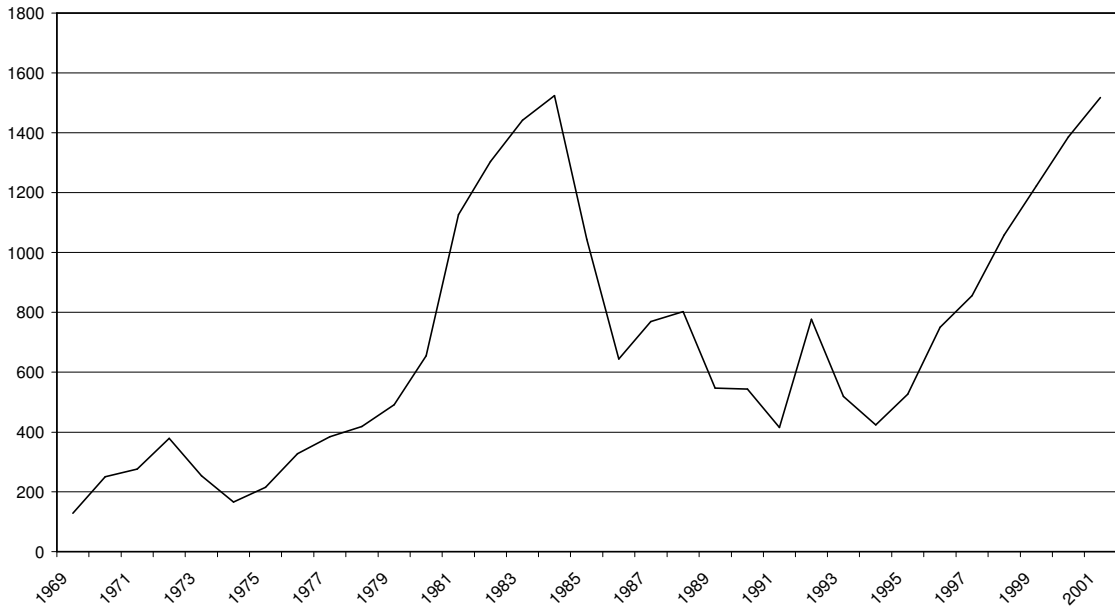
Adapted from: ECFMG, *1969-2001 Annual Reports* (Philadelphia, 1970-2002).

Figure 2.3.
Percent of ECFMG Certificates Awarded to International Citizens,
1969-2001



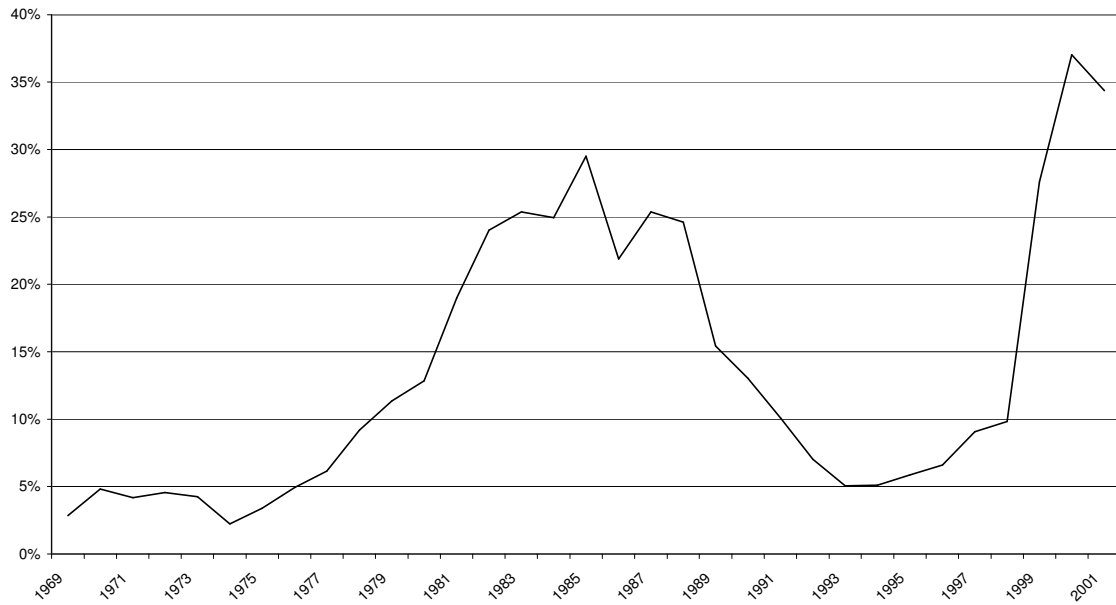
Adapted from: ECFMG, *1969-2001 Annual Reports* (Philadelphia, 1970-2002).

Figure 2.4.
Number of ECFMG Certificates Awarded to U.S. Citizens, 1969-2001



Adapted from: ECFMG, *1969-2001 Annual Reports* (Philadelphia, 1970-2002).

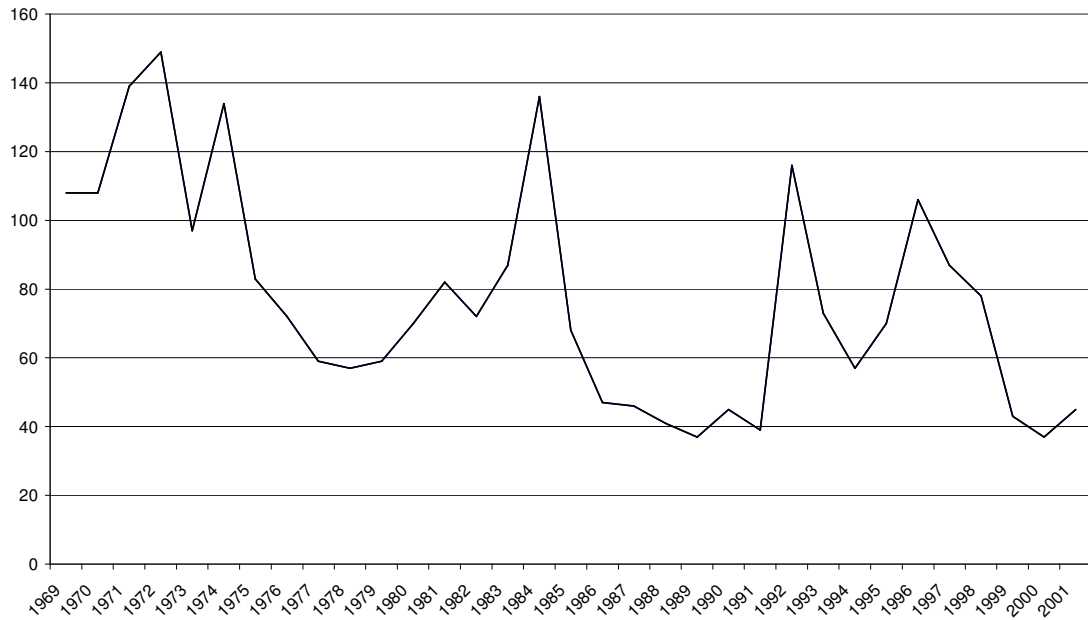
Figure 2.5.
Percent of ECFMG Certificates Awarded to U.S. Citizens, 1969-2001



Adapted from: ECFMG, *1969-2001 Annual Reports* (Philadelphia, 1970-2002).

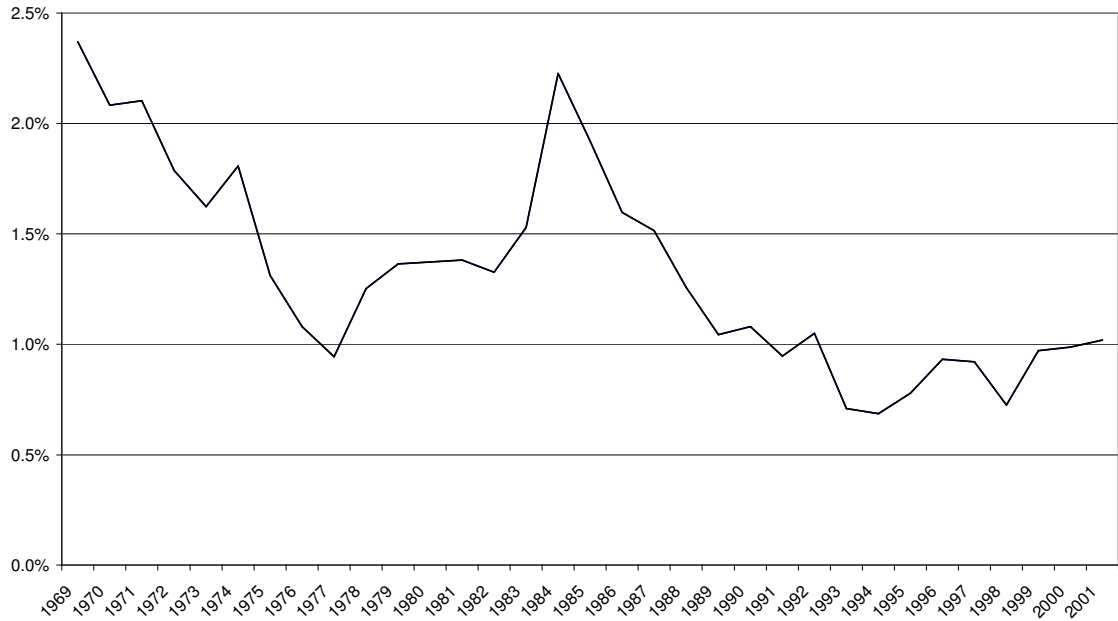
Figure 1.6 shows the number of Mexican citizens who were certified, and Figure 1.7 presents these data as a percent of the total number of international citizen certifications. For comparison purposes, Figures 1.8 and 1.9 show this information for Indian citizens.

Figure 2.6.
Number of Mexican Citizens Awarded ECFMG Certificates, 1969-2001



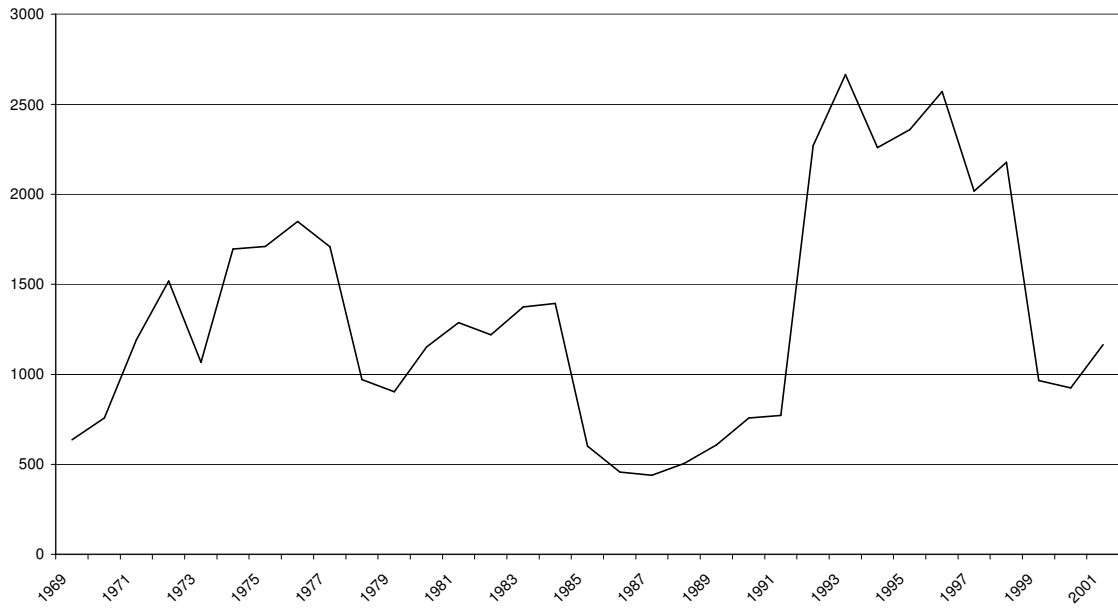
Adapted from: ECFMG, *1969-2001 Annual Reports* (Philadelphia, 1970-2002).

Figure 2.7.
Percent of International Citizen ECFMG Certificates Awarded to Mexican Citizens, 1969-2001



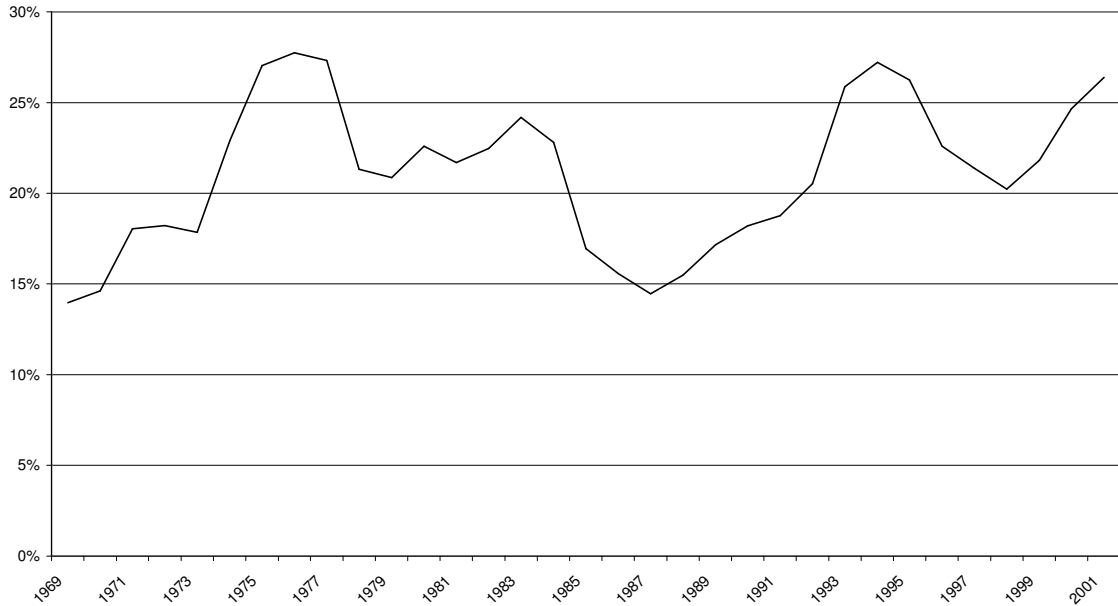
Adapted from: ECFMG, *1969-2001 Annual Reports* (Philadelphia, 1970-2002).

Figure 2.8.
Number of Indian Citizens Awarded ECFMG Certificates, 1969-2001



Adapted from: ECFMG, *1969-2001 Annual Reports* (Philadelphia, 1970-2002).

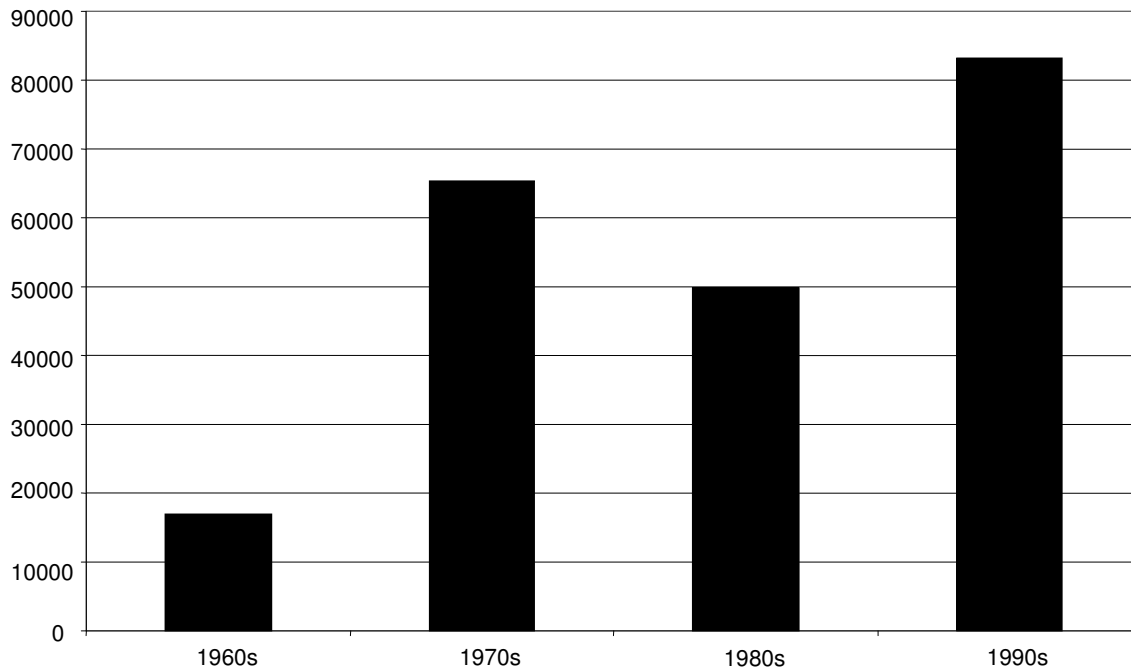
Figure 2.9.
Percent of International Citizen ECFMG Certificates Awarded to Mexican Citizens, 1969-2001



Adapted from: ECFMG, *1969-2001 Annual Reports* (Philadelphia, 1970-2002).

While no yearly data are available before 1969, the ECFMG does release decadal figures on the total number of certifications. These data are presented in Figure 1.10.

Figure 2.10.
Total Number of ECFMG Certificates Awarded, 1960-1999



Source: ECFMG, *A History: 1958-2000* (Philadelphia, 2000), p. 43.

Tabular data from Figures 1.1-1.10 are presented in Appendices A, B, and C. Appendix A contains data from Figures 1.1-1.5. Appendix B contains data from Figures 1.6-1.9. Appendix C contains data from Figure 1.10.

Several trends are evident. Certification levels were low in the 1960s but increased dramatically afterwards. A drop in certifications occurred in the late 1980s but the level surged in 1990s to record numbers. In 1998, certifications rapidly decreased to 1980s levels and have remained there since. The U.S. citizen portion of ECFMG certificates has increased sharply in the years since 1969. The numbers of Mexican citizens receiving certification varied widely from 1969-2001 but roughly paralleled changes in the total certification level. However, both the number of Mexican certifications and their percent of the total have declined over time. In comparison, Indian IMGs receive 20 times the number of certifications as their Mexican counterparts, and India has increased both its number of certifications and share of the total since 1969. In 2001, 4,416 non-U.S. citizens received the ECFMG certification. Of these, 45 were Mexican and 1,165 were Indian.

Few clear patterns exist between test changes and changes in the numbers of certifications or the composition of the IMGs receiving them. Only one clear linkage is present. After the CSA was added in 1998, the total number of ECFMG certificates as

well as the number of Mexicans receiving them dropped by half and has not recovered. The drop occurred entirely with international citizens. U.S. citizen certificates were not affected by the change in testing; their numbers actually increased after 1998.

The Fifth Pathway

On July 1, 1971, the Council on Medical Education (CME) of the American Medical Association (AMA) created the Fifth Pathway due in part to U.S. citizens studying medicine at the *Universidad Autónoma de Guadalajara* in Mexico organizing a legislative lobbying campaign for this program in the U.S. Congress.²⁵ Through this program, American medical students studying abroad may return to the United States and enter the residency match program without first having to fulfill the medical school graduation requirements established by international institutions or governments. The Fifth Pathway program consists of one academic year of supervised clinical training in a teaching hospital affiliated with a U.S. medical school accredited by the Liaison Committee on Medical Education (LCME) to ensure that the level of training is comparable to the school's own training program. After completing the program, students receive a Fifth Pathway certificate. This will be accepted in lieu of the certification from the ECFMG, otherwise required to enter the residency match. Fifth Pathway graduates are then eligible to begin first year of residency in an Accredited Council on Graduate Medical Education (ACGME) approved program without having to complete social service or internship requirements set by a given international country. From 1996-2002, an average of 56 Fifth Pathway students a year applied for residencies.²⁶

The Fifth Pathway program is available to U.S. citizens and legal residents who are attending international medical schools, outside the United States, Canada, or Puerto Rico, that are listed in the World Directory of Medical Schools published by the World Health Organization. Students applying for the program must complete undergraduate course work at an accredited U.S. college or university, complete all requirements of the international medical school attended, obtain a passing score on Step 1 of the United States Medical Licensing Examination (USMLE) and have their academic records and clinical skills evaluated by the faculty of the sponsoring U.S. medical school.

The CME has recommended to all state boards of medical examiners that they consider licensure for all Fifth Pathway graduates who have successfully completed their clinical work on the same basis as those candidates who have received ECFMG certification. Regardless of the route taken, each medical graduate must successfully complete the Steps 1 and 2 of the USMLE. While ECFMG certification is universally accepted within the United States and allows application for residency programs in all 50 states and territories, the Fifth Pathway is more limited: Indiana, Vermont, and Utah do not accept the Fifth Pathway graduates, and Arkansas, Guam, Michigan, and the U.S. Virgin Islands only accept them on a per case basis. It should be further noted that in 1997, the Texas legislature pulled the Fifth Pathway from the books, only to reinstate it shortly thereafter.^{27, 28}

Currently, the only large-scale program is operated by the New York Medical College.²⁹ A few other small programs exist but are very limited, and some new programs are being planned. At the New York Medical College program, students undergo a year of clinical rotations at hospitals in the New York City metropolitan area in internal medicine, surgery, obstetrics and gynecology, pediatrics, psychiatry, and electives. They take Step 2 of the USMLE during this year as well. Tuition is \$22,000.³⁰ After graduation, an M.D. is granted by the New York State Education Department.

Most Fifth Pathway students come from the *Universidad Autónoma de Guadalajara*. Expenses for their four-year program are approximately \$150,000, and with the Fifth Pathway year in New York the total cost could top \$180,000.³¹ This is significantly higher than average expenses at a U.S. medical college, as public medical schools cost an average of \$98,208 and private institutions cost an average of \$149,780.³² These costs would likely prevent the Fifth Pathway from becoming a major mechanism for increasing the number of Mexican IMGs entering U.S. residencies.

National Resident Matching Program

After becoming eligible for a U.S. residency program, candidates must apply to individual programs. The National Resident Matching Program (NRMP), a nonprofit corporation established in 1952, officiates the complex process. The NRMP is not an application service; rather, it matches candidates' and programs' preferences for each other in a fair and consistent manner. Applicants apply to several programs and rank their preferences. Programs rank a number of acceptable candidates. The NRMP then uses a complex algorithm to ensure that candidates are matched to programs in the most mutually preferred available slots. The matching process occurs in one day in March every year.³³

More candidates apply to residencies than there are slots. In 2002, 31,083 candidates applied for 22,916 slots. However, only 23,459 of the total number of candidates were still active on the day of the match. The remainder, 73 percent of which were IMGs, either submitted incomplete applications or withdrew. On match day, 20,670 candidates were assigned slots, leaving 2,789 unmatched active candidates. These and some of the 7,588 inactive applicants then competed for the remaining 2,246 unmatched slots in an informal process known as the "scramble."³⁴ According to residency program director preferences, some of these slots were filled and some remained empty. We found no data on the results of the "scramble," but even if all slots were filled many candidates would still be turned away.

U.S. medical graduates are much more successful in the match than IMGs. Of all groups applying to the match, international citizen IMGs fared the worst. There is an excess of residency positions for U.S. medical school graduates, with 1.4 residency slots per graduate. In 2002, 94 percent of U.S. allopathic medical school seniors were matched, while only 51 percent of international citizen IMGs received a slot.³⁵ This confirms an observation made by Dr. Stanley Fisch, director of the pediatrics residency at Valley Baptist Health Center in Harlingen, Texas, that IMGs are seen as somewhat unfavorable

to residency directors. He said that a high IMG percentage is perceived as a sign of a lower quality residency program.³⁶ Figures on the match success of various groups in 2002 are presented in Table 4.

**Table 2.4.
2002 NRMP Match Data**

	Active Applicants	Number Matched	Percent Matched	Number Unmatched	Percent Unmatched
U.S. Allopathic Students	14,336	13,489	94%	847	6%
Canadian Students	99	77	78%	22	22%
U.S. Physicians	1,009	454	45%	555	55%
Osteopaths	1,316	933	71%	383	29%
Fifth Pathway	114	67	59%	47	41%
U.S. Citizen ECFMG	2,029	1,092	54%	937	46%
International Citizen ECFMG	4,556	2,335	51%	2,221	49%
Total	23,459	18,447	79%	5,012	21%

Adapted from: NRMP, *Selected Data Tables 2002*. Online. Available:

http://www.nrmp.org/res_match/data_tables.html. Accessed: November 30, 2002.

Note: Data only includes matches for first-year positions. Some residencies only accept candidates after an initial year of general training. Several active applicants in this table applied to second-year residency positions, but the match results omit second-year slot matches; thus, the number and percent unmatched data is somewhat inflated. There were 2,223 second-year slots matched, bringing the 21 percent total unmatched figure down to 12 percent with 80 percent awarded to U.S. candidates.

Licensure Requirements

Texas State Board of Medical Examiners and Texas State Legislature

Both the Texas State Legislature and the Texas State Board of Medical Examiners (BME) determine the requirements for obtaining Medical Licensure in Texas. The rules and regulations defined by each of these institutions are similar in scope and are as follows.

An applicant must:

- Be at least 21 years old and be of good professional character.
- Have completed at least 60 semester hours of college courses, other than in medical school, which is acceptable to the University of Texas at Austin for credit on a Bachelor of Arts or Sciences degree.

- Have completed their primary, secondary, and premedical education required in the country of their medical school graduation, if that school is located outside of the United States or Canada.
- Have either successfully completed one year of graduate medical training approved by the board in the U.S. or Canada, or graduated from a medical school located outside the United States or Canada and has successfully completed three years of graduate medical training approved by said board.
- Have passed a Texas medical jurisprudence examination as determined by board rule.
- Have passed, within three attempts and with a score of 75 or higher, an accepted examination such as the United States Medical Licensing Examination (USMLE), the Federation Licensing Examination (FLEX), National Board of Medical Examiners Examination (NBME), National Board of Osteopathic Medical Examiners Examination (NBOME), Medical Council of Canada Examination (LMCC), or the state board examination. Additionally, an applicant may use any of the following combinations with all parts, levels, components or steps passed within seven years, to attain eligibility:
 - FLEX I plus USMLE 3
 - USLME 1 and 2 plus FLEX II
 - Any combination of the three parts of the USMLE and NBME,
 - Any combination of the USMLE 1 and 2
 - NBME I plus NBME II plus the FLEX II
 - NBOME I or COMLEX Level I and NBOME Part II or COMLEX Level II and NBOME Part III or COMLEX Level III.
- Be a graduate of an approved medical school.
- Have successfully completed a one-year training program of graduate medical training approved by the BME.³⁷

There are, of course, additional eligibility requirements for international medical graduates or graduates of unapproved medical schools (as worded by the BME). These rules are outlined by the Texas State Legislature in Chapter 155.004, and by the Texas State Board of Medical Examiners in Chapter 163.3. Applicants must present proof that they are a graduate of a school whose curriculum meets the requirements for an unapproved medical school as determined by a committee at the Texas Higher Education Coordinating Board. They must have successfully completed at least three years of graduate medical training in the United States or Canada that are approved by the board. Further, the applicant must be eligible for licensure in the country where their school is located, barring any citizenship requirements. Finally, they must hold a valid certificate issued by the ECFMG and be able to communicate in English.

Additionally, there are eligibility requirements of international medical school students in the Fifth Pathway Program in the Texas State Legislature Chapter 155.005 and the Texas

State Board of Medical Examiners Chapter 163.12. These requirements are more involved than those for international medical graduates.

Fifth Pathway participants must:

- Have studied in a school outside of the United States or Canada that is acceptable to the Board of Medical Examiners.
- Have completed all of the didactic work at the international medical school but not have graduated from this institution.
- Have attained a score satisfactory to a medical school in the United States approved by the Liaison Committee on Medical Education on a qualifying examination and have completed one academic year of supervised clinical training in the U.S.
- Have received a passing score on the ECFMG examination or another examination, if required by the BME.
- Have successfully completed at least three years of graduate medical training in the United States or Canada that was approved by the board as of the date the training was completed.
- Have the ability to communicate in English.
- Have passed the aforementioned license examination required by the board.

Under this program, if applicants have satisfied the above requirements, they are not further obligated to meet any requirement of the international medical school beyond completion of the didactic work, or be certified by the ECFMG.^{38, 39}

California Assembly Bill: AB 1045 (Firebaugh)

An Overview

The existing law provided for a task force on culturally and linguistically appropriate competent physicians and dentists in the department of consumer affairs. Pursuant to this law, a subcommittee within the task force examined the feasibility of a pilot program that allowed Mexican and Caribbean licensed physicians and dentists to practice in nonprofit community health centers in medically underserved areas.

The following findings contributed to the formation and eventual passing of this bill.

- The 2000 United States Census determined the population of Latinos in California was approximately 11 million of the 35 million people living in the state, or approximately 31.4 percent of the population.
- The U.S. General Accounting Office reported that the United States Community Health Centers' patients are comprised of 65 percent ethnic and racial minorities.
- Title IV of the Civil Rights Act of 1964 requires any federally funded health facility to ensure those with limited English proficiency may access health care

services. These individuals usually experience delays, denials of service, receive care or services based on inaccurate or incomplete information, or are excluded entirely from programs.

- The Health Resources and Services Administration found in 1998 that only 4 percent of active patient care physicians were Latino, while the Association of American Medical Colleges found in 1998 that only 6.8 percent of all graduates from U.S. medical schools were of an ethnic or racial minority group.
- The Institute of Medicine report, requested by the U.S. Congress, found evidence that suggested provider-patient communication is directly linked to patient satisfaction, adherence, and health outcomes. Thus, when sociocultural differences between the patient and the provider are not appreciated, explored, or understood in medical encounters, the result is patient dissatisfaction, poor adherence, and poorer health outcomes, and racial and ethnic disparities in health care.
- A Commonwealth Fund of New York study discovered that one-third of Latinos experienced difficulties communicating with their doctors. Language, cultural traditions, and sensitivity were the most common problems found. This study cited communication as an essential component to quality health care with inadequate communication only leading to the perception of inhumane service delivery.
- The Summit on Immigration Needs and Contributions of the Bridging Borders in the Silicon Valley Project found that approximately 50 percent of participants reported that having a provider who spoke their native language would improve the quality of health care they received.
- Only two states in the U.S. have reported cultural competency standards for care, while none have reported requiring international language competencies for physicians.
- According to the San Jose Mercury News, 65 percent of the membership of the largest medical association in California reported that if they were required to pay for medical interpreters, they would stop seeing patients that required translation services.

On September 30, 2002, the California Assembly approved Bill 1045 on the Practice of Healing Arts. The bill set forth the program's provisions related to eligibility, licensing, location, and hiring. It authorizes a three-year nonrenewable license for physician participants, and prohibits these medical licenses from being used as a basis for issuing a license to permanently practice medicine in California. The bill specifies certain requirements that IMGs are required to meet in order to participate in a separate pilot program and to receive an applicant status letter. The bill grants the Medical Board of California the authority to issue a license to practice medicine to an IMG participating in the program if the specified criteria were met. Further, the Medical Board of California will oversee this program and report to the CA Legislature every January regarding the program.⁴⁰

Bill AB 1045, The Licensed Physicians and Dentists from Mexico Pilot Program

The program allows up to 30 licensed physicians specializing in family practice, internal medicine, pediatrics, and obstetrics and gynecology from Mexico to practice medicine in California for a period not to exceed three years. Physicians from Mexico shall have completed the following requirements prior to leaving Mexico:

- Physician must be licensed, certified, or recertified, and in good standing in their medical specialty in Mexico
- Passed the board review course with a score equivalent to that registered by US applicants when passing a board review course for the U.S. certification in each of his or her specialty areas and passed an interview examination developed by the National Autonomous University of Mexico (UNAM) for each specialty area. Family practitioners who will include OB/GYN in their practices will be required to have appropriately documented, as specified by United States standards, 50 live births. Mexican obstetricians and gynecologists shall meet the requirements of good standing established by the American College of Obstetricians and Gynecologists.
- Satisfactorily completed a six-month orientation program that addressed medical protocol, community clinic history and medical ethics, the California medical delivery system, health maintenance organizations and managed care practices, and pharmacology differences.
- Mexican physicians participating in the program will be required to enroll in adult English as a Second Language (ESL) classes that focus both on verbal and written subject matter.
- Representatives from the UNAM in Mexico and a medical school in good standing or a facility conducting an approved medical residency training program in California shall confer to develop a mutually agreed upon distant learning program for the six-month orientation program.⁴¹

Upon satisfactory completion of these requirements, and after obtaining the three-year nonrenewable medical license the Mexican physicians will be required to enroll in continuing education classes as well as additional ESL courses, and participate in a six-month externship at his or her place of employment.

Applicants who have met all requirements will be placed into a pool of candidates to be recruited for employment by nonprofit community health centers in California. The three-year non-renewable license or permit will terminate upon notice by certified mail, return receipt requested, to the licensee or permit-holder's address of record. An evaluation will be performed 12 months after the start of the program.

Although this California legislation is a considerable step towards a more cooperative system, it is not without critics. Some contend that the 30 Mexican doctors should be international fellows, or have access to the residency programs. They believe that there will be negative ripple effects on medical practices. It is not the presence of these

Mexican-trained doctors that is being opposed, but their receipt of licensure because their practice will then be unstructured and unsupervised. The supervision and structure of the AB 1045 is not up to the California Medical Association's standards because its language is too vague.⁴²

Texas Sunset Commission

Since its inception in 1977, The Texas Sunset Commission has reviewed occupational licensing agencies and observed standard practices that guide agency structure, the oversight they receive, and their approach to licensing and enforcement. These standard practices provide a model for evaluating the occupational licensing agencies to ensure efficiency, effectiveness, fairness, and accountability in their mission to protect the public. The Sunset Commission has established two practice standards in the area of licensing, in terms of general qualifications and education, that are relevant enough to be further examined. The first standard states "(q)ualifications should not unreasonably restrict entry into practice." This standard should be examined and later applied to the alleged requirement of international medical graduates to provide a letter from their junior high school principals. This standard, upon determining the supposed requirement's accuracy, would presumably invalidate it.

The second standard applicable to the licensure of health professionals deals with education. It states "(a)ccrediting authority should not result in unduly restricting educational opportunities but should ensure a program to provide the necessary minimum level of competency to practice the profession. Accreditation standards should be limited to issues of direct relevance to overall program quality." The explanation of this standard is that "accrediting authority potentially could be used to limit acceptable programs to the benefit of current practitioners and the detriment of the public. The accreditation process should relate clearly to overall quality of the program." This could potentially help shape future model programs and open the admissions to more international medical graduates.

The application of these standards may work in favor of granting reciprocity between Mexican and U.S. medical schools and associations. It must be mentioned, however, that these gray areas need a considerable amount of further examination.⁴³

Conclusion

A shortage of Hispanic and Mexican-American physicians exists in the U.S. Hispanics are underrepresented in U.S. medical schools and in IMGs entering residencies. It is not likely that the New York Medical College Fifth Pathway program could become a major pathway for Mexican-American IMGs, given the high costs. However, other Fifth Pathway programs could be established that are less expensive or that promote practice in medically underserved areas. Additionally, there does not appear to be much support for a Fifth Pathway program in Texas, even though Fifth Pathway participants may be certified if they completed the program in New York.

Partnerships could be established with Mexican medical schools to increase the number of Mexicans obtaining ECFMG certification. Barriers to ECFMG certification are

multiple and significant. It might be particularly helpful for Mexican schools to integrate the USMLE Steps 1 and 2 into their curriculum as their U.S. counterparts do, so that students could take these tests when the information covered is freshest in their minds.

There has also been some discussion regarding U.S. medical schools establishing satellite campuses in Mexico. This idea would work in theory: Mexican physicians would be trained in a U.S. medical school, thereby facilitating easier access to residency programs in the United States. However, for Mexican students to be funded in such a program, they must make a state contribution like practicing medicine in Texas after receiving certification.⁴⁴

Currently, the NMRP match results for international citizen IMGs are disheartening. Perhaps residency directors in the future will place more value on the important cultural and linguistic competencies that certain ethnic groups, particularly Hispanics, bring to the U.S. health care system.

These solutions are only initial steps. One day Mexican medical education could be incorporated into the U.S. system as Canada was brought in under LCME. This would require significant standardization in the Mexican system as well as changes in perceptions on the U.S. side. Until then, measures should be taken under the current framework to increase the number of Mexican and Hispanic IMGs entering U.S. residencies and practice. The number of Mexican and Hispanic immigrants in the U.S. is rapidly increasing, and they deserve culturally and linguistically competent care.

Notes

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² *Ibid.*, p. 1.

³ Liaison Committee on Medical Education (LCME), *LCME Online*. Online. Available: <http://www.lcme.org/faqlcme.htm>. Accessed: November 30, 2002.

⁴ The Educational Commission on Foreign Medical Graduates (ECFMG), *ECFMG Online*. Online. Available: <http://www.ECFMG.org>. Accessed: November 20, 2002.

⁵ *Ibid.*

⁶ *Ibid.*

⁷ *Ibid.*

⁸ ECFMG, *1958-2001 Annual Reports* (Philadelphia, 1959-2002).

⁹ United States Medical Licensing Examination (USMLE), *USMLE Performance Data*. Online. Available: <http://www.usmle.org/news/perfdata.htm>. Accessed: November 20, 2002.

¹⁰ The Educational Commission on Foreign Medical Graduates (ECFMG), *ECFMG Online*. Available: <http://www.ECFMG.org>. Accessed: November 20, 2002.

¹¹ *Ibid.*

¹² ECFMG, *2000 Annual Report*, p. 12; and ECFMG, *2001 Annual Report*, p. 9.

¹³ ECFMG, *ECFMG Online* (online).

¹⁴ *Ibid.*

¹⁵ *Ibid.*

¹⁶ *Ibid.*

¹⁷ *Ibid.*

¹⁸ *ECFMG, A History: 1956-2000* (Philadelphia, 2001), pp. 3-5.

¹⁹ *Ibid.*, pp. 3-5.

²⁰ *Ibid.*, pp. 5-8.

- ²¹ Ibid., pp. 3-13.
- ²² Ibid., pp. 3-13.
- ²³ Ibid., pp. 10-12.
- ²⁴ Ibid., pp. 3-13.
- ²⁵ Universidad Autónoma de Guadalajara, North American Students Association, *Unofficial Guide to Fifth Pathway* (Guadalajara, Mexico, 2002), p. 5. Online. Available: <http://www.fifthpathway.com/guide.pdf>. Accessed: November 21, 2002.
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- ²⁸ Interview by Sarah Davis and David Warner with Stacey Silverman, Program Director, Texas Higher Education Coordinating Board, Austin Texas, November 14, 2002.
- ²⁹ New York Medical College, *The Fifth Pathway Program*. Online. Available: <http://www.nymc.edu/dephome/fifth.asp>. Accessed: November 21, 2002.
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- ³² Email interview by Sarah Davis with Stacey Silverman, Program Director, Texas Higher Education Coordinating Board, Austin, Texas, March 25, 2003.
- ³³ NRMP, *About the NRMP*. Online. Available: http://www.nrmp.org/about_nrmp/index.html. Accessed: November 30, 2002.
- ³⁴ NRMP, *Selected Data Tables 2002*. Online. Available: http://www.nrmp.org/res_match/data_tables.html. Accessed: November 30, 2002.
- ³⁵ Ibid.
- ³⁶ Interview by Emily Blosser, Don Lucas, and David Warner with Dr. Stanley Fisch, Director, Pediatrics Residency Program, Valley Baptist Health Center, Harlingen, Texas, October 11, 2002.
- ³⁷ Texas State Board of Medical Examiners, *Licensure, Chapter 163 (Effective September 19, 2002)*. Online. Available: <http://www.tsbme.state.tx.us/rules/rules/163.htm>. Accessed: November 25, 2002; and Texas State Legislature, *License to Practice Medicine*, Chapter 155.003.

³⁸ Texas Statute, *Occupations*, Chapter 155, 77th Texas Legislature (effective September 1, 2001). Online. Available: http://www.capitol.state.tx.us/cgi-bin/cqcggi?CQ_SESSION_KEY=SOLNLCRLPSEQ&CQ_QUERY_HANDLE=125388&CQ_CUR_DOCUMENT=1&CQ_TLO_DOC_TEXT=YES. Accessed: November 25, 2002.

³⁹ Texas State Board of Medical Examiners, *Licensure, Chapter 163 (Effective September 19, 2002)*. Online. Available: <http://www.tsbme.state.tx.us/rules/rules/163.htm>. Accessed: November 25, 2002.

⁴⁰ *California State Assembly Bill 1045*, Chapter 1157, Firebaugh (passed September 30, 2002).

⁴¹ Ibid.

⁴² Interview by Emily Blosser with Bob McElderry, Associate Director, California Medical Association, Sacramento, California, December 13, 2002.

⁴³ Sunset Commission of Texas, *Sunset Commission Licensing Model*. Online. Available: <http://www.sunset.state.tx.us/licensemodel.pdf>. Accessed: November 25, 2002.

⁴⁴ Interview by Sarah Davis, Cory MacDonald, and David Warner with Stacey Silverman and David Linkletter, Texas Higher Education Coordinating Board, and Jaime Garanflo, Ivan Hurwitz, Denise Myer, Nori Peterson, and Jennifer Soffler, Texas Board of Medical Examiners, Austin, Texas, December 19, 2002.

Appendix A. Tabular Data on ECFMG Certifications: U.S. and International Recipients

Year	Total Number of ECFMG Certificates Awarded (Figure 1)	Number of ECFMG Certificates Awarded to International Citizens (Figure 2)	Percent of ECFMG Certificates Awarded to International Citizens (Figure 3)	Number of ECFMG Certificates Awarded to U.S. Citizens (Figure 4)	Percent of ECFMG Certificates Awarded to U.S. Citizens (Figure 5)
1969	4686	4557	97%	129	3%
1970	5436	5186	95%	250	5%
1971	6886	6610	96%	276	4%
1972	8712	8333	96%	379	5%
1973	6227	5973	96%	254	4%
1974	7579	7413	98%	166	2%
1975	6542	6327	97%	215	3%
1976	6997	6669	95%	328	5%
1977	6636	6252	94%	384	6%
1978	4966	4548	92%	418	9%
1979	4817	4326	90%	491	11%
1980	5756	5101	89%	655	13%
1981	7063	5936	84%	1127	19%
1982	6731	5427	81%	1304	24%
1983	7127	5685	80%	1442	25%
1984	7634	6110	80%	1524	25%
1985	4585	3541	77%	1044	29%
1986	3585	2941	82%	644	22%
1987	3805	3035	80%	770	25%
1988	4061	3259	80%	802	25%
1989	4092	3545	87%	547	15%
1990	4710	4167	88%	543	13%
1991	4535	4120	91%	415	10%
1992	11830	11053	93%	777	7%
1993	10815	10296	95%	519	5%
1994	8722	8298	95%	424	5%
1995	9517	8990	94%	527	6%
1996	12124	11374	94%	750	7%
1997	10297	9441	92%	856	9%
1998	11814	10756	91%	1058	10%
1999	5653	4430	78%	1223	28%
2000	5133	3746	73%	1387	37%
2001	5934	4416	74%	1518	34%

Adapted from: ECFMG, *1969-2001 Annual Reports* (Philadelphia, 1970-2002).

Appendix B. Tabular Data on ECFMG Certifications: Mexican and Indian Recipients

Year	Number of ECFMG Certificates Awarded to Mexican Citizens (Figure 6)	Percent of International Citizen ECFMG Certificates Awarded to Mexican Citizens (Figure 7)	Number of ECFMG Certificates Awarded to Indian Citizens (Figure 8)	Percent of International Citizen ECFMG Certificates Awarded to Indian Citizens (Figure 9)
1969	N/A	N/A	636	14%
1970	108	2.1%	758	15%
1971	139	2.1%	1192	18%
1972	149	1.8%	1519	18%
1973	97	1.6%	1066	18%
1974	134	1.8%	1697	23%
1975	83	1.3%	1710	27%
1976	72	1.1%	1850	28%
1977	59	0.9%	1708	27%
1978	57	1.3%	970	21%
1979	59	1.4%	903	21%
1980	N/A	N/A	1152	23%
1981	82	1.4%	1287	22%
1982	72	1.3%	1219	22%
1983	87	1.5%	1374	24%
1984	136	2.2%	1393	23%
1985	68	1.9%	600	17%
1986	47	1.6%	458	16%
1987	46	1.5%	439	14%
1988	41	1.3%	505	15%
1989	37	1.0%	608	17%
1990	45	1.1%	758	18%
1991	39	0.9%	773	19%
1992	116	1.0%	2270	21%
1993	73	0.7%	2665	26%
1994	57	0.7%	2259	27%
1995	70	0.8%	2359	26%
1996	106	0.9%	2570	23%
1997	87	0.9%	2018	21%
1998	78	0.7%	2177	20%
1999	43	1.0%	966	22%
2000	37	1.0%	924	25%
2001	45	1.0%	1165	26%

Adapted from: ECFMG, *1969-2001 Annual Reports* (Philadelphia, 1970-2002).

Appendix C. Tabular Decadal Data on ECFMG Certifications

Decade	Total Number of ECFMG Certificates Awarded (Figure 10)
1960s	16,995
1970s	65,337
1980s	49,794
1990s	83,172

Adapted from: ECFMG, *A History: 1958-2000* (Philadelphia, 2000), p. 43.

Chapter 3. Medical Education in Mexico

by Cory Macdonald and Carlos Cantú Mireles

Introduction

This paper will provide an overview of the medical education system in Mexico. We will explain the process leading up to attending undergraduate medical school, the process of being admitted to an undergraduate medical school, and the training and education received in these schools. It should be noted that the quality and curricula of the 79 medical schools in Mexico vary considerably. In this paper, we will focus on the schools accredited by the country's two main accrediting bodies. Also, we will describe the accreditation process in Mexico, which is currently in a process of transition. The United States Department of Education's system for deciding which Mexican schools are certified to accept U.S. students attending on federal loans will aid us in understanding the details of the Mexican accreditation process. Finally, we will look at the process for attending a residency program and earning a specialized degree in medicine in Mexico.

Statistics and Trends: Physicians in Mexico

In 2000, there were 187,000 medical doctors in Mexico, of whom 84,000 were specialists and 45,000 were general practitioners. There were also 13,000 residents and 16,000 students doing their required year of social service before officially becoming doctors, or their "pasantes." The other 29,000 have diverse functions, including 9,000 odontologists.¹ In 1998, there were approximately 7,500 new doctors in Mexico, and 5,500 received their official doctor titles (after one year of social service). During the 1970s, the government promoted an increase in the number of medical schools, with a resulting increase in the number of students. In that decade 29 schools were formed. By 2001 there were 79 schools (see appendix A). Six states contain 57 percent of the total number of medical students: Mexico City (D.F.), Jalisco, Michoacan, Oaxaca, Puebla, and Nuevo Leon.² In 2000, the number of undergraduate medical students was approximately 80,000.³

Mexican School System Leading to Medical School

Mexican students enter grade school at six years old. After six years of grade school, students go through the equivalent of junior high or middle school in the U.S. This step is known as secondary school and lasts three years. The next phase is called preparatory and is the equivalent to high school in the U.S. This stage lasts three years in most schools, but some schools, mostly public, last only two years.⁴ For most students, the total number of years of education in Mexico before college is 12 years.

Mexican students in the preparatory stage can choose among different areas of focus, with classes in those areas to be taken during the last year in a three-year program, or during the last semester in a two-year program. This decision is based on the type of college programs students plan to enter. These areas of focus are considered the pre-

college phase of preparatory school. The different areas of focus include chemistry-biology, economics-management, physics-math, social-liberal arts, and architecture-design, among other choices. Alternatively, some preparatory schools offer only one program for all their students. The schools that do this usually have a more intensive curriculum for their students in all areas so they can be prepared for any career choice they make.

Medical schools prefer students who have gone through the chemistry-biology track in preparatory school, but students who have chosen other areas of focus are not prohibited from applying to or attending medical school.

For an analysis of a particular preparatory program we can look at the school run by La Salle University. Students at the school who choose the chemistry-biology track during their pre-college year end up with four semesters of chemistry and biology courses, two semesters of chemistry and biology lab seminars, two semesters of biochemistry techniques analysis, and two semesters of health and hygiene courses.⁵ This training provides a background in science for medical school, as well as for other health professions such as nursing and dentistry. Furthermore, it is partially equivalent to the pre-medical education that students receive in U.S. undergraduate schools before entering medical school.

Upon graduating from preparatory school, students have the option of applying to a wide array of undergraduate programs at both private and public institutions. After selecting a school, students take a general admission test and choose which program to apply to within the school. Some public schools use the admission test prepared by the National Center for Evaluation of Higher Education (CENEVAL). Other institutions, both public and private, have their own admissions tests. Whichever test a school uses, the medical programs usually require higher scores than the other programs. The prospective students who apply for the medical program and pass the admissions test are ranked according to their scores, and the particular number of slots that the medical program has is filled with these top-ranked students. However, in some schools, a good test score is not enough. For example, The Monterrey Institute of Technology requires a score of at least 1350 on the SAT, along with an average grade of 80/100 during preparatory education and two interviews with professors.⁶

Format of Undergraduate Medical Programs in Mexico

On the surface, the most significant difference between U.S. and Mexican medical education appears to be that Mexican pre-residency programs are undergraduate and six years, whereas U.S. pre-residency programs are graduate and four years. Combined with a four-year undergraduate program in the U.S., this means that U.S. pre-residency medical students spend two more years in higher education than Mexican pre-residency medical students. However, this may not signify that medical Mexican students receive less basic science and medical training. Mexican medical students are usually only required to take approximately 20 percent of their total coursework in classes outside of medicine and basic science.⁷ This is normally fewer nonmedical-related courses than an

undergraduate in the U.S. would take before entering medical school. Also, as previously mentioned, many medical students in Mexico began preparing for medical school in preparatory school by choosing a chemistry-biology track during their pre-college year or semester. Therefore, it might be useful to look at the total number of hours the students in Mexico spend in basic science and medical courses through medical school.

In 1996 Jorge A. Fernandez did a research study on a sample of 56 Mexican medical schools regarding the proportions of classes in different areas of study. He found that approximately 22 percent of the courses taken were related to basic science, 57 percent were related to medical science, and the other 21 percent were related to socio-medical courses, including a second language, usually English. The study also looked at the number of hours of the medical curricula in Mexico and showed a wide range: from 3,500 to 11,000 hours, with approximately 40 percent of the schools having curricula in the 5,001 to 6,000 range.⁸

Although the significance of the difference in the total years spent in higher education may be lessened by a more scientifically focused curriculum in some medical schools, there are other differences between the two country's systems that stem from the fact that medical education is undergraduate in Mexico. For example, at many of the accredited schools in Mexico, students take basic science classes during their first two or three years that U.S. students would take as undergraduates. Also during these first two or three years, students take medical classes that would not be taken in the U.S. until medical school.

For example, at the University Autonomous of Nuevo Leon (UANL), a public school, students take anatomy in the first year, biochemistry and physiology in the second year, and toxicology and psychopathology in the third year.⁹ At the Monterrey Institute of Technology, a private school, students take cellular biology and molecular genetics during their first year, anatomy throughout their first two years, and microbiology during their second year.¹⁰ The last three or four years of medical education in Mexico are often devoted to practical training along with theoretical study, and usually include at least one year of internship in a hospital. Thus, the Mexican system is different from the U.S. system because in the U.S. students enter medical school with their basic science already completed, and then focus solely on medical classes. On the other hand, although Mexican students enter medical programs with some basic science from high school, basic science and medical-related classes are intertwined, unlike in the U.S.

Another difference between U.S. and Mexican medical schools, in some instances, relates to hospital training. This issue is relevant to Mexican students' success on the USMLE, which will be explored in more depth later in this piece. According to Dr. Zacarías, there are some schools that give five years of curriculum and only one year of hospital internship. Furthermore, this year of internship may not be controlled by the schools that do not have their own hospitals. This might, in some instances, lead to inadequate training.¹¹ However, many Mexican students do have a great deal of practical experience in hospital settings. In fact, some people argue that Mexican medical students benefit from more direct patient interaction than students in the U.S. The amount of time a

student spends at a hospital for clinical training and the type of experience the student has depends on a set of particular factors. These factors include whether the school has its own hospital, whether the hospital is public or private, and, if the school does not have its own hospital, whether the school has a good relationship with an outside hospital.

The scenario that allows for the most hands-on contact with patients is when a public school has its own hospital, because they have less concern with liability. This is the case for UANL. Instead of having only a sixth year of formal internship, UANL's formal internships last three years, and include rounds with professors and residents.¹² UANL's students are sometimes relied on to fulfill some of the basic responsibilities of a resident or certified doctor. In effect, at public schools with their own hospitals like UANL, students receive a greater amount of practical experience.

However, not having its own hospital is not necessarily an impediment to practical experience. For example, a second scenario which allows for extensive hospital experience is when private schools have good relations with a network of hospitals. This is the case at the University of Monterrey (UDEM), where students receive practical training while rotating at 11 different hospitals including Christus Muguerza Monterrey, which is linked with hospitals in the U.S. UDEM's students begin their clinical training during their third year. Throughout their third, fourth, and fifth years, they take electives in which they follow a doctor in groups of about three to six. During the sixth year the students do a formal clinical rotating internship, studying the fields of pediatrics, obstetrics/gynecology, surgery, and internal medicine. They also spend periods of time in emergency and preventive medicine. During this year, the students work at the hospital for 36 hours a week in shifts of at least 10 hours a day.¹³

A third scenario is where a private school has its own hospital. In this situation schools have more control over their students than do those schools that contract with outside hospitals. This improved level of control involves a trade-off, however, as private hospitals often face great liability and must ensure a high level of care. Therefore, students may be restricted from having as much hands-on experience with patients as they would at a public hospital. The Monterrey Institute of Technology is a private school with its own hospital that faces this predicament. However, the school complements its internal program by placing students in local clinics and having them do clinical rotations at U.S. schools.¹⁴

The exchange program of the Monterrey Institute of Technology with the U.S. is an example of how some schools in Mexico bridge the gap of differences between the two systems. The Monterrey Institute of Technology has exchange agreements with Methodist-Baylor College of Medicine, Harvard, Texas Children's Hospital, Cleveland Clinic, Northern Ohio University, and the University of Texas Health Science Center at San Antonio. Many of the other leading medical schools in Mexico continuously seek to develop international exchange programs with U.S. schools.

In conclusion, there is a great deal of variety among the type of education and training a student receives in Mexican medical schools. This is due to differences between public and private schools, differences in access to hospital experience and technology, and

differences in faculty. However, despite a lack of uniformity between many Mexican medical schools, there are a significant number of accredited schools in which students receive a great deal of practical experience. Furthermore, there are generalizations that can be made about the structure of the typical accredited Mexican medical school. The programs usually last six years, with the first two or three years devoted to classroom education, which includes the basic sciences. The last three years of the programs usually include a significant amount of clinical training in a hospital setting, and culminate in a year-long internship in a hospital. Regardless of whether a student attends an accredited school or not, after the students complete their programs, they must do one year of social service before becoming general practitioners or applying to residency programs. This year of social service is often done in rural clinics.

Testing in the U.S. and Mexico and Mexican Performance on the USMLE

The differences in format between U.S. and Mexican medical schools, discussed in the previous section, make it difficult for Mexican students to take the USMLE at intervals as it is done in the U.S. Mexican students who want to apply for U.S. residencies usually take all of the USMLE tests after they have finished their program, at which point they may be up to five or six years removed from classes that would prepare them for the USMLE I.¹⁵ Another difference between the U.S. and Mexico not discussed in the previous section is that students in Mexico do not have to take any exam to practice as general practitioners, once they have completed their academic programs and their year of social service.¹⁶ Without a similar test, there is little incentive for schools to reformat their programs in a way that would make it easier for their students to take the USMLE at periodic intervals.

There are other obstacles to Mexican students performing well on the USMLE tests that stem from the differences between medical training in the two countries. For example, according to Dr. Garza, director of laboratories at Christus Muguerza Monterrey, some students do not have access to the same level of technology as students in the U.S. Consequently, many students cannot take tests in biochemical procedure and genetics that would prepare them for the clinical portions of the USMLE. Dr. Garza also sees room for improvement in the area of communication between the programs of basic science and clinical science, and in the training of professors. He also believes that for more students to gain admittance into U.S. residency programs there would have to be an increased focus on the specific basic science courses that are required by U.S. medical schools.¹⁷

General Trends in Medical Education and the Accreditation Process

In the 1970s the Mexican government perceived a need for more doctors to serve in rural areas, and they began to promote the formation of more medical schools.¹⁸ In 1970, there were 27 medical schools, and by 1980, this number had increased to 56. During the same time, the number of students increased from 28,731 to 93,365. However, the concern with increasing the number of schools and doctors led to a neglect of ensuring the quality

of schools. In response, beginning in the 1980s, the government, aided by the efforts of civil associations such as the Association of Mexican Faculties and Schools of Medicine (AMFEM), began shifting the emphasis towards improving the quality of medical training as opposed to increasing the quantity of doctors in Mexico. This is demonstrated by the number of medical students decreasing by around 30,000 in the last 20 years.¹⁹

The Mexican Association of Faculties and Schools of Medicine, AMFEM, is a civil association that was formed in 1957 and whose stated purpose is to improve the quality of medical education in Mexico. The executive membership of the organization is made up of faculty members from both private and public medical schools in Mexico. The organization began developing a process for accrediting medical schools in 1989, and the plans were finalized at a conference on November 7, 1992. AMFEM evaluated and accredited its first school in 1996.²⁰ As of June 2000, 16 schools were accredited by AMFEM. Among these schools were both private and public institutions such as UANL, UDEM, The Monterrey Institute of Technology, and The National Autonomous University (UNAM).²¹ Since then, nine more schools have received accreditation, bringing the total to 25 out of 79.²² As of June 2002, over 30 other schools were somewhere in the accreditation process.²³

An important issue is whether AMFEM's accreditation standards are comparable to those in the U.S., and the U.S. Department of Education's evaluation of AMFEM's accreditation process provides useful insight in this area. The National Committee on Foreign Medical Education and Accreditation (NCFMEA), part of The Department of Education since 1992, reviews other countries accreditation standards in order to determine which schools U.S. students can attend while receiving the Federal Family Educational Loan (FFEL).²⁴ As per usual procedure, AMFEM contacted the department, requested evaluation, filled out a questionnaire, and provided supporting documents for the Department of Education. A staff member at the department prepared an analysis of AMFEM, which was given to Committee members. According to a U.S. Department of Education Staff Report, the NCFMEA determined in September of 1997 that the AMFEM standards were "comparable to those used to evaluate medical schools in the United States."²⁵ AMFEM is one of only 24 accrediting foreign bodies that the NCFMEA has recognized.²⁶ However, the executive director of the NCFMEA has emphasized that the committee is not equivalent to U.S. accreditation.²⁷

In order to maintain eligibility with the NCFMEA, accrediting bodies must submit annual reports to them and communicate changes in any school's accreditation status. AMFEM has maintained its eligibility since 1997, but in their most recent report, they informed the NCFMEA of some recent developments in their country.²⁸ Despite what might be interpreted as progress by AMFEM towards accrediting a majority of Mexico's medical schools, on January 24, 2002, another accrediting body was formed. The creation of the new organization, the Mexican Council for the Accreditation of Medical Education (COMAEM), was accompanied by a ceremony attended by the Secretary of Health.²⁹ Attendance by the Secretary demonstrates the emphasis the Mexican government now places on improving accreditation of Mexican schools and improving Mexican medical education generally.

Another example of the Mexican government's new emphasis was the Secretary of Public Education's establishment of the Council for the Accreditation of Higher Education in Mexico (COPAES) in October 2000. Despite being created by the government, COPAES is a civil organization authorized to confer formal recognition on organizations that promote quality and improvement through accreditation processes. The general requirements for this recognition are justness, impartiality, consistency, reliability, control, quality assurance, responsibility, seriousness, and openness.³⁰ In June 2002, COPAES granted formal recognition to COMAEM, rather than AMFEM, as the accrediting body for Mexican medical schools. This formal recognition will last five years, and COMAEM will have to formally update COPAES on their activities annually. Eugenio Cetina Vadillo, Mexico's director of higher education, presided over the ceremony.³¹ The decision to recognize COMAEM instead of AMFEM may be because the new accrediting body is not made up of the faculty members of Mexican medical schools, like AMFEM. In describing the reason that COMAEM was formed despite the existence of AMFEM, Dr. Alejandro Cravioto, former Dean of the medical school at UNAM, said that COMAEM is viewed as an impartial body, whereas AMFEM is not.³²

The fact that there are now two accrediting bodies does not indicate that they are in competition with one another, however. In fact, according to a U.S. Department of Education staff analysis, AMFEM itself established COMAEM as a body "totally independent from AMFEM, to develop accreditation standards, policies and procedures to meet COPAES's requirements."³³ At least initially, the plan seems to be for the two groups to work together. In a press release from the Ministry of Health in June 2002, the department said that the best way to ensure that medical students receive adequate training is to make sure the schools have met AMFEM accreditation requirements, which will be vouched for by COMAEM.³⁴ Furthermore, on April 29, 2002, Enrique Ruelas, the Undersecretary of Health for Innovation and Quality, said that AMFEM will be complemented by COMAEM in accrediting schools, and the new committee will give the certifications an "official sense."³⁵

Despite talk of the two groups working together, it seems the long-term goal is for COMAEM to take over the accreditation process completely. Although AMFEM has also applied for COPAES recognition, COMAEM will be replacing AMFEM according to U.S. Department of Education documents.³⁶ Considering COMAEM will eventually be the sole accrediting body of Mexican medical schools, it is important to examine the COMAEM standards. COMAEM, lead by Dr. Guillermo Soberón, former Secretary of Health and head of FUNSALUD, already has its own accreditation standards and procedures. According to Dr. Cravioto, "COMAEM has done its own accreditation process, based in part on the standards used by AMFEM."³⁷ These standards contain stronger language than those used by AMFEM and 81 percent of the standards must be complied with.³⁸

The accreditation process by COMAEM follows the same structure of AMFEM and consists of three phases: auto evaluation, verification, and final decision. The first step is for the dean of the medical school to send a letter of intention to COMAEM; then the school receives the effective documents and the accreditation process starts. During the

auto evaluation, the school compares their services and procedures with the minimum quality requirements established by COMAEM. With that information the school must identify strengths and weakness and propose lines of improvement. During the second phase, a committee from COMAEM visits the school to conduct interviews and revise documents, as well as examine the infrastructure and equipment. A report of the visit is issued with the grade of accomplishment on each standard and recommendations to improve deficient areas. Finally, COMAEM gives or denies accreditation based on the report. This certification lasts for five years, and it is recommended that before this period ends the schools starts the recertification process (see Appendix B).

Currently, the U.S. Department of Education has accepted COMAEM accredited schools as eligible to receive student's paying with FFEL loans from the U.S. Department of Education.³⁹ However, discussions with the executive director of the National Committee on Foreign Medical Education and Accreditation (NCFMEA) left us with the impression that the U.S. Department of Education is still in the process of learning more about the new board and the transition that will take place with COMAEM replacing AMFEM. COMAEM is responsible for submitting the next annual report to the Department of Education.⁴⁰

Another step that Mexico is taking to improve the quality of its medical schools, along with the creation of COPAES and COMAEM, is a plan to prevent medical students from non-accredited schools from doing clinical rotations or serving in residencies in public hospitals. Although the plan will only legally bar medical students from public hospitals, private hospitals will have to follow suit if they want their programs to be recognized by academic institutions.⁴¹ This plan is set to begin in April 2003 and may prevent students from non-accredited schools from practicing medicine in Mexico.⁴² The plan was suggested by the General Sanitary Council, which is the top decision-making body in the health sector and by the Inter-secretarial Commission for Health Resources, which is chaired by both the Secretary of Education and the Secretary of Health. However, there are obstacles to the implementation of this plan. One obstacle, according to Dr. Cravioto, is a federal law that "protects the autonomy of universities with regards to their academic programs....If a program has been approved the government cannot interfere with its operation at any level, (and) this would include hospitals as training grounds."⁴³ The way in which the government will deal with this legal problem is unclear. Another obstacle to the implementation of this plan is the vocal opposition of many schools that are not currently accredited.⁴⁴

To conclude this section, it appears that the Mexican government and the various civil organizations involved are making an effort to improve the quality of undergraduate medical education in Mexico. The government has demonstrated its dedication to this goal by overseeing the creation of COPAES, which has the power to formally recognize accrediting bodies. Furthermore, COPAES has recognized a new and more objective accrediting body, COMAEM. This body has been charged with the goal of bringing more schools to the level of accreditation, and the government has begun to show a willingness to sanction schools that do not comply with accreditation standards. Finally, the efforts mentioned above may be a precursor to more steps to improve Mexican

medical education. The Ministry of Health, in an official press notice from May 1, 2002, said that COMAEM will be presenting its official strategy for improving Mexican medical schools in 2003.⁴⁵

Residency Programs

According to Dr. Cravioto, “The training of specialists is handled in a very different way both by academic and health care institutions....Neither AMFEM or COMAEM participate in...certification of hospitals.”⁴⁶ In fact, there is no accrediting body that certifies hospitals to train residents. Instead, it is left to individual schools to certify hospitals for their own programs. After hospitals apply to universities to become academic settings, review committees from the universities perform site visits and review the credentials of possible instructors. This process is done for undergraduate internship programs also, but in the in the residency programs the universities usually maintain much more control over the academic programs.⁴⁷ The high level of participation by the schools in the residency programs, combined with rigorous competition for the residencies among students, makes the area less of a concern than undergraduate medical education for those who are focused on improving the quality of medical education in Mexico.

Competition for residencies is fierce in Mexico, as only a small percentage of medical graduates can become specialists. There are not enough hospitals with adequate technology to train all of the doctors who want to become specialists.⁴⁸ Acceptance into a program is primarily based on how students do on an annual test. The number of students who take the test varies annually, but it is usually around 20,000.⁴⁹ Hospitals who have applied to have residency programs specify exactly how many residents they have room for. The total number of spots in all of the hospitals varies each year, but it is usually somewhere between 2,000 and 3,000. Therefore, only about 10 to 15 percent of the test-takers are admitted into residency programs each year. Since many Mexican medical students take the test more than once, about a third of the annual graduates, who number about 7,500, eventually do residencies. By contrast, virtually all U.S. medical students who intend to practice complete a residency.

After the testing is done, the testing company provides the hospitals with a list of the students that have received the best scores, and these students are eligible to apply for residencies in the specialty they chose before taking the test. Many hospitals, especially those with the best technology and reputations, have requirements beyond a high test score. For example, Christus Muguerza requires that applicants take another exam and do a personal interview.⁵⁰ Once an applicant has secured a residency, the length of the residency varies depending on the area of medicine. At the UANL, the internal medicine program is four years. Surgery and pediatrics are also four years. The cardiology program is four years of internal medicine plus two or three years of cardiology. Other sub-specialties such as plastic surgery also total six or seven years.⁵¹

Conclusion

The medical education system in Mexico has changed greatly in the last 30 years. The number of schools and students increased drastically during the 1970s, and then decreased during the last 20 years. The government and civil organizations such as AMFEM, COMAEM, and COPAES have made a concerted effort to improve the quality and uniformity of undergraduate medical education, especially during the last ten years. These efforts have been acknowledged by the U.S. Department of Education in its acceptance of AMFEM and COMAEM-accredited schools as eligible to train U.S. students receiving federal loans. However, despite this progress, there are many Mexican schools that have not met AMFEM or COMAEM accreditation requirements. Also, there are still considerable differences between the medical education systems in the U.S. and Mexico. The primary differences surround medical education being undergraduate-level in Mexico, and graduate-level in the U.S. The fact that Mexican medical education is not centered on the USMLE, technology differences, and language barriers may contribute to the low number of Mexican students who enter U.S. residencies. To some students the process might seem overwhelming, encouraging them to apply to competitive Mexican residency programs.

Notes

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Appendix A. Medical Schools and Students in Mexico

Number of Medical Schools in Mexico

Years	Number of New Schools	Total
1900	-	9
1901-1950	8	17
1951-1960	5	22
1961-1970	5	27
1971-1980	29	56
1981-1990	3	59
1991-1998	5	64
1999-2000	14	78
2001	1	79

Source: Federación Médica de Sonora, *Ejercicio actual de la medicina*. Online. Available: <http://www.fms.uson.mx/ejercicio.htm>. Accessed: February, 2, 2003.

Number of Medical Students in Mexico

Year	First Year Students	Total Medical Students
1970	8,283	28,731
1975	17,952	66,141
1980	16,044	93,365
1985	10,113	66,201
1990	11,226	57,667
1998	14,520	62,063

Source: Rosalinda Flores Echavarría et al, "La formación médica en México y los procesos en búsqueda de garantizar la calidad de los egresados," *Revista de la Facultad de Medicina*, vol. 44 no. 2 (March-April 2001), pp. 75-80. Online. Available: <http://www.medigraphic.com/espanol/e-htms/e-facmed/e-un2001/e-un01-2/em-un012h.htm>. Accessed: February 5, 2003.

Appendix B. Classification of Medical Schools

Medical Schools	Registered with AMFEM	Five year accreditation until	Accreditation in Phase 2 or 3	Accreditation in Phase 1	Public / Private	Program Length
Facultad de Medicina Universidad Autónoma de Yucatán	•	26-Sep-02			Public	7 years
Facultad de Medicina Universidad Nacional Autónoma de México	•	6-Nov-02			Public	5 years
Escuela de Medicina Universidad Autónoma de Coahuila, Unidad Saltillo	•	19-Mar-03			Public	6 years
Facultad de Estudios Superiores "Iztacala" Universidad Nacional Autónoma de México	•	3-Apr-03			Public	5 years
Facultad de Medicina Universidad Autónoma de Chihuahua	•	7-Aug-03			Public	5 years
Facultad de Medicina Universidad Veracruzana, Unidad Xalapa	•	7-Apr-04			Public	10 semesters
Escuela de Medicina Universidad Anáhuac	•	25-Jun-04			Private	6 years
Facultad de Medicina Universidad Juárez del Estado de Durango, Gómez Palacio	•	28-Apr-05			Public	10 semesters
Facultad de Medicina Benemérita Universidad Autónoma de Puebla	•	28-Apr-05			Public	
Facultad de Medicina de Tampico Universidad Autónoma de Tamaulipas	•	30-Jun-05			Public	5 years
Escuela Superior de Medicina Instituto Politécnico Nacional	•	30-Jun-05			Public	12 semesters
Facultad de Medicina Universidad Autónoma de Zacatecas	•	5-Dec-05			Public	10 semesters
Escuela de Medicina Universidad del Noreste	•	5-Apr-06			Private	10 semesters
Escuela de Medicina Universidad Autónoma del Estado de Hidalgo	•	5-Apr-06			Public	12 semesters
Facultad de Medicina Universidad Juárez del Estado de Durango, Unidad Durango	•	22-Jun-06			Public	10 semesters
Escuela de Medicina Centro de Estudios Superiores Xochicalco, Unidad Ensenada	•	26-Oct-06			Private	8 semesters
Escuela de Medicina Universidad Autónoma de Ciudad Juárez	•	26-Oct-06			Public	10 semesters
Carrera de Medicina Centro Universitario del Sur, Universidad de Guadalajara	•	15-Dec-06				
Escuela de Medicina Universidad Panamericana	•	15-Dec-06			Private	6 years
Facultad de Medicina "Ignacio A. Santos" Instituto Tecnológico de Estudios Superiores Monterrey	•	22-Jan-07			Private	9 semesters
Facultad de Medicina Universidad Autónoma de San Luis Potosí	•	4-Jun-07			Public	6 years
División de Ciencias de la Salud Universidad de Monterrey	•	4-Jun-07			Private	9 semesters

Medical Schools	Registered with AMFEM	Five year accreditation until	Accreditation in Phase 2 or 3	Accreditation in Phase 1	Public / Private	Program Length
Facultad de Medicina Universidad Autónoma del Estado de México	•	26-Jun-07			Public	14 semesters
Facultad de Medicina de León Universidad de Guanajuato	•	26-Jun-07				
Facultad de Medicina de León Universidad de Guanajuato	•	28-Aug-07			Public	9 semesters
Escuela Médico Militar Universidad Autónoma de Nuevo León	•		•		Public	6 years
Escuela de Medicina Universidad México Americana del Norte	•		•		Private	10 semesters
Facultad de Medicina Universidad de Colima	•		•		Public	12 semesters
Facultad de Medicina Universidad Autónoma de Coahuila Unidad Torreón	•		•		Public	6 years
Facultad de Medicina Universidad Popular Autónoma del Estado de Puebla	•		•			
Facultad Mexicana de Medicina Universidad La Salle	•		•		Private	12 semesters
Centro de Estudios Universitarios Xochicalco Campus Tijuana	•		•		Private	8 semesters
Escuela Médico Militar Universidad Autónoma de Querétaro	•		•		Public	5 years
Facultad de Medicina Universidad del Mayab	•		•			
Facultad de Medicina Universidad de Guadalajara	•			•	Public	8 semesters
Escuela de Medicina Universidad Autónoma Campeche	•			•	Public	5 years
Escuela de Medicina y Cirugía Universidad Regional del Sureste	•			•	Private	6 years
Facultad de Medicina Universidad Autónoma de Guadalajara	•			•	Private	10 semesters
Facultad de Medicina Universidad Autónoma de BC, Unidad Tijuana	•			•	Public	
Facultad de Medicina Universidad Autónoma de Nayarit	•			•	Public	10 semesters
Escuela Nacional de Medicina y Homeopatía Instituto Politécnico Nacional	•			•	Public	12 semesters
Carrera de Medicina Universidad Autónoma Metropolitana, Plantel Xochimilco	•			•	Public	
Facultad de Medicina Universidad Valle del Bravo	•			•	Private	10 semesters
Facultad de Medicina "Dr. Ignacio Chávez" Universidad Michoacana de San Nicolás de Hidalgo	•			•	Public	5 years
Escuela de Medicina Universidad Autónoma de Baja California, Unidad Mexicali	•			•	Public	
Facultad de Medicina Universidad Autónoma de Chiapas	•			•	Public	12 semesters
Centro Biomédico Universidad Autónoma de Aguascalientes	•			•	Public	10 semesters

Medical Schools	Registered with AMFEM	Five year accreditation until	Accreditation in Phase 2 or 3	Accreditation in Phase 1	Public / Private	Program Length
Escuela de Medicina Universidad Autónoma del Estado de Morelos	•			•	Public	12 semesters
Facultad de Medicina Universidad Autónoma "Benito Juárez" de Oaxaca	•			•	Public	7 years
Escuela de Medicina Universidad Autónoma de Sinaloa	•			•		
Carrera de Medicina Universidad Juárez Autónoma de Tabasco	•			•	Public	6 years
Facultad de Medicina Universidad Veracruzana, Unidad Ciudad Mendoza	•			•	Public	10 semesters
Facultad de Medicina Universidad Veracruzana, Unidad Poza Rica	•			•	Public	10 semesters
Carrera de Medicina Facultad de Estudios Superiores "Zaragoza" UNAM	•			•	Public	5 years
Facultad de Medicina Universidad Veracruzana, Unidad Veracruz	•			•	Public	10 semesters
Carrera de Medicina Centro Interdisciplinario de Ciencias de la Salud, IPN	•			•	Public	12 semesters
Facultad de Medicina Universidad de Montemorelos	•			•	Private	10 semesters
Facultad de Medicina Universidad Veracruzana, Unidad Minatitlán	•			•	Public	10 semesters
Escuela de Medicina Alternativa Chiapas					Private	12 semesters
Instituto de Estudios Superiores de Chiapas Campus Tapachula					Private	6 years
Centro Cultural Universitario Justo Sierra Distrito Federal					Private	10 semesters
Escuela Libre de Homeopatía de México Distrito Federal					Private	5 years
Escuela Medico Naval Distrito Federal					Public	12 semesters
Escuela de Medicina Universidad del Norte de México, Durango					Private	14 semesters
Universidad Quetzalcoatl Unidad Irapuato, Guanajuato					Private	10 semesters
Escuela Superior de Medicina Universidad Autónoma de Guerrero, Acapulco					Public	10 semesters
Centro Universitario Guadalajara LAMAR					Private	12 semesters
Facultad de Humanidades y Ciencias de la Salud Universidad del Valle Atemajac, Guadalajara					Private	4 years
Escuela de Medicina Tominaga Nakamoto Estado de México					Private	10 semesters
Departamento del Ciencias de la Salud Universidad del Valle de México, Querétaro, Juriquilla					Private	10 semesters
División de Ciencias Biológicas y de la Salud Universidad de Sonora, Campus Hermosillo					Public	
Universidad Panamericana de Nuevo Laredo Nuevo Laredo, Tamaulipas					Private	10 semesters

Medical Schools	Registered with AMFEM	Five year accreditation until	Accreditation in Phase 2 or 3	Accreditation in Phase 1	Public / Private	Program Length
Departamento Académico de Ciencias de la Salud Universidad Autónoma de Tlaxcala, Zacatelco						
Facultad de Medicina Universidad Villa Rica, Veracruz						
Escuela de Medicina "Don Santiago Ramón y Cajal", Westhill Institute					Private	12 semesters

Source: ANUIES, *Catalogo de opciones de Estudio de Nivel Superior*. Online. Available: <http://www.anuies.mx>. Accessed: February 2, 2003.

Chapter 4. Mexican-Trained Dentists: Opportunities for Licensure in the U.S.

by Emily Blosser

Introduction

The North American Free Trade Agreement (NAFTA) is commonly thought of as a treaty that facilitates trade, reduces tariff barriers, and liberalizes the movement of goods between its three member countries: Mexico, Canada, and the United States. However, provisions of NAFTA also call for and encourage licensing bodies in these countries to develop mutually recognizable standards and criteria for licensing and certification of professional services.¹ The healthcare professions, including dentistry, are by no means excluded from these professional services and although NAFTA was ratified in 1993, it appears to have had little impact on the movement of dentists between Mexico and the United States. Mexican-educated dentists seeking licensure in the United States still face significant barriers, particularly due to the fact that a Mexican dental degree is not generally recognized as being the equivalent of its counterpart in the United States. Canadian and United States dentists, on the other hand, have enjoyed the benefits of a reciprocal agreement since 1956, whereby the dental education in both countries is recognized as being equivalent.²

While few would argue that licensure standards in the United States should be lowered for Mexican dentists, the implementation of more transparent standards between Mexico and the U.S. would honor the true spirit of NAFTA. Furthermore, the licensure of Mexican-educated dentists might be a potential way to address dental shortage problems in various underserved areas in Texas and possibly other states. As the demand for culturally and linguistically sensitive dentists increases, Mexican dentists could also prove to be an excellent fit in areas where the population is predominantly of Hispanic origin. As the United States and Mexico move toward a binational approach to healthcare and the two countries' healthcare systems become more intertwined, the need for cross-border licensure of dentists becomes increasingly important.

This report has two main purposes. The first is to examine the licensure procedure for foreign-educated dentists (with an emphasis on Mexican-trained dentists) in the United States, specifically in Texas, in order to identify possible opportunities for more streamlined standards between the two countries. The second is to describe two relatively new initiatives introduced in the state of California regarding the licensure of Mexican dentists.

Dental Licensure in the United States

Licensure is defined as the process by which permission is given to an individual to engage in a particular occupation or use a particular title. Regulation of licensure takes

place at the state level and is generally the responsibility of the state board of dentistry or the state board of dental examiners.³ Standards from state to state are not uniform and tend to vary. Reciprocity also does not necessarily exist between states, meaning that a dentist licensed in one state may have to complete new requirements to practice in another. Currently, 43 states have provisions to grant licenses to dentists who currently practice and are licensed in another jurisdiction as long as these dentists meet certain standards (generally that the dentist has practiced for five years).⁴ Although barriers have been reduced considerably in recent years to allow easier mobility of dentists between states, there has been some question of whether some laws and policies regarding dental licensure serve primarily to protect dentists' economic interests. Strong statistical evidence supports this claim, as states with high average incomes for dentists tend to have higher failure rates on their state licensure examinations.⁵ The price of dental services has also been shown to be 12 to 15 percent higher in states without reciprocity.⁶ The ADA (American Dental Association), a private, not-for-profit organization of dentists and dental students, has supported the individual states in their right to regulate dental licensure but has encouraged dental boards to develop mutual agreements for U.S. trained dentists.

Licensure of Foreign Dentists

The process by which foreign-trained dentists become licensed in the United States is multifaceted and complex. This is complicated by the fact that each state has different mechanisms in place to license foreign-educated dentists. Foreign-trained dentists who want to obtain a license in the U.S. must consult with the individual state where they wish to practice in order to determine its guidelines.

Although licensure varies widely from state to state, any dentist, regardless of where he/she received his/her training, must fulfill certain criteria. How the individual states implement these requirements may differ. In general, there are three main licensure requirements all dentists must meet to obtain licensure in the U.S: the written examination requirement, the educational requirement, and the clinical examination requirement.⁷

The Written Examination

The written examination is the only requirement that is standardized in all states and is required of all individuals who wish to be licensed in the U.S. The two examinations that must be successfully completed are the National Board Exams Part I and II. The first examination (Part I) is usually taken after the first two years of dental school for U.S. dental students and consists of four sections covering anatomic sciences, biochemistry-physiology, microbiology-pathology, and dental anatomy and occlusion. The four sections each contain 100 multiple choice questions. Successful completion of Part I is required before Part II can be taken. Part II is generally taken in the last year of dental school for U.S. dental students and lasts an entire day. It covers the clinical dental sciences such as operative dentistry, pharmacology, endodontics, periodontics, oral and maxillofacial surgery, pain control, prosthodontics, orthodontics/pediatric dentistry, oral

diagnosis, and patient management. The test consists of multiple choice questions as in Part I.⁸

The Written Examination Procedure for U.S. and Foreign Graduates

A dental student not enrolled in an accredited school who wishes to take Part I and II should submit his/her application and fee to the Joint Commission on National Dental Examiners and have his/her transcripts verified by Educational Credential Evaluators at a cost of \$85. It is only necessary to have the transcripts verified once, and again Part I must be successfully completed before Part II can be taken. The tests are offered only at U.S. and Canadian dental schools.

Additionally, a foreign-educated dental student who registers to take either test must submit a form with the seal of his/her dental school and the signature of the dean or registrar of the school. If the individual is a dentist and not currently a student, there are two possibilities for him/her to establish eligibility to take the examinations. The first is to submit a letter from the secretary of a board of dentistry in a United States licensing jurisdiction in which he/she is eligible for licensure. The second is to provide evidence of graduation that must be verified and submitted through the Joint Commission on National Dental Examiners, which is the same process required of a student of a foreign dental school.⁹ The cost of Part I is \$125. The cost of Part II is \$160 for the written format and \$300 for the computerized test.¹⁰ A Mexican dentist would need to travel to the U.S. or Canada to complete the test and would have to complete them in English. The examinations could also prove difficult for a Mexican dentist who has been practicing for some years and therefore might be rusty in basic sciences.

The Educational Requirement for U.S.-Trained Dentists

For U.S. dental graduates the educational requirement is met when a student graduates from an accredited dental school. An accredited dental school is defined as one that is recognized and has been approved by the Commission on Dental Accreditation of the American Dental Association. All dental schools in the U.S. are accredited by the commission. As previously mentioned, the Commission on Dental Accreditation in Canada (CDAC) and the ADA's Commission on Dental Accreditation (CODA) have a reciprocal agreement granting the dental schools in both countries the same status.¹¹

The Educational Requirement for Foreign-Educated Dentists

This requirement appears to be the most difficult aspect in obtaining licensure for a foreign-trained dentist due to the fact that the majority of states simply refuse to grant licensure to an applicant that does not hold a D.D.S. or D.M.D. degree from an accredited dental school. Currently, 32 states require that an individual graduate from an accredited school and 18 states and the District of Columbia require graduates of programs outside the United States to complete two years of supplementary education at an accredited dental school in order to become licensed.¹² Although numerous variations in requirements exist in states, generally the options available to internationally trained

dentists are either to repeat the basic dental education at an accredited dental school or to pursue further study in a specialty field at an accredited school.

Requirements Specific to Texas

Texas belongs to the group of states that allow foreign-educated dentists to obtain further training in a specialty field in order to become licensed. A foreign-educated dentist can also attempt to begin a general dentistry program with advanced standing, which would usually occur in the second year of dental school. The dentist would need to complete the last three to three and a half years of a general dentistry program, and upon completion would then meet the requirement of graduating from an accredited school. This is generally difficult because the three dental schools in Texas (Baylor College of Dentistry, The University of Texas Health Science Center San Antonio Dental School, and The University of Texas Health Science Center Houston Dental School) only have available slots for advanced standing admission in the event that they experience attrition.¹³ This means that in any given year all three schools may not admit candidates. (Baylor has not admitted a foreign-trained dentist in the last seven years with advanced standing.¹⁴) Furthermore, both the University of Texas Health Science Center in Houston and San Antonio are limited to 10 percent of their student body from outside the state of Texas.

The second possibility is to complete an ADA-approved specialty education program that lasts at least two years. Specialties that are accepted in Texas include endodontics, periodontics, oral and maxillofacial pathology, oral and maxillofacial surgery, oral and maxillofacial radiology, orthodontics, dentofacial orthopedics, pediatric dentistry, dental public health, or prosthodontics. A general practice residency would not suffice for the purpose of licensure.¹⁵ Ironically, such residencies generally last one to two years, the same time length as required for Texas licensure, and would often be better training for a dentist who wants to practice general dentistry than a particular dental specialty.¹⁶ Additionally, for a dentist from Mexico or Latin America, the costs of completing further educational training, relocation, and living would often be far too expensive to be truly feasible.¹⁷

Unfortunately, no statistics appear to be available that reflect the number of Mexican-trained dentists enrolled in specialty education programs in Texas or for that matter, in the United States. The ADA has published statistics indicating the number of foreign-educated dentists in dental specialty programs nationally. Additionally, after contacting all three dental schools in Texas, only the University of Texas Health Science Center in Houston responded concretely to a request about the nationalities of its dental students in specialty programs in the year 2002. For the entering year of 2002, four foreign-trained dentists were admitted into the nine advanced education programs offered. There were a total of 476 applications received and 119 of those were trained in foreign countries. Of the 95 students currently enrolled in advanced education programs, 26 received their training in countries other than the United States.¹⁸ This information is piecemeal at best and does not offer a comprehensive view of the number of Mexican-educated dentists in dental graduate education in Texas or other states.

Table 4.1.
Dentists Enrolled in Advanced Education Programs in the U.S.,
2001-2002

	Total Enrolled	Foreign-Trained
Dental Public Health	35	18
Endodontics	406	48
Oral and Maxillofacial Pathology	31	12
Orthodontics and Maxillofacial Radiology	5	-
Oral and Maxillofacial Surgery	848	100
Orthodontics and Dentofacial Orthopedics	714	56
Pediatric Dentistry	442	59
Periodontics	476	51
Prosthodontics	417	65
Totals	3,374	409

Source: American Dental Association, *Dentistry in the United States: Information on Education and Licensure*. Online. Available: <http://www.ada.org/prof/prac/licensure/lic-intl.html>. Accessed: February 10, 2003.

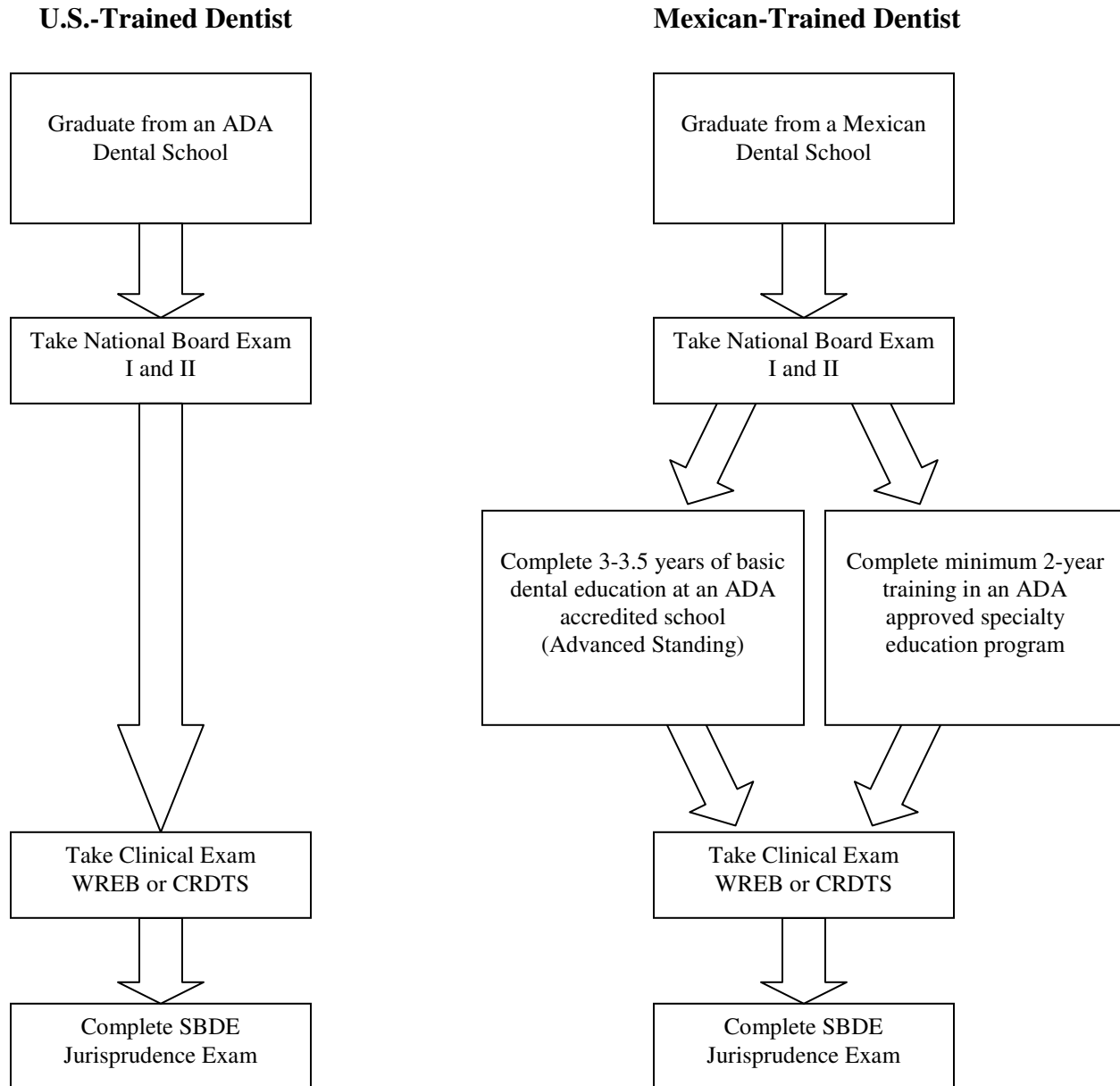
Clinical Examination Requirement

The last requirement for licensure concerns the clinical examination. Each state has a different procedure for this examination; while some states conduct their own examinations, many are administered jointly by a regional agency. Four such agencies exist and are used by 41 jurisdictions.¹⁹ In Texas, both U.S.-educated and foreign-educated candidates take the same test from the Western Regional Examining Board (WREB) or the Central Regional Dental Testing Service (CRDTS).

A foreign-trained dentist must submit a letter with the WREB application from the state board where he/she wishes to practice dentistry verifying that he/she has met all the requirements necessary in that particular state.²⁰ In Texas, the candidate must have completed a dental specialty program in order to receive the letter needed.²¹ The WREB exam is administered at the dental schools in Texas for a cost of approximately \$1,240. The WREB exam covers direct restoration preparation, direct restoration finish, indirect restoration finish, endodontics, periodontal clinical assessment diagnosis, periodontal treatment, and prosthetics.²² Each candidate who takes the clinical examination through WREB is responsible for providing his/her own patient or patients for two restorative and periodontal procedures. It is possible to use only one patient for all three procedures, if all requirements are met by the patient.²³

In Texas it is also necessary for all applicants to take a jurisprudence examination. The exam takes one hour to complete and is offered in Dallas, Houston, and San Antonio. Study packets are available from the Texas Board of Dental Examiners and cost \$20. The total cost of the application for licensure is \$350.

**Figure 4.1.
Licensure Process of Dentists in Texas**



Adapted from: American Dental Association, *Dentistry in the United States: Information on Education and Licensure*. Online. Available: <http://www.ada.org/prof/prac/licensure/licintl.html>. Accessed: February 10, 2003; and Texas Board of Dental Examiners, *Dental Licensure for Foreign-Educated Applicants*. Online. Available: <http://www.tsbde.state.tx.us/documents/licensureAppsDocs/DDSLicForeignChk1st.pdf>. Accessed: November 11, 2002.

ADA's Position on Licensure of Foreign-Trained Dentists

The ADA maintains that although it supports the idea of allowing foreign-trained dentists to practice in the states, it has a vested interest in preserving licensure standards in order to protect the public. The organization believes that testing cannot adequately measure a candidate's competency and therefore recommends that an internationally trained dentist complete a two-year supplementary education program at an accredited dental school.²⁴ While the ADA makes these recommendations, ultimately it has always supported the individual states in their right to autonomy over regulating dental licensure. Initially, after NAFTA was passed, the organization also raised concerns about its impact on the states' control of dental licensure.²⁵

Efforts to Establish a Reciprocal Agreement between the ADA and the ADM and MNCDE

Despite such support for states to regulate licensure, measures are underway between the United States and Mexico to explore the possibility of establishing a reciprocal agreement similar to the one that exists between Canada and the U.S. The ADA House of Delegates recently indicated that "NAFTA has acted as an impetus for discussion with representatives of the *Asociacion Dental Mexicana* (ADM)" (which is the Mexican equivalent of the ADA) regarding such an agreement.²⁶ Talks have begun between the two organizations and the ADM is hopeful that reciprocity can be established between the Mexican National Council on Dental Education (MNDCE) and the ADA Commission on Dental Accreditation. The MNDCE has accredited 15 of 58 dental schools in Mexico and the ADA Commission is currently reviewing copies of the Mexican Predoctoral Accreditation Guidelines and Procedures to determine if they are similar to its own.²⁷ The ADA asserts that if such an agreement is to be established, the MNCDE will have to prove that its policies and procedures are equivalent to those of the ADA. The ADM believes that it may take a considerable amount of time before an agreement between MNCDE and the ADA Commission can be reached, due to political concerns and governmental regulations in Mexico.²⁸ In the meantime, Mexican dentists will still have to meet strict state requirements for licensure as any other foreign-educated dentist would.

Number of Mexican Dentists Practicing in the U.S.

It is not clear how many Mexican-educated dentists are licensed in Texas or the United States. No statistics exist that track the number of licenses granted to Mexican dentists in the U.S. According to the Texas Board of Dental Examiners, there are 11,245 dentists licensed in Texas, and of those, 162 are foreign-trained. The Texas Board of Dental Examiners offered a bench test from 1990 to 1995 to assess the skills of internationally educated dentists, allowing them to circumvent the educational requirement of completing additional training.²⁹ It is not known how many internationally trained dentists were licensed during this period. Ironically, all three dental schools in Texas have foreign-educated faculty members who train future dentists in Texas but who themselves do not have access to licensure.

California and Cross Border Licensure

California offers a unique perspective for comparison with other states regarding its dental licensure laws and regulations. Two new pieces of legislation that have recently been enacted may lead to increased cooperation in the future between Mexico and United States dentists and represent unprecedented measures in terms of licensure of foreign-educated health care professionals.

California Dental Licensure Procedures

California is one of only two states that currently offer a bench test to dental graduates of non-accredited schools instead of requiring them to further their educations in the United States. After a dentist passes the National Board Examinations Parts I and II, a candidate has four attempts to successfully pass California's bench test, also known as the restorative technique examination. (After four unsuccessful attempts, the dentists must complete additional training.) The exam covers amalgam, cast restoration-wax up models, and cast restoration-preparation only. Upon successful completion, a dentist is then eligible to take the clinical examination necessary for licensure, which is administered by the State of California.³⁰ In January 2004, based on regulations of Assembly Bill 1116, passed in 1997, California will do away with the restorative technique exam and all dentists who do not hold a dental degree from an accredited school will have to obtain further training.³¹

The legislation was initiated after concerns were voiced by many of the members of the dental board who did not feel such a test was an adequate measure of a dentist's ability.³² The California Dental Association had misgivings about the licensure process because foreign dentists were being trained to pass the test and the organization felt that four attempts at the exam would not ensure the foreign-educated dentists possessed equivalent skills and knowledge expected of California's dentists.³³ The legislation therefore stipulated that foreign dental schools would have to gain accreditation from the state of California in order for their dental degrees to be recognized.³⁴ Dental graduates of non-accredited schools will be required to participate in an International Dental Program administered by a dental school in the state of California. Any dental school outside of the United States may apply to the Board of Dental Examiners for accreditation. The board must then make site visits to the school to determine if it is operating at the appropriate level and make any recommendations for needed changes in procedure. All costs of travel and procedural changes are paid by the dental school.³⁵ The California Dental Association, which supported the bill, maintains that this is the most effective way to regulate licensure, since it mandates that dentists are trained in the highest standards of care. The organization also sees this as a positive step towards more collaborative efforts with foreign countries.³⁶

The first school to obtain provisional accreditation from the California Board of Dental Examiners is the University De La Salle in Leon, Mexico. If the school meets the appropriate accreditation guidelines mandated by the board within a 24-month time frame, the school could obtain full accreditation, which would be valid for seven years.³⁷

If the school does receive full accreditation, graduates would be eligible to apply for licensure in five to six years in California, without having to complete additional education at an accredited dental school in the U.S. Site visits have been made by board members, who are following the accreditation guidelines defined by the ADA Commission on Dental Accreditation. While board members have generally been impressed with the school, certain weaknesses have been pointed out.³⁸ The main deficiencies that have been identified are as follows: no available documentation of basic life-support, no documentation of faculty or student immunizations or vaccines, the school's infection control standards did not meet U.S. or Canadian standards, patient records were deficient, there was a lack of supplemental oxygen, and sterilization facilities lacked contemporary equipment and methodology.³⁹

Students at the University De La Salle will have the opportunity to complete a specially designed track for California dental licensure. This track entails English language courses as well as classes that prepare them for the National Board Examinations I and II.⁴⁰

It is not clear if other states will recognize the credentials of dental graduates of the University De La Salle since most states require dentists to graduate from dental schools accredited by the Commission on Dental Accreditation.

Assembly Bill 1045

A second piece of legislation in California (Assembly Bill 1045) also merits special attention because of its unique approach towards responding to unmet health needs in California by recruiting dentists and doctors south of the border. The new law will bring 30 doctors and 30 dentists from Mexico to practice in community health centers in underserved areas.

Many Californians do not receive regular dental care, and oral diseases and other oral conditions are endemic in the population. Forty-four percent of California adults have no dental insurance and half of all California children have untreated tooth decay.⁴¹ A consistently large number of children of Latino immigrants remained uninsured, particularly for dental services, and fewer than half of Californians covered by Medicaid utilize services available to them, most likely due to cultural and linguistic barriers.⁴² The stimulus for AB 1045 came from a growing frustration about this situation on the part of Arnoldo Torres, Executive Director of the California Hispanic Health Care Association. Torres felt that the medical and dental community and medical and dental schools in California were not addressing the problem of cultural and linguistic competency and that not enough steps were being taken domestically to solve the problems that plagued California's health care system. Torres, who had close contact with the National Autonomous University in Mexico City, felt certain that a pilot program could be implemented.⁴³ He began to work with assembly member Marco Firebaugh to find a solution. Firebaugh's effort in the legislature led to him sponsoring legislation in 1998 to create a task force to look into the feasibility of bringing doctors and dentists to the U.S. from Mexico and the Caribbean. Based on the taskforce's recommendations, Marco Firebaugh introduced Assembly Bill 1045 in the 1999-2000

session. The bill was passed by both houses and was signed by Governor Gray Davis in September 2002.

The new law specifically authorizes three-year non renewable licenses for 30 Mexican doctors and 30 dentists and requires the Medical Board of California and the Dental Board of California to provide oversight of the program and provide the licenses.⁴⁴ The bill will allow dentists to bypass the traditional path to licensure and for these reasons has proved highly controversial. The first Mexican doctors and dentists will begin work in California sometime between July 2003 and January 2004.

The participating dentists must be graduates of the National Autonomous University of Mexico School of Dentistry (*Facultad de Odontologia*) and licensed dentists in good standing in Mexico. The National Autonomous dental school requires that all graduates have a minimum grade point average and a specified English language comprehension and conversational level. Additionally, in order to be admitted to the dental school, students must pass a general examination and an oral interview.

Before the dentists are able to work in community clinics, it will be necessary for them to complete a course taught by a member of a California dental school approved by the California Board of Dental Examiners. The course will cover pharmacology, oral pathology, clinical applications, biomedical sciences, clinical history management, special patient care, sedation techniques, and infection control guidelines. Upon completion of this course, dentists will be eligible to obtain employment in a nonprofit community health center within the structure of an extramural dental program. An extramural dental program is a clinical facility linked to an approved dental school that exists outside the walls, boundaries, or precincts of the primary campus of the dental school and in which dental services are rendered. The dentists will also have to complete English language training as well as the continuing education units that are also mandatory of their U.S. licensed counterparts.⁴⁵

Critics claim the bill may lead to “brain drain” in Mexico, although UNAM and the Mexican Ministry of Health assert that Mexico has an oversupply of dentists and doctors.⁴⁶ Groups such as the California Dental Association feel that the legislation might create a two-tiered standard of care since foreign-trained dentists often have less exposure to the newest equipment and technology and therefore may not ensure that patients are getting the highest level of care.⁴⁷

Upon completion of the program an evaluation will be undertaken to determine its success. Torres believes the program will act as a stepping stone to bringing the two countries together so that their medical systems can work together, as well as to dispel any myths about deficiencies in the Mexican medical and dental educational systems.⁴⁸

While 30 dentists may seem like a relatively small number for a problem that is so pervasive in underserved areas, many see this as a first step toward working for a healthier California. Additionally, hopes remain high that such legislation will act as a stimulus to alternative solutions to the situation.⁴⁹

Conclusion

It remains to be seen what impact NAFTA will have on the licensure of dentists in the U.S. The migration of dentists between the U.S. and Mexico certainly has the potential to increase knowledge of health care professionals in both countries and possibly fill the need for dentists in shortage areas. Improving communication between the two countries regarding training, licensure, and conditions of practice will hopefully allow both to begin improved transnational health care solutions without comprising standards of care.

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Chapter 5. Problems Facing Dentistry in Texas and Possible Solutions Involving Mexico

by Ben Bosell

Introduction

There is currently a large unmet need for dental care in Texas. Although it is a state-wide issue, the border region is one area where the unmet need seems most prevalent. A variety of factors have influenced the decline of availability of dental care in Texas today. This paper will look at the access to dental care, focusing on the border region, the role of insurance, children, and a survey of the Mexican dental system, and will examine the possibility of establishing international accreditation standards.

Better Access to Care: Focus on the Border Region

Currently, there are more people in Texas who require dental care attention than can be provided by the dental workforce. This is particularly true in the border region, which comprises 43 counties. The state's population-to-dentist ratio in 1999 was 2,748:1 compared to the border region's ratio of 3,831:1.¹ These ratios exemplify the difference between the access to care for the border region and the rest of Texas. Moreover, the gap between the border region and the rest of Texas is widened when Bexar county is not included in the border region's statistics. Without Bexar county, the border region's population-to-dentist ratio jumps to 5,479:1, nearly double the state's ratio.² If it weren't for the border region's alarmingly poor dentist-to-patient ratio, Texas' overall ratio would be at a more reasonable level. This underscores the importance of focusing on supplying more dental care in the border region.

Eighty-five percent of the population on the border are of Hispanic descent while the majority of dentists are not Hispanic.³ A 1995 study of a control group of 3,460 individuals found the following percentages of people who required various dental procedures: 14.8 percent did not need dental treatment; 27.4 percent needed at least one surface restoration; 24.4 percent needed at least two surface restorations; 10.6 percent needed at least three surface restorations; 7.6 percent needed at least one crown; 7.3 percent needed extractions due to caries; 9.1 percent needed extraction of teeth for other reason and one person needed 16 teeth extracted due to caries.⁴ At the minimum, these figures illustrate the unmet dental health needs of the border population.

Just as the figures for border residents requiring various dental procedures is striking, the statistics on the percentages of people frequenting a dentist is also indicative of poor access to dental care. The same report found that 28.2 percent had visited a dentist within the past year and 22.5 percent between years one and two. Even though 65 percent of adults reported having dental problems, only one-half of the sample population saw a dentist in the prior two years.⁵ Moreover, in Texas as a whole, only 40 percent of Texas

adults making less than \$15,000 per year visited a dentist in 2000.⁶ Lack of insurance could be one reason why these people are not receiving the proper dental care, and according to the Texas Health and Human Services Commission, 27 percent of people below age 65 are estimated to be uninsured in the border region.⁷

These statistics show that people in need of dental care are not receiving the dental care they should. Recent figures by the Texas Workforce Commission predict a growth rate in dentists of only 4.5 percent through 2010.⁸ The federal government identifies dental health professional shortage areas, and 101 counties in Texas were designated by the U.S. Department of Health and Human Services as such for dentists.⁹ Alarming, 75 of these areas were for whole counties, and many of the border counties are designated as shortage areas.¹⁰ In fact, only two of the 43 border counties in Texas are not federally designated dental shortage areas.¹¹ One factor that is not taken into account in the HPSA designation is cross-border utilization of dental services. To our knowledge, no studies have been undertaken on the percentage of the border population who cross the border for dental services.

Between 2000 and 2010, the number of dentists in Texas is projected to increase by 380.¹² Between 1991 and 1998, Texas' population grew by 14 percent while the number of dentists declined by 4 percent. The result was a 15 percent decline in dentists per capita compared to a 12 percent decline nationwide. From 1985-1986 to 1995-1996, the Texas population grew by 15 percent while the number of dental graduates declined by 32 percent. In Texas, there were 37 dentists per 100,000 in 1998, well below the national average of 48.4 per 100,000. This ranks Texas 41st in the nation in dentists per capita.¹³ The growth of dentists is projected to be slower than that of other professions; this combined with the large number of dentists expected to retire soon and increasing demand possibly makes for a dim outlook.¹⁴ Without positive changes, the increase in dentists will not be enough to meet the unmet need. Statutory law does not offer much assistance for the flexibility of adding to the dentistry workforce. See Appendix A for the Dental Practices Act, which statutorily defines the dentistry profession in Texas.

Dental Insurance: Medicaid for Children

The road to better insurance coverage should start with the youngest segment of our population. If you ask any dentist the best way for a population to have overall "good dental health," he will more than likely say that it starts with children. A child who has received dental care is more likely to become an adult with good dental health than a child who has not received proper dental care. States such as Texas realized this truism and enacted the Texas Health Steps Medicaid program (THSteps). The THSteps program was Texas' version of the federally required Early Periodic Screening, Diagnosis and Treatment (EPSDT) program.¹⁵ EPSDT has been a part of Texas Medicaid since 1967, when Texas began participating in the program.¹⁶

THSteps must provide each eligible child with medical checkups that assess the child's physical, mental, and dental health, and his vision and hearing, to identify existing or potential problems and to provide immunizations. Additionally, THSteps must provide

checkups and immunizations at scheduled periods according to nationally recognized professional standards and must provide necessary follow-up treatment. The program, if it follows the federal rules, must inform all eligible recipients of the availability of EPSDT services and how to obtain them.¹⁷

The program has undergone many growing pains, most notably a class-action suit in 1993 on behalf of 1.3 million children who were entitled to EPSDT services, titled *Frew v. Ladd* (now *Frew v. Gilbert*) in the U.S. District Court for the Eastern District of Texas. The class action alleged that the Texas Health and Human Services Commission was failing to provide diagnostic and treatment services to children enrolled in the program. In particular, the lawsuit charged that EPSDT medically screened only 29 percent of eligible children annually. Texas signed a consent decree in 1996 in which it agreed to take specific steps to remedy the shortcomings of its health care programs for poor children. In March of 2000 the plaintiffs returned to court for better dental care for children under this program.¹⁸ The plaintiffs alleged that Texas had not met the requirements of the decree and asked the court to enforce the 1996 decree. U.S. District Judge William Wayne Justice granted most of the motion by the plaintiffs to enforce the decree ordering a corrective plan by October 13, 2000, and specifically found that Texas failed to meet its requirements in the following areas:

- failing to provide dental checkups for about one million poor children in 1998 and an even larger number of eligibles in 1999;
- failing to provide sufficient staff and other resources to inform eligible recipients about Texas Health Steps effectively;
- failing to provide needed transportation to clinics and hospitals;
- failing to provide adequate care to enrollees of the Medicaid managed care programs;
- failing to provide treatment to children of migrant workers enrolled in managed care programs;
- failing to train health care providers adequately; and
- failing to obtain adequate data from contacting HMOs regarding their operations and provision of care.¹⁹

The judge essentially found that the plaintiffs had found sufficient evidence that the state had inflated its data about checkups in the managed care system. These checkups received by managed care enrollees, as the judge stated were, in fact, “grossly inadequate and incomplete.” The court elaborated by saying “[d]espite the increased health risks faced by class members whose parents are migrant farm workers, much evidence suggests that defendants (Texas) have not adequately ensured that their managed care contractors make efforts to accommodate them.”²⁰

Supporters of Judge Justice’s decree say that Texas has not done enough to ensure that Medicaid recipients received access to needed dental care services. They claim that despite improvements since 1993, many areas of Texas’ Medicaid program still fail to

meet federal mandates to serve eligible children adequately. Even though Texas may be performing better than the national average in some areas, they say THSteps fails to meet its federal mandate to provide preventive care and education and all necessary follow-up treatments to eligible families.²¹

Defenders of the Texas Medicaid program believe that taxpayer's money should be allocated by legislators and administrators, not one judge. They believe Texas has performed in good faith to meet the consent-decree requirements, and the program has made significant strides since 1993. THSteps has also outperformed national performance, and Texas' new budget and scope of the THSteps outreach efforts are the largest in the United States.²²

The Texas Department of Health (TDH) has prepared the Texas Health Steps Dental Statewide Report for Service Utilization SFY 2000. This report was finalized by TDH in December 2001. The report analyzes a specific aspect of program effectiveness related to service provision to a targeted population based on comparison among counties or county clusters.²³

A variety of factors must be considered when evaluating the effectiveness of the THSteps dental program in delivering services to the targeted eligible population. These factors include the number and distribution of providers enrolled in the Medicaid program, availability and distribution of dental service providers, the child's period of eligibility, parental compliance and cooperation, and diagnoses and treatment indicated at the time of the dental visit. The availability and distribution of dentists relates to access to care.²⁴

The report concluded that the pattern of service utilization in 2000 showed slight improvement. The Texas THSteps Dental program provided a dental service to 643,942 children in SFY 2000. In any given month, the number of children eligible for Medicaid is approximately 1.3 million.²⁵ The report concluded that 41 percent of the THSteps eligibles who could have received at least one dental service received a dental service.²⁶

The Office of the Attorney General has appealed the ruling by Judge Justice to the 5th U.S. Circuit of Appeals. The appellate court disagreed with Judge Justice's decision. They stated that Congress did not intend for a court to require a state participating in the Medicaid program must always provide every EPSDT service to every eligible person at all times. Perfect compliance is practically impossible, and the appellate court will not infer congressional intent that a state achieve the impossible. Unless the plaintiffs can prove that the right to dental services is being denied by the state, the courts cannot intervene. The appellate court, therefore, vacated the order of the District Court.²⁷

Texas SCHIP

The State Children's Health Insurance Program (SCHIP) is an alternative for families who do not qualify for Medicaid. SCHIP, which is funded with federal block grant dollars and state matching dollars, is a health insurance program for many children in families who make too much money, or have too many assets, for Medicaid, but who cannot afford other private insurance options.²⁸

Uninsured children in families with incomes at or under twice (200 percent) the federal poverty line are eligible for SCHIP. Those enrolled in SCHIP receive a comprehensive benefits package, similar to a good employer-sponsored health plan. It includes coverage of eye exams and glasses, prescription drugs, and limited dental check-ups and therapy. In most urban areas, SCHIP offers a choice of HMO-type insurers, while in rural areas, the coverage is more like traditional health insurance. Enrollment began on April 3, 2000, and the first coverage started on May 1, 2000; those who qualify for Medicaid based on family income and assets cannot get SCHIP. However, for these applicants, the application used for SCHIP is automatically forwarded to the Texas Department of Human Services (DHS) so they may be enrolled in Medicaid.²⁹ The Congressional Research Service reports that, nationally, between December 1998 and June 1999, 28 percent of the Medicaid participation rate increase is attributable to initial SCHIP applicants.³⁰

The perceived success of the program has not been overlooked. Governor Perry recognized the TexCare Partnership for reaching its goal of enrolling 428,000 children in SCHIP in just 18 months.³¹ The number of children enrolled in SCHIP on January 1, 2003 was 505,566.³² Texas developed the TexCare Partnership to raise awareness of new children's health insurance options and to help Texas families obtain affordable coverage for their uninsured children. It is too early to completely conclude that SCHIP is a success, but it has been responsible for insuring new populations of children who previously lacked health insurance, and it has been instrumental in highlighting the barriers to Medicaid.

Mexican Dental System

The available literature concerning dental education and accreditation in Mexico is sparse. One dental educator in San Antonio summarizes the American dentist's views on Mexican dental schools. This dentist opined that there are many credible and overall good dental schools in Mexico, however there are many poor schools as well.³³ There exists a wide gap between the "good" and "bad" dental schools, but both the "good" and "bad" schools churn out dentists each year to serve the Mexican population. The next section outlines aspects of the Mexican dental system.

Mexican dental education starts after the student finishes preparatory school, the equivalent of high school in the United States. During the last year of preparatory school, the student chooses to focus on a particular subject such as biology or history. To gain admittance to many dental schools, it is required that the student focus on biology. Admissions offices at Mexican dental schools look at three things: a knowledge exam, a psychological exam, and an interview. Students who achieve high marks during preparatory school are not usually required to take the knowledge exam.³⁴

Dental education lasts either four or five years, depending on the school. To be able to practice dentistry, the student must either write a thesis after performing research or take the national dental exam. Most students choose to take the exam. Every student must

also complete one year of social service in Mexico after completing his/her dental education.³⁵

There are five main bodies in Mexico that influence the dentistry profession. The two main dental associations in Mexico are the Asociación Dental Mexicana (ADM) and the Colegio Nacional de Cirujanos Dentistas (CNCD). The Federación Mexicana de Facultades y Escuelas de Odontología (FMFEO) helps dental schools structure their education programs. CENEVAL is the organization that administers the national exam taken by dental students at the end of their studies. Lastly, the Consejo Nacional de Educación Odontológica (CONAEDO) is the most important dental body in Mexico. It is responsible for accrediting dental schools, and it is comprised of members of ADM, CNCD, FMFEO, and CENEVAL.³⁶

The current climate is one of immense opportunity, especially with the advent of the North American Free Trade Agreement (NAFTA). One of the provisions of the agreement requires that the three countries—U.S., Mexico, and Canada—develop mutually acceptable standards and criteria for licensing and certifying professional service providers and to provide recommendations on mutual recognition. The opportunities are not being fully realized in the field of dentistry because, even though NAFTA advocates the free mobility of labor, including dentists, various states have only opened the doors to Canadian dentists (ten Canadian schools qualify).³⁷ In addition to NAFTA, the General Agreement on Trade in Services (GATS) of the World Trade Organization and the Declaration of Common Resolve for free and open trade by the year 2020 have similar implications for accrediting bodies.³⁸

Practical “hands on” exercises of pre-clinical and clinical training have been identified as a main difference between dental education in the U.S. and Mexico.³⁹ This can possibly be attributed to the Mexican dental school’s lack of many of the facilities American schools are fortunate to have. The U.S. has 54 total dental schools compared to 63 in Mexico, which is much smaller in geography and population than the U.S. Thus it seems logical to conclude that, on the whole, the standards of Mexican dental schools are below the standards in the U.S. Regardless of the differences, American dentists have agreed that the better Mexican dental schools utilize capable administrators who attempt to provide students and faculty with opportunities to enhance their knowledge and maintain practicing skills to a high degree of competence. Due to the difficulty of obtaining information regarding each dental school in Mexico, this statement cannot be generalized to the Mexican dental education system.⁴⁰ See Appendix B for two sample curricula from Mexican dental schools.

Future Outlook: International Standards for Dental Education?

Activities of California and Minnesota have prompted the American Dental Association (ADA) to study the possibility of accrediting foreign dental schools.⁴¹ California, for instance, has enacted a law that creates an approval process for foreign dental schools that apply. This process in California will permit graduates of the foreign schools to be eligible to take the California State Dental Board Examination. Moreover, Minnesota

law gives the dental board authority to decide whether a foreign dental school is equivalent to a school accredited by the ADA Commission on Dental Accreditation (CODA). If the Minnesota board decides that the foreign school is equivalent, then the foreign graduate would be eligible to take the Minnesota licensure exam. The ADA's involvement signifies a desire of the ADA to enhance quality standards of dental care worldwide. ADA is therefore working with international health and dental organizations to establish international standards for dental education.⁴²

The ADA began this arduous task of establishing international standards by studying the procedures, namely the principles of accreditation. The ADA identifies six specific purposes of accreditation:

- to recognize program performance and outcomes, thus motivating programs to comply with standards;
- to increase confidence in education or training programs;
- to provide a minimum set of curriculum requirements;
- to help define the content of the profession and scope of practice;
- to increase the credibility of the profession; and
- to ensure consistency of training outcomes.⁴³

The U.S., when looking at accreditation, is unlike many foreign countries. The U.S. has no federal ministry of education or other educational authority exercising national control. The Secretary of Education recognizes private organizations or associations that accredit higher education programs based on recommendations from the National Advisory Committee on Institutional Quality and Integrity that evaluates accrediting bodies based on its review criteria. CODA was first recognized by the Secretary of Education in 1952, and it has maintained its status as accrediting dental programs since then. CODA has evaluated several programs outside the U.S, namely Japanese, German, and Korean programs. They do this because each of these programs is sponsored by an approved U.S. institution of higher education. CODA visits these sites at the expense of the program requesting accreditation.⁴⁴

The ADA's attempt to set international standards is still in its infancy, and it has the European Union's (EU) DentEd Thematic Network Project as an example of an effort to harmonize dental education across the EU. DentED's primary goal was to facilitate and assist dental schools to join toward higher standards in dental education, science, and scholarship. This will be accomplished through better understanding, pooling intellectual resources, sharing innovations and best practices, and exchanging and promoting better understanding of education in the context of their own regional priorities.⁴⁵

The DentED project concluded that significant regional differences exist among European dental schools. The dental curricula throughout Europe tend to provide comparable levels of theoretical instruction or the knowledge base, while the clinical experiences aren't as similar. At schools where the clinical training is not utilized as much, there exists more of a reliance on lecture and pre-clinical courses. DentEd reports

that even with the inconsistencies among European dental schools, the existing traditions should produce graduates who can demonstrate the required competence for independent clinical practice. In addition, with any dental agreement among nations, the DentEd notes the need for all schools to operate within the legal or regulatory framework for the practice of dentistry set by individual national governments.⁴⁶

There are other places to look when evaluating the possibility of international dental standards. When looking within the U.S., 12 percent of the U.S.-based specialized accrediting agencies conduct accreditation activities outside the U.S. One such example is the American Veterinary Medical Association's Council on Education (AVMA COE). The AVMA COE has accredited five colleges of veterinary medicine in the Netherlands, England, Scotland, and New Zealand. The objectives of the AVMA COE is to ensure that each graduate of an accredited college of veterinary medicine is firmly based in the fundamental principles, scientific knowledge, and physical and mental skills of veterinary medicine. CODA could look to AVMA COE as an example of how to evaluate international dental programs.⁴⁷

Veterinary accreditation is completely voluntary, thus the AVMA COE does not solicit applications. Initial or continued approval of a foreign veterinary college is contingent upon: 1) the licensing body of that foreign country recognizing that graduates of U.S. and Canadian veterinary colleges have met the same educational standards as graduates of AVMA-approved foreign veterinary colleges; and 2) the foreign country conferring licenses to graduates of AVMA-accredited U.S. and Canadian veterinary colleges that are identical to those given to graduates of that country's AVMA-approved veterinary colleges, by a licensing process no more difficult than that required of graduates of that country's AVMA-approved veterinary colleges.⁴⁸

The AVMA will not assist in the development of foreign colleges, consequently only established colleges may seek accreditation. The AVMA will take site visits conducted by the COE. Three types of site visits exist:

- 1) Consultative visit: available to an established institution desiring consultation and advice on its readiness for obtaining accreditation status. In this visit, the college will pay the expenses for the visit and an \$8,500 fee is imposed for administrative costs of the AVMA.
- 2) Complete visit: comprehensive on-site visit to an established foreign institution seeking initial accreditation. The college pays for the expenses and a \$12,000 fee is imposed for administrative costs of the AVMA. If accreditation is awarded to the college, the newly accredited college is charged an annual \$1,000 fee.
- 3) Short visit: visits based on information learned via the college's annual report or third party comment. Expenses are paid by the sponsoring university and a \$2,750 fee is imposed for administrative costs of the AVMA.⁴⁹

In reviewing the EU and existing U.S. accrediting agencies such as the AVMA COE, the ADA has identified three potential methods to achieve international standards in dentistry for accreditation. First, there is the option of reciprocal agreements. When two or more

accrediting agencies have mutually determined that their accreditation standards, policies and procedures are equivalent, then a reciprocal agreement may be established. CODA and the Commission on Dental Accreditation of Canada (CDAC) have had a reciprocal accreditation agreement since 1956 which entails that the dental, dental specialty, dental hygiene, and dental assisting educational programs accredited by either agency are equivalent to their own and no further education is required for eligibility for licensure. The CDAC and the ADA, each year, attend each other's meetings with an annual cost of \$6,000 to the ADA to maintain this reciprocal agreement.⁵⁰

During the past ten years, Mexico has approached the ADA to discuss the possibility of a reciprocal agreement. During this time, the Asociación Dental Mexicana (ADM) has been invited to attend the meetings between CODA and CDAC. The ADM, trying to jumpstart a reciprocal agreement, furnished a report in February 2002 to the ADA listing the 15 schools accredited by the MNCDE. The next step in the road toward a reciprocal agreement is to compare the Mexican Predoctoral Accreditation *Guidelines and Procedures* with CODA's *Accreditation Standards for Dental Education Programs* to determine whether the standards, policies and procedures used by both agencies are equivalent. It is thought by both sides that, due to political concerns and governmental regulations in Mexico, it will be some time before a reciprocal agreement is reached between CODA and MNCDE.⁵¹

Another method that could be used by the ADA is to establish a process for direct or primary accreditation of dental schools outside the U.S. and Canada. This process would follow the model set by AVMA discussed earlier. CODA would be requested to position itself to offer accreditation to international dental schools requesting a review. CODA would then need to identify ways to assess comparability of prerequisite and general education requirements, as well as dental requirements. CODA could not act alone in this method; it would be necessary to determine whether international dental organizations, international dental education organizations, and international dental schools would be supportive of or interested in an international accreditation program.⁵²

Lastly, the ADA could expand its efforts to improve dental education worldwide by offering consultative services to educational programs or institutions engaged in quality improvement activities. This method would require multiple ADA agencies working together, namely the Council on Dental Education and Licensure, the Center for International Development and Affairs (in cooperation with Health Volunteers Overseas), and CODA. The ADA reports that implementation of this method would require initial planning by an interagency work group to develop a protocol and resources for providing consultative services, as well as a marketing plan and budget.⁵³

Case Study: University de la Salle in Leon, Guanajuato

This section summarizes a meeting with Dr. Mary-Jean Bernal-McGrath, the dean of the private dental school at the University de la Salle in Leon, Guanajuato. The University de la Salle dental school has a total enrollment of 300 students. It has 64 full and part-time faculty members, 84 percent of whom have post-graduate degrees. The school's

program lasts five years, with one year of social service. Most students begin at the age of 18 after completion of preparatory school. The school has the capacity to admit 100 students per year, and the attrition rate is 20 to 28 percent, mostly during the first year. This rate is mainly due to the fact that students are forced to decide on a career path at such a young age. Last year, 68 students graduated, and 22 students are slated to graduate in 2003. The admissions requirements for excellent students coming out of preparatory school is a psychological exam and an interview. Similar to high school in the U.S., preparatory students in Mexico have grades and a grade point average (GPA) by which dental school can evaluate them. For other lesser accomplished students, a knowledge exam is also required.⁵⁴

The academic program of five years or 10 semesters is fairly rigorous. The clinical component starts at the fifth semester, and it lasts from 7 a.m. to 7 p.m. Students always work in pairs with other students in the clinics. There are usually three exams per semester and one final exam. Unlike preparatory school, students at the school do not receive grades or a GPA. The school belongs to FMFEO, and Dr. McGrath-Bernal stated that this ensures better standards due to the five-year curriculum review. Fifty-six out of the 63 dental schools in Mexico belong to FMFEO. The school was also the fifth dental school in Mexico and the first in Guanajuato to be accredited by CONAEDO. Dr. McGrath-Bernal opined that CONAEDO's standards are more rigid than the U.S. equivalent, CODA, because CONAEDO is a relatively new organization formed in the latter part of 2000. Because CODA has more experience after many years of being in existence, its policies may be more flexible than CONAEDO's.

Completely independent from CONAEDO is FIMPES, which accredits only private schools. It is the job of FIMPES to accredit the University de la Salle in its entirety, not focusing on any one part such as the dental school. Dr. McGrath-Bernal admits that the school is a high quality institution, but it is not the best in Mexico. The strengths are its academic program, and the main area of improvement is in research. Opportunities for research are limited because of the lack of required facilities and part-time faculty members who do not have time to devote to research. Part-time faculty members are more likely found in private schools because unlike public school professors, private school faculty members usually have a private practice as well.⁵⁵

The school is unique because of its provisional accreditation by the California Board of Dental Examiners (CBDE). Talks between the school and California began six years ago by a former graduate of the school who resided in California. The idea was initially rejected, but after support by key politicians in California, the idea was accepted and the CBDE visited the school in July 2002. Areas identified by the CBDE as needing improvement were record-keeping, vaccinations of students, oxygen canisters, and infection control. By August 2002, each of these was completely corrected except for infection control, which mainly consists of sterilization equipment and procedures. The school was granted provisional accreditation in August 2002 and given 24 months to correct its infection control deficiency. The school plans to remodel its building, moving the sterilization areas from the third floor to the basement. This will allow for more space for the necessary equipment in order to meet the CBDE standards. Dr. McGrath-

Bernal thinks that even if the school is not fully accredited after 24 months by the CBDE, it is a win-win situation for the school because it is an opportunity for the school to examine and improve itself.⁵⁶

Students in this program do not follow the same program as regular students at the school. For instance, the curriculum requires that students take English courses so that they are prepared to practice in California. Students that are in this program are prepared to take the dental qualifying exams in California, thus the education program is structured similar to dental schools in California. In essence, a student in this program should receive a comparable education in all aspects as a student who attends dental school in California. There are currently two students in the program and two more who will start next August. The school wanted to start slowly because the program is new. The program is open to both California and Mexico residents, however in reality, mostly Californians will be in the program due to the tuition difference between this program and the normal academic program. This program costs students \$16,000 per year while the normal academic program costs \$3,600. This supports one of the main reasons why this agreement was made—to give the California Hispanic population an opportunity for a dental career.⁵⁷

Conclusion

The supply of dentistry services does not satisfy the need for dental care throughout Texas, especially in the border region. The majority of the unmet need is likely in the state's Hispanic population. Moreover, during the past decade, courts have been involved with assessing Texas' efforts to supply dental care to children, arguably the most vulnerable segment of our population. Even though Texas has shown improvement in supplying dental care to impoverished children, there is still a long way to go before the supply of dentistry services meets the demand.

One initiative that has already been undertaken in California is the California Board of Dental Examiners granting provisional certification to the University De La Salle in Leon, Guanajuato—marking the first time an approval process other than that of the ADA, Commission on Dental Accreditation, or the Canadian Commission on Dental Accreditation has been implemented in the United States.⁵⁸ Although the dental education as a whole in Mexico is not as advanced as in the U.S., this should not preclude this opportunity for other states like Texas. Some of Mexico's schools are on comparable levels as those in the U.S., and the ADA has had these assurances from the ADM. Texas is in a critical period right now in terms of offering dental care to its population. One extremely viable solution is directly south of Texas—Mexico—and all we need to do is find common ground between Texas and Mexico so that Mexican dentists can aid in addressing the supply shortage.

Notes

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¹⁷ *Ibid.*

¹⁸ *Ibid.*

¹⁹ Andrews Health Law Litigation Reporter, *Federal Court Finds Texas Violated Decree to Improve Health of Poor Children* (September 2000), p. 10.

²⁰ *Frew v. Gilbert*, No. CIV.A.393CV65, 2000 WL 33795091 at 2-3 (E.D. Texas).

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²² *Ibid.*

²³ Texas Department of Health, Associateship for Family Health Research and Public Health Assessment Division, *Texas Health Steps Dental Statewideness Report for Service Utilization SFY 2000* (Austin, Tex., December 31, 2001), p. 1.

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²⁷ *Frazar v. Gilbert*, 300 F.3d 530, 544 (5th Cir. 2002).

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- ³⁴ Interview by Ben Bosell with Mary-Jean McGrath-Bernal, Dean, University de la Salle School of Dentistry, Leon, Guanajuato, March 24, 2003.
- ³⁵ McGrath-Bernal interview.
- ³⁶ McGrath-Bernal interview.
- ³⁷ American Dental Association. Resolutions 18-21, *Report 5 of the Board of Trustees to the House of Delegates: International Standards for Dental Education* (August 2002), p. 3.
- ³⁸ Ibid.
- ³⁹ Ramon Baez and Pablo Schneider, *Dental Health at the United States Mexico Border* (1995), p. 33 (unpublished manuscript).
- ⁴⁰ Ibid.
- ⁴¹ American Dental Association, *Resolutions 18-21, Report 5 of the Board of Trustees to the House of Delegates: International Standards for Dental Education* (Chicago, IL, August 2002), p. 1.
- ⁴² Ibid., pp. 1-2.
- ⁴³ Ibid. p. 2.
- ⁴⁴ Ibid., p. 3.
- ⁴⁵ DentEd, *Convergence in European Dental Standards*, p. 1. Online. Available: <http://www.dented.org/resources.php3>. Accessed: February 15, 2003.
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- ⁴⁷ American Dental Association, *Report 5 of the Board of Trustees to the House of Delegates: International Standards for Dental Education*, p. 1; and The American Veterinary Medical Association, *Welcome to the AVMA*. Online. Available: <http://www.avma.org>. Accessed: February 15, 2003.
- ⁴⁸ American Dental Association, *Report 5 of the Board of Trustees to the House of Delegates: International Standards for Dental Education*, p. 6.
- ⁴⁹ Ibid.
- ⁵⁰ Ibid.; Canadian Dental Association. *Councils and Commission of Board of Governors*. Online. Available: http://www.cda-adc.ca/english/about_cda/structure/councils_committees_panels/councils_commission_bog.asp. Accessed: February 15, 2003.

⁵¹ American Dental Association. *Report 5 of the Board of Trustees to the House of Delegates: International Standards for Dental Education*, p. 7.

⁵² *Ibid.*, p. 8.

⁵³ *Ibid.*

⁵⁴ Interview by Ben Bosell with Mary-Jean McGrath-Bernal, Dean, University de la Salle School of Dentistry, Leon, Guanajuato, Mexico, March 24, 2003.

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⁵⁶ *Ibid.*

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Appendix A. Dental Practices Act

Article 251.003 of the Occupations Code lists ten provisions on defining a dentist:

- (1) represents to the public that the person is a dentist or dental surgeon or uses or permits to be used for the person or another person various titles that a dentist earns that shows they can:
 - a. diagnose, treat, or remove stains or concretions from human teeth; or
 - b. provide surgical and adjunctive treatment for a disease, pain, injury, deficiency, deformity, or physical condition of the human teeth, oral cavity alveolar process, gums, jaws, or directly related and adjacent masticatory structures;
- (2) performs or offers to perform by any means the:
 - a. cleaning of human teeth;
 - b. removal of stains, concretions, or deposits from teeth in the human mouth; or
 - c. diagnosis, treatment, operation, or prescription for a disease, pain, injury, deficiency, deformity, or physical condition of the human teeth, oral cavity, alveolar process, gums or jaws;
- (3) prescribes, makes, or causes to be made or offers the same an impression of any portion of the human mouth, teeth, gums, or jaw:
 - a. to diagnose, prescribe, or treat, or aid in the diagnosis, prescription, or treatment, or a physical condition of the human mouth, teeth, gums, or jaws; or
 - b. to construct or aid in the construction of a dental appliance, denture, dental bridge, false teeth, dental plate of false teeth, or another substitute for human teeth;
- (4) owns, maintains, or operates an office or place of business under which the person employs under any type of contract another person to practice dentistry;
- (5) fits, adjusts, repairs, or substitutes or offers the same in the human mouth or directly related and adjacent masticatory structures a dental appliance, structure, prosthesis, or denture;
- (6) aids in the fitting, adjusting, repairing, or substituting or causes to the same in the human mouth or directly related and adjacent masticatory structures a dental appliance, structure, prosthesis, or denture;
- (7) without a written prescription or work order signed by a dentist legally practicing dentistry in this state or in the jurisdiction in which the dentist maintains the dentist's office:
 - a. makes, processes, reproduces, repairs, or relines a full or partial denture, fixed or removable dental bridge or appliance, dental plate of false teeth, artificial dental restoration, or a substitute or corrective device or appliance for the human teeth, gums, jaws, mouth alveolar process, or any part for another; or
 - b. offers, undertakes, aids, abets, or causes another person to engage in an activity described by Paragraph (a);

- (8) directly or indirectly offers, undertakes, or causes another to perform for any person an act, service, or part of an act or service in the practice of dentistry, including:
 - a. inducing, administering, prescribing, or dispensing anesthesia or an anesthetic drug, medicine, or an agent in any way related to the practice of dentistry;
 - b. permitting or allowing another to use the person's license or certification to practice dentistry in this state; or
 - c. aiding or abetting the practice of dentistry by a person not licensed by the board to practice dentistry;
- (9) controls, influences, attempts to do the same, or otherwise interferes with the exercise of a dentist's independent professional judgment regarding the diagnosis or treatment of a dental disease, disorder, or physical condition; or
- (10) represents that the person is a dentist or uses another title that is intended to convey to the public that the services offered by the person are included within the practice of dentistry.

Exemptions exist for:

- (1) faculty members of a reputable dental school or dental hygiene school in which the member performs services for the sole benefit of the school;
- (2) a student of a reputable dental school who performs the student's operations without pay, except for actual cost of materials, in the presence of and under the direct supervision of a demonstrator or teacher who is a faculty member of a reputable dental school;
- (3) a person:
 - a. who performs laboratory work only on inert matter; and
 - b. who does not solicit or obtain work by any means from a person who is not a licensed dentist engaged in the practice of dentistry and does not act as the agent or solicitor or, and does not have any interest in, a dental office or practice or the receipts of a dental office or practice;
- (4) a physician licensed in this state who does not represent that the person is practicing dentistry, including a physician who extracts teeth or applies pain relief in the regular practice of the physician's profession;
- (5) a dental hygienist:
 - a. who is authorized to practice dental hygiene in this state; and
 - b. who practices dental hygiene in strict conformity with the state law regulating the practice of dental hygiene;
- (6) a person who is a member of an established church and practices healing by prayer only;
- (7) an employee of a licensed dentist in this state who makes dental x-rays in the dental office under the supervision of the dentist;
- (8) a Dental Health Service Corporation chartered under Section A(1), Article 2.01, Texas Non-Profit Corporation Act (Article 1386-2.01, Vernon's Texas Civil Statutes);
- (9) a dental intern or dental resident as defined and regulated by board rules;
- (10) a student;

- a. who is in a dental hygiene program accredited by the Commission on Dental Accreditation of the American Dental Association and operated as an accredited institution of higher education;
 - b. who practices dental hygiene without pay under the general supervision of a dentist and under the supervision of a demonstrator or teacher who is a faculty member of the program:
 - i. in a clinic operated for the sole benefit of the program's institution of higher education; or
 - ii. in a clinic operated by a government or nonprofit organization that serves underserved populations as determined by board rule; and
 - c. who practices in strict conformity with state law regulating the practice of dental hygiene;
- (11) a dental assistant who performs duties permitted under Chapter 265, in strict conformity with state law; or
- (12) a dentist licensed by another state or a foreign country who performs a clinical procedure only as a demonstration for professional and technical education purposes, if the dentist first obtains from the board a temporary license for that purpose.

Note that the State Board of Dental Examiners is subject to Chapter 325, Government Code (Texas Sunset Act). Unless continued in existence as provided by that chapter, the board is abolished September 1, 2005.

Source: Texas Occupation Code Annotated, sec. 251.003.

Appendix B. Two Sample Curriculums

From the Universidad Michoacana de San Nicolas de Hidalgo:

First Year

- Human Anatomy and Dissections
- General and Special Physiology
- Histology and Embryology
- Dental Chemistry
- Dental Anatomy
- Radiology I

Second Year

- Pathological Anatomy and Lab
- Topographical Anatomy of Head and Neck
- Clinic in “Propedeutic” Medicine
- Microbiology and Lab
- Introduction to Dental Operation
- Biochemistry and Lab
- Operation Techniques and Lab
- Radiology II

Third Year

- Anesthesia Clinic
- Dental Operation I
- First Course in “Exodoncia” Clinic
- Gold Prosthetics I
- Mouth Pathology
- Therapy and Pharmacology
- Total Prosthodontia I
- Total Prosthodontia I
- Preventative and Hygienic Dentistry
- Therapeutic Medicine Clinic
- Integral Diagnostic Clinic

Fourth Year

- Minor Mouth Surgery
- Dental Operations II
- “Exodoncia” Clinic II
- Gold Prosthetics II
- Parodontia
- Total Prosthodontia II
- Mouth Rehabilitation

- Endodontia
- Orthodontia
- Child Dentistry Clinic
- Removable Bridges

Source: Universidad Michoacana de San Nicolas de Hidalgo, *Plan de estudios*. Online. Available: <http://www.ccu.umich.mx/univ/lic/odont-plan.html>. Accessed: February 15, 2003.

From the Universidad Autonoma de Nuevo Leon:

First Semester

- Human Anatomy
- Biochemistry
- Embryology
- Histology
- Written and Oral Communication

Second Semester

- Dental Anatomy
- Pathological Anatomy
- Physiology
- Microbiology
- Social Dentistry
- Computers

Third Semester

- Dental Topics
- Occlusion I
- Pathology I
- Radiology I
- Art Appreciation
- Environmental Sciences
- Psychology in Dentistry

Fourth Semester

- Anesthesiology
- Occlusion II
- Dental Operation I
- Pathology II
- “Propedeutic” Clinic
- Radiology II
- Psychology and Professional Development

Fifth Semester

- Mouth Surgery
- Pharmacology
- Geriatric Dentistry
- Internal Medicine in Dentistry
- Dental Operation II
- Periodontics I
- “Propedeutic” Clinic
- Scientific Methodology

Sixth Semester

- Mouth Surgery II
- Preventive Dentistry
- Dental Operation II
- “Periodontic” Clinic
- Total Prosthesis I
- Sociology and Profession

Seventh Semester

- Mouth Surgery III
- Dental Operation IV
- Fixed Prosthesis and Crowns
- Total Prosthesis II
- Research and Community
- English Competency

Eighth Semester

- Management
- Mouth Surgery
- Endodontics/Pre-Clinic
- Fixed Prosthesis and Crowns II
- Removable Partial Prosthesis
- Professional Ethics

Ninth Semester

- Endodontics Clinic
- Child Dentistry
- Orthodontical/Pre-Clinic
- Fixed Prosthesis and Crowns III
- Removable Partial Prosthesis
- Integral Seminar I

Tenth Semester

- Dental Ceramics
- Dentist Deontology
- Child Dentistry II
- Internal Dentistry
- Orthodontics Clinic II
- Integral Seminar II

Source: Universidad Autonoma de Nuevo Leon, *Plan de estudios*. Online. Available: <http://www.uanl.mx/facs/fo/licenciatura/PlanEstudios/FacOdontologiaPlanEstudios.html>. Accessed: February 15, 2003.

Chapter 6. Cross-Border Credentialing for Health Professionals: Licensing Mexican Nurses to Work in the United States

by Jessica Kempf, Sonja Scott, and Gina Amatangelo

“The health of the Nation depends on an adequate supply of nurses and a nursing workforce that reflects the racial and ethnic diversity of the population.”¹

Health policy experts agree that the United States must increase its body of “culturally competent” nurses if it is to meet the health care needs of a changing U.S. population. Cultural competence has been defined as the “co-creation of human caring transactions to promote health, comfort, well being and human integrity within the life experiences of persons, families and communities...”² Many health care professionals believe that nurses are able to provide higher-quality health care when they have life experiences and cultural backgrounds that are similar to those of their patients.³ These professionals believe that an increase in the number of Hispanic nurses in the U.S. could lead to the provision of more “culturally competent” care for patients with Hispanic heritage, and that the streamlining of licensing requirements for nurses from Mexico could help the U.S. combat its growing nursing shortage on a larger scale.

Even more critical, it is widely recognized that the United States’ nursing shortage will continue to worsen in the upcoming decades unless the U.S. makes dramatic changes in the work environment to make the profession more attractive. Almost all projections for health care in the 21st century call for more nurses in underserved communities.⁴ Given the aging nurse population and the small number of nurses entering the field, the *Journal of the American Medical Association* predicts that the U.S. will experience a shortage of epic proportions after 2010, as the baby-boomers begin to retire and become more dependent on medical services.⁵ The shortage of nurses along the U.S.-Mexico border may be even more acute just as the demand for bilingual, culturally competent nurses grows, leading many to look abroad to fill unmet workforce needs.

Since the 1960s, many U.S. hospitals have faced mixed successes in their attempts to recruit nurses from other countries to solve their nurse shortages. By 1996, 110,000 foreign-born nurses were employed or residing in the U.S; 43 percent of these nurses were from the Philippines, 19 percent from Canada, 15 percent from the United Kingdom and 9 percent from India.⁶ A number of the nurses from Asia and Africa have returned to their homelands after struggling to learn the English language and the health care culture of this country. Despite U.S. Immigration Law to prohibit such practice, some U.S. hospitals have refused to pay foreign nurses as well as their American counterparts, forcing these nurses to seek alternative careers.⁷

A number of health care providers and policy experts have questioned the U.S. strategy of recruiting nurses from other countries when Mexico has more qualified nurses than

paid positions to employ them. In addition, an unknown number of non-practicing nurses from Mexico reside in the United States. Many health care experts believe that Mexican nurses would be a good cultural fit for our health care facilities, and that hospitals would not have to provide costly translation services to their Spanish-speaking patients if they had more Spanish-speaking nurses. Some health care professionals have suggested that the cost to train and license Mexican nurses would probably be comparable to the signing bonuses that hospitals are already spending to recruit people into the field. Mexico's proximity to the U.S. might make it cheaper to recruit Mexican nurses than African or Asian nurses.

Data on immigrating Hispanic nurses is sparse, suggesting that nurses from Mexico, Cuba, Puerto Rico, the Dominican Republic, and Central and South America do not yet comprise a substantial portion of immigrant nurses. According to the U.S. Department of Health and Human Services, only 2 percent of the registered nurse (RN) population was Hispanic as of March 2000, even though 12.5 percent of the U.S. population is Hispanic.⁸

Numbers for Mexican nurses are considerably smaller and even more difficult to calculate. Immigration and Naturalization Service (INS) figures on RNs are confusing, and suggest that NAFTA has not substantially increased the number of registered nurses that emigrate from Mexico each year. In 1998, the INS recorded the occupations of 46 percent of the Mexicans entering the U.S. under NAFTA, and found that only 10 RNs entered from Mexico that year. In 1999, the INS surveyed the occupations of only 24 percent of all Mexicans entering under NAFTA, and found only six RNs. Out of the 9 percent of entries it surveyed in 2000, the INS only found one Mexican RN entering under the agreement. It recorded nine RNs in 2001 and three in the first half of 2002, but sampled an unknown portion of the people entering from Mexico under NAFTA.

This paper will examine the barriers that Mexican nurses face in becoming certified to practice in the U.S., and will explore how the increased migration of Mexican nurses to the U.S. could affect health care delivery in both countries. The first section will focus on the levels of nursing in the U.S. and Mexico. The second portion will delineate the licensure requirements that Mexican nurses must meet before beginning work in the U.S. The third section will explain the different visas that Mexican nurses may choose from when trying to immigrate to the U.S. The fourth part will focus on other barriers that often prevent Mexican nurses from passing the licensure exams, and the fifth section will examine solutions that could make it easier to certify Mexican nurses to work in the U.S. While several of these programs are in their nascent stages, many health care experts hope that binational educational programs and regulatory reform will provide Mexican nurses with the means to meet U.S. certification requirements and improve health care delivery in Mexico and the U.S. in the future.

Licensure Requirements of Mexican Nurses to Become Certified in the U.S.

Levels of Nursing in the U.S.

One must have an overview of the three levels of nursing in the U.S. to fully comprehend the certification process for nurses. The first level of nursing in the U.S. is comprised of registered nurses (RNs) who are licensed to practice independently of physicians and other health professionals. The second level consists of licensed practical nurses (LPNs) and licensed vocational nurses (LVNs), and the third tier contains certified nursing assistants (CNAs), nursing/psychiatric/home health aides (HHAs) and personal/home care aides (HCAs). The work responsibilities and educational requirements for each level differ.

First-tier Nurses

In the U.S., RNs work independently from physicians and other healthcare professionals. RNs held about 2.2 million jobs in 2000. Approximately three out of five RNs worked in hospitals, while the rest worked in doctors' offices, clinics, nursing homes, schools, private residences, and government agencies. Even though the number of RNs grew in the last decade, the rate of growth in the field declined. The Texas Workforce Commission reports that RNs earn \$42,620 annually on average.⁹

Individuals can take three different educational paths to receive their RN licenses. After high school, aspiring RNs must complete either a baccalaureate degree, an associate degree, or a diploma in nursing before attempting the certification examination.

Many students pursue a four-year degree plan at a senior college or university after graduating from secondary school. The curriculum combines the theory and practice of nursing with general education in the humanities and behavioral, biological, and physical sciences. Students who already possess a nursing license based on an associate degree or diploma program generally follow an accelerated program to get their certifications in a shorter period of time. The baccalaureate degree prepares nurses for administrative work, and provides a foundation for RNs to pursue graduate education if they want to teach or work in a specialty area.

While many RN-hopefuls pursue an associate degree, the associate degree provides limited career opportunities in contrast to the baccalaureate program. The majority of associate degree programs are available at community and junior colleges, but some senior colleges and universities, technical institutes, and private institutions also offer the associate's curriculum. Associates programs last approximately two years and combine nursing classes and general college courses. Upon completion of a state-approved associates program, a graduate is eligible to take the state licensure examination to become a registered nurse. In some states, students who wish to obtain bachelor's degrees after receiving their associate's degrees may have to spend more than two years and repeat certain material to obtain the bachelor's. Other states, such as Texas, have

adopted an articulation plan in order to standardize treatment of students' associate degrees.

Although hospital diploma schools are the oldest type of educational program for RNs, diploma programs have dwindled from 800 to approximately 200 in the last 20 years. Diploma programs last about three years, but do not provide academic credit. Graduates of state-approved programs are eligible to take the state licensing examination for registered nurses. After receiving the RN license, diploma graduates are limited to beginning hospital staff positions and are not qualified for certain positions outside the hospital.¹⁰

After finishing a baccalaureate, associate, or diploma degree, each RN candidate must pass the National Council Licensure Examination for a Registered License (NCLEX-RN) before obtaining a state license to practice nursing.¹¹ The exam is designed to test the knowledge that nurses will need in the first six months of practice. Nurse graduates who fail the exam can repeat it in 91 days.¹² Individuals who pass the test will not have to retake it if they apply for certification in another state. However, RNs must attend continuing education courses and periodically renew their licenses.

Second-tier Nurses

LPNs, called "LVNs" in Texas and California, provide basic bedside care for the sick, injured, convalescent and disabled under the direction of physicians and registered nurses. LPNs take vital signs such as temperature, blood pressure, pulse and respiration. They also treat bedsores, administer medications (including giving injections), feed patients, administer ice packs, monitor catheters, and record fluid and food intake and output. They help patients with bathing, dressing and personal hygiene, and keep them physically and emotionally comfortable. Some LVNs help registered nurses care for seriously ill patients in intensive care units, while others assist with the delivery of babies. Despite having this variety of responsibilities, the LPN's job and responsibilities are more limited than the RN's. LPNs engage in tasks according to their level of training, and by law, much of the responsibility for the care that they provide rests with their supervisors and employers. The prospects for upward mobility are remote; the average annual salary for LVNs in Texas is \$28,570.¹³

LPNs must graduate from a school of practical nursing approved by the Texas State Board of Nursing to become certified in Texas. LPN programs usually require one to one and a half years of education at a vocational technical school or community college. After completing the educational requirements, LPN candidates must pass the NCLEX-PN. The NCLEX-PN is a written exam approved by Texas Board of Vocational Nurses and administered by the National Council of State Boards of Nursing.¹⁴

Third-tier Nurses or Unlicensed Assistive Personnel

There is no federal requirement that unlicensed assistive personnel be certified unless they are working as a certified nurse aide in a long-term care facility. Though it is not federally mandated, some hospitals and other facilities may have their own requirements

for such personnel, though these “certifications” are not official or standardized. Long-term care certification programs are usually 2 to 15 weeks in length and are primarily conducted by medical or long-term care facilities, as well as high schools or community colleges. Because there is no certification required for other types of third-tier nurses, the burden of training long-term care nurse aides falls to the long-term care system. Training programs typically provide instruction and supervised clinical experience related to basic patient care. Nurses’ aides typically provide basic nursing skills such as bathing, walking, and feeding patients once they begin working. The U.S. Bureau of Labor Statistics predicts that the aging U.S. population will trigger rapid growth in the field through the year 2008. The Texas Workforce Commission reports that CNAs earn \$14,640 annually.

Texas does not require home health aides (HHAs and HCAs) to become certified to practice in the state. While some community colleges offer educational training programs to prepare home aides for their jobs, most agencies provide two to three week training programs for aides who lack previous experience. Training focuses on basic skills such as basic nutrition, taking vital signs, infection control, personal hygiene, and communication skills. Health aides may get their national certification through the National Association for Home Care exam, but the certification is voluntary. The average annual salary for a home aide is currently \$23,340. Health professionals do not project that the field will grow substantially in the near future, but a high job turnover rate translates to almost continuous openings in the field.¹⁵

Levels of Nursing in Mexico

Mexico has different educational requirements than the U.S. for its three levels of nursing. Most Mexican nurses are educated at a *licenciatura* (baccalaureate) or technical (general nurse) level, while auxiliary nurses (nurses aides) have fewer educational requirements. Licenciatura and technical nurses often do the same kind of work even though their educational requirements are substantially different.¹⁶

Licenciatura, or *enfermera*, nurses are first-level nurses in Mexico. Applicants to licenciatura programs must have senior high school certificates. Education programs last four years, and are usually located at universities. The first two years typically focus on basic science subjects such as anatomy, biochemistry, microbiology, physiopathology and pharmacology, while the last two years include clinical training.¹⁷ Nursing students must perform six months to two years of community service before receiving their BN license. However, Mexico has no national examination requirements, and nurses are considered to be licensed by the secretary of education rather than from any nursing organization.¹⁸ After they become licensed, these nurses typically perform direct patient services under the supervision of a physician. Many licenciatura level nurses perform technical level and nurse’s aid tasks, but BN license-holders tend to advance more quickly than their second and third-level nurse counterparts.¹⁹

Second-level nurses in Mexico are called technical nurses, or *enfermera técnica*, and comprise the largest segment of the nursing population in Mexico. The educational requirements for technical nurses substantially differ from those of LVNs here in the U.S.

Applicants to technical nursing programs in Mexico must have a graduation certificate from junior high. Applicants typically study nursing at private schools for three years. Technical nurse graduates must perform up to two years of community service before receiving their nursing licenses.²⁰

Auxilio nurses comprise the third tier of nursing in Mexico. *Auxilio* nurses perform duties comparable to those of nursing assistants in the United States. Candidates must graduate from junior high and complete a six-month certificate program. *Auxilio* nurses are becoming less common, and fewer training programs for them now exist.²¹

How Do Foreign Nurses Become Certified in the U.S.?

Each state sets the licensure requirements for nurses within that state. The National Council of State Boards of Nursing (NCSBN), an association of state boards of nursing, establishes the requirements to sit for the NCLEX exam. The association has published the Core Uniform Licensure Requirements as guidelines for nurses who wish to practice in the United States. Because the NCSBN is not a regulatory body, some states' requirements differ from these produced by the association.

- **Verification of Comparable Educational Attainment:** All applications must demonstrate that they meet comparable educational requirements comparable to those established by the core requirements (graduation from a state-approved program). The Commission on Graduates of Foreign Nursing Schools (for RNs) or other credential review agencies provide a standardized method to ensure that international education programs are comparable to the U.S. state-approved programs.²²
- **CGFNS Certification (for RN Candidates) or Equivalent Credential Review (for LPN/VN Candidates):** In addition to reviewing a candidate's academic background, the credential review process includes verification of the candidate's experience and licensure in the nursing profession. The Commission on Graduates of Foreign Nursing Schools (CGFNS) provides a program to evaluate and certify an individual's English language proficiency. The Commission administers a test for RN candidates, which is intended to predict candidates' success on the NCLEX exam. Forty-two state boards of nursing currently require the CGFNS exam for foreign trained RN candidates.²³ Though not all states require this step for licensure, CGFNS certification is necessary for foreign nurses applying for a visa. Some professionals contend that the CGFNS credential certification helps to streamline the visa process, as states do not have to take on the task of individually verifying the education and licensure status of each foreign nurse applying for a visa.
- **Nursing Knowledge, Skills, and Ability Assessment:** All nurses, both U.S. educated and foreign-trained, are required to pass a licensure exam. All RN candidates must pass the NCLEX examination, and all LPN/VN candidates must pass the NCLEX-PN. The national core requirements stipulate that both U.S. and foreign-trained nurses may have unlimited attempts to pass the exam, though

some states do restrict an individual's ability to retake the test multiple times without additional education.²⁴

Licensing Foreign Nurses as RNs: Texas Requirements

The Texas Board of Nursing Examiners (TBNE or “board”) has created regulations that govern how foreign-educated nurses may become certified as RNs in Texas. Foreign applicants must pass a screening examination, exhibit English proficiency, pass a registered nurse examination, and provide verification that they have fulfilled the education requirements. Additionally, TBNE regulation §217(c) stipulates that foreign-educated RN applicants who graduated more than four years ago must have practiced as professional registered nurses for 24 of the past 48 months. This regulation poses a problem for many foreign-trained nurses who have already immigrated to the U.S. Applicants who have not fulfilled the 24-month requirement must complete a professional nursing program to be eligible for licensure as an RN.²⁵

All foreign-educated RN applicants must file a “Graduates from Nursing Educational Programs Outside United States” Jurisdictions (GSOUS) Questionnaire” with TBNE prior to submitting any other paperwork to the board. TBNE uses the questionnaire to determine whether the candidate has the requisite educational background to become certified.

TBNE regulation §217.4 sets the education requirements that a foreign-trained nurse must fulfill to gain his or her RN licensure in Texas. The applicant must have academic credentials that are equivalent to graduation from a governmentally accredited/approved, post-secondary general nursing program at least two academic years in length. The applicant must receive both theory and clinical education in medical and surgical nursing, maternal/infant nursing, nursing care of children, and psychiatric/mental health nursing, and must have received his or her initial license as a first-level, “licenciada” nurse in Mexico. Furthermore, the applicant must be currently licensed on the first level in his or her home country. In order to fulfill this requirement, an applicant must provide the TBNE with a certificate of verification from the Commission on Graduates of Foreign Nursing Schools (CGFNS), which certifies that the applicant has met these academic prerequisites.

In addition to defining education requirements, TBNE Regulation §217.4 requires applicants to pass the Commission on Graduates of Foreign Nursing Schools Qualifying Examination (CGFNS exam). The CGFNS was established in 1977 because only 10 to 15 percent of the foreign nurses who were attempting the U.S. registered nurse licensing examination (NCELX-RN) exam were passing at the time. The CGFNS exam was designed to function as a predictor for first-level, general nurses wishing to assess their chances of passing the NCLEX-RN. The test is administered several times a year in many countries throughout the world, and consists of two sections that are modeled after the NCLEX-RN. Most nurses who are trying to get their certification in the U.S. attempt the test in Houston, Chicago, and Los Angeles. The test is not currently given in Mexico because so few people sit for the exam there. Because Puerto Rico is a U.S. territory, nurses from Puerto Rico are not required to take the CGFNS examination, but they must

still demonstrate English proficiency to the CGFNS if their education was not entirely in English.²⁶

In 1998, CGFNS removed the English portion of the CGFNS examination and replaced it with the Test of English as a Foreign Language (TOEFL). Foreign applicants for RN certification must demonstrate minimum English proficiency with a score of 540 on the paper test or 207 on the computer exam. Applicants can also fulfill the English requirement by passing the Test of Written English, Test of Spoken English, or Michigan English Language Assessment battery (MELAB). The testing organization will send documentation of the applicant's scores directly to the TBNE.²⁷

Before registering for the NCLEX-RN, each applicant must arrange for the CGFNS to send a certificate directly to TBNE to verify that the applicant has passed the TOEFL and CGFNS exams and received CGFNS verification of the educational requirements. The applicant must arrange for CGFNS to send the certificate after the applicant has filed the GSOUS questionnaire with TBNE. After TBNE receives the CGFNS certificate, it sends the "Application for Initial Licensure" packet to the candidate. The application packet is good for six months; if the candidate does not mail the packet back to TBNE within this timeframe, he or she will have to pay the Texas application fee again.²⁸

Nurses must achieve a passing score on the NCLEX-RN to become licensed. A recent CGFNS study suggests that 82.02 percent of the applicants who earn a CGFNS Certificate pass the NCLEX-RN on their first attempt. In contrast, only 35.86 percent of those who fail to earn a CGFNS certificate pass the NCLEX-RN the first time.²⁹ Applicants who fail the NCLEX exam three times may not reattempt the test without additional education. Applicants may take the CGFNS exam as many times as is necessary to pass without requiring any additional schooling.

Applicants who pass the TOEFL, CGFNS and NCLEX and meet all of the other TBNE requirements receive a license that is good for a period ranging from six months to 29 months, depending on the applicant's birth date. The TBNE uses this method for administrative efficiency with both foreign and domestic nurses. After the initial licensure period, the license is re-issued every two years on the nurse's date of birth. Foreign-trained applicants may not receive a temporary license to practice until they have met the CGFNS requirements and passed the NCLEX-RN.³⁰

Texas Requirements to Certify Foreign Nurses as LVNs

Foreign-educated nurses must meet the following requirements to gain their LVN certifications in Texas:³¹

1. Nurses must pass the National Council Licensure Examination for Practical Nurses.
2. Nurses must have met curriculum content equivalent to the Texas curriculum.
3. Nurses must have education or practice (as a licensed nurse) within the past five years.

4. Nurses must submit a transcript in English or have transcript translated by an official translation service.

Some health professionals have suggested that it might make sense to try to certify nurses as LVNs and later elevate them to RNs. This strategy would allow immigrant nurses to adjust to their new clinical environment and master the English language before attempting the NCLEX-RN. Nurses might be able to get employment quicker, which would allow them to financially support themselves while they study for the RN licensure exams.

Immigration Requirements for Nurses who Wish to Move to the U.S.

Professional Immigrant Visas

Foreign nurses with at least two years of nursing studies after secondary school may qualify for skilled worker or professional immigrant visas. To qualify for an E-3 visa, a foreign nurse must have a nursing license in her home country and a CGFNS certificate or an unrestricted license to practice professional nursing in the state of intended employment.³²

A foreign nurse does not need to file a temporary permit or temporary license with the petition for immigration. The temporary or interim licensing may be obtained immediately after the nurse enters the U.S. and registers for the NCLEX. The nurse should fill out the application for the NCLEX as soon as he or she enters the country, but should not actually file the paperwork before moving to the U.S.³³

Non-immigrant H-1C Visas

New federal legislation has made it possible for nurses to obtain nonimmigrant visas to work in areas designated as “Health Professional Shortage Areas” by the Department of Health and Human Services. Prior to 1995, the Immigration and Nursing Relief Act of 1989 (INRA) and the Immigration Act of 1990 (IMMACT90) had established an exclusive H-1 category for professional nurses. The H-1 visa category expired on September 1, 1995, and was replaced with an H-1A nonimmigrant nurse program in October 1996. The new H-1A program only benefited nonimmigrants who were present in the U.S. as of September 1, 1995, and whose authorized period of tenure in the U.S. expired before September 30, 1997. This H-1A program expired September 30, 1997, and was replaced by the Nursing Relief for Disadvantaged Areas Act on November 12, 1999.³⁴

The Nursing Relief for Disadvantaged Areas Act allows for 500 new H-1C visas to be given out annually until the bill sunsets in 2003. States with a population of fewer than 8 million people can receive up to 25 visas, while states with more than 9 million receive no more than 50 visas. The employer must agree to sponsor the nurse; the nurse may not initiate immigration procedures with the INS.³⁵

H-1B Visas

Foreign nurses who plan to work in professional jobs that require at least a bachelor's degree may be eligible for H-1B visas. If the petitioning employer or the licensing state requires the nurse to have a bachelor's degree, the nurse may be able to apply for the H-1B. The nurse must, of course, pass all state licensure requirements, including the CGFNS and the NCLEX in Texas. Most H-1B visa holders work in specialty positions such as Care Plan Coordinator, Rehab Professional/Charge registered nurse or Unit Manager Supervisor. However, it is important to remember that those Mexican nurses who do not obtain the equivalent of a bachelor's degree in nursing will not be eligible for the H-1B.³⁶

To obtain an H-1B visa for a potential employee, an employer must submit a labor condition application for certification by the INS. The employer must be located within the U.S., must have an employer/employee relationship with the applicant and must have a current IRS tax I.D. number. The employer must offer the H-1B visa holder the greater of 1) the same wage it offers individuals with similar experience and qualifications, or 2) the prevailing wage for the occupation based on the best information available. This wage must correspond to the pay of employees with the "substantially same duties and responsibilities." The employer must also promise to provide working conditions for the H-1B visa holder that will not adversely affect its other employees with similar job duties. The employer must attest that it does not have a strike or lockout, and must provide notice to the bargaining representative or other appropriate entity that a labor condition application has been filed.³⁷

TN Visas under NAFTA

First-level nurses who are citizens of Mexico may circumvent the H-1B timeline and qualify for temporary "TN" visas. Under NAFTA, this visa was made available to qualified professionals from Mexico and Canada in cases where the position and the candidate meet certain criteria stipulated in the trade agreement. The TN visa allows professionals to stay in the U.S. for up to one year. They are subject to U.S. nursing regulations. Nurses must have their state/provincial license or licenciatura degree to qualify for a TN.³⁸

The application procedure for Mexican RNs is more complex than for Canadians because Canadian citizens only need TN status, while Mexican citizens must obtain visas to come to the U.S. To apply for a TN visa, a Mexican nurse must: 1) ask his or her prospective U.S. employer submit a labor condition application (LCA) to the Department of Labor, 2) have the employer fill out an I-129 "Petition For Non-Immigrant Workers" with the Immigration and Naturalization Service (INS) Service Center in Lincoln, Nebraska, and 3) apply for a non-immigrant visa at a U.S. Embassy or Consulate in Mexico after the petition has been approved.³⁹

The TN visa typically takes one to six weeks to approve. A nurse entering on a TN visa is not considered an immigrant; the person's spouse and unmarried, minor children are entitled to derivative status, but they may not accept employment in the United States.

Nurses may be able to extend their stays in one-year increments for an unlimited period of time. Mexican citizens may apply for an extension of their temporary stays by having their employers renew their labor certification and file another I-129 with their regional INS offices.⁴⁰

H-3 Visas

Nurses can obtain an H-3 visa in three ways. A nursing student can obtain the H-3 to complete a residency at an AMA-approved hospital during his or her vacation from school in Mexico. A nursing student may obtain an H-3 if he or she is pursuing medical education in the U.S. or Canada and his or her petition for immigration provides a statement that the nurse is qualified under state law to receive the training. A nurse may also obtain the H-3 if he or she has an unrestricted license to practice in the country where he or she was educated.⁴¹

Green Cards

Registered nurses who have received an offer of employment from a U.S. hospital or medical center are eligible to apply for a green card on Schedule A. The green card is a 10-year employer-sponsored permanent visa. After five years, the employee and his or her immediate family will be eligible for citizenship. The Immigration Act of 1990 (IMMACT90) and the Illegal Immigration Reform and Immigration Responsibility Act of 1996 (ILLRAIRA) gave nurses pre-certification with the Department of Labor.⁴²

To obtain a green card, a nurse should do the following:

1. Contact CGFNS to schedule an exam and begin the certification process.
2. Update his or her resume.
3. Begin locating and contacting prospective employers, staffing companies, or health care recruiters. This can be done on numerous Internet job sites.
4. Inform prospective employers that they will be applying for a green card and that they will need assistance with their I-140 Immigrant Petition for Alien Worker.
5. Proceed with the VisaScreen application. The VisaScreen is offered by the International Commission on Healthcare Professions (ICHP) in association with the CGFNS, and enables healthcare professional to verify and evaluate the credentials of potential immigrants. The VisaScreen certificate must be presented at the final visa interview with the consulate.
6. Obtain an application to sit for the NCLEX examination. Many states offer online applications. Remember to update your employer on your plans.
7. Wait for approval of the I-140. Usually the INS takes at least three to six months. The INS has four regional service centers; some work faster than others.⁴³

Other Barriers to Licensure

Research shows that many of the Mexican nurses who have immigrated to the U.S. have failed their certification examinations even after enrolling in clinical education and English language programs. Research indicates that Mexican nurses have had lower passage rates than nurses from other countries. Barriers such as language, computer training, and differences in the educational systems of the two countries may explain this anomaly.

Historically, only a small percentage of the Mexican nurses who have attempted the CGFNS have achieved a passing score. The CGFNS board reports that only 10 percent of the 138 Mexican nurses who took the CGFNS between 1997 and 2001 passed the test. Of this 10 percent, only half succeeded on their first try. In contrast, nurses from the Philippines had a 33 percent passage rate.⁴⁴

Mexican nurses have also had particularly low success rates with the NCLEX exam. The National Council of State Boards of Nursing reports that only four of the 43 Mexican-trained nurses who took the NCLEX in 1999 passed the test. This 9 percent pass rate increased to 17 percent in 2000, when eight of the 47 Mexican nurses who took the test passed. In 2001, three of the 39 nurses who took the exam passed, a 10 percent success rate. The Council's 2001 data on individuals attempting the NCLEX also demonstrates that a relatively low number of Mexican nurses attempt the test. While only 29 Mexican nurses attempted the exam in 2001, nurses from other developing nations in Asia turned out in particularly high numbers; 4,456 individuals from the Philippines, 391 from India, and 542 from Korea attempted the exam.⁴⁵

The following list by the Dallas-Forth Worth Area Health Education Center (East Texas AHEC) identifies barriers to Hispanic nurses' pursuit of licensure, and may provide a partial explanation to the low passage rates for Mexican nurses:⁴⁶

- English: many of the nurses cannot speak or read English at a professional level
- Lack of proper documentation: many nurses do not have official documents confirming their legal immigration status or their educational or clinical work experience
- Lack of a work permit
- Texas Board of Nurses Examiners' practice requirements that require foreign nurses to have worked professionally 24 of the last 48 months
- CGFNS requirement (required in 80 percent of the states in the U.S.)
- Test-taking skills: many Mexican nurses have little to no experience in multiple-choice or computer-based exams
- Evaluation/translation of paperwork (including transcripts and documentation of work experience)
- Retrieving documentation from Mexican licensing authority: the Mexican government does not collect education documents in a centralized location

- Access to healthcare jobs that allow nurses to immerse themselves in the English language (many nurses in the border region are not forced to learn English because a high percentage of their patients speak Spanish)
- Limited volunteer opportunities in hospitals
- Differences in the U.S. health care system
- Need for refreshment of clinical skills, knowledge of pharmacology, and introduction to new technology
- Resources to provide continuing education/training
- Inability of nursing schools to establish cohort programs for Hispanic nurses only.

The Dallas-Forth Worth AHEC states Mexican nurses face the most difficulty with their English skills when they try to get certified in the U.S. On September 6, 2001, the Dallas-Ft. Worth Hospital Council Focus Group for Hispanic Nursing concurred that English language skills constitute the biggest barrier for Mexican nurses trying to get certified in the U.S. Nurses must learn the English jargon of the profession as well as the language skills needed to communicate with their patients and other medical personnel. Many nurses along the border region find it difficult to immerse themselves in English because a high percentage of their patients and co-workers speak Spanish. Some health care professionals contend that it may ultimately prove easier to find and train bilingual individuals with an interest in nursing than to train already-practicing nurses to be bilingual.⁴⁷ However, the general sentiment among health care professionals is that the U.S. nursing shortage is too acute to be solved solely by the domestic workforce alone, and that the U.S. will need to import foreign nurses to fill the empty slots in its hospitals, doctors' offices and nursing home facilities.

Many Mexican nurses find it difficult to get their U.S. certification because they have taken time off from the practice of nursing. TBNE regulation §2.174 requires foreign-trained nurses to work in a clinical setting for 24 out of the past 48 months before they are eligible to take the NCLEX. This regulation may reduce the pool of Mexican nurses who are eligible to take the NCLEX by as much as 50 percent.⁴⁸ Even those who have met the 24-month requirement may find it difficult to produce the proper documentation of their work experiences. If documentation can be procured, many skilled nurses ultimately fail the NCLEX anyway because they have been out of school so long that they are rusty in their basic science skills. Interestingly enough, the regulation may automatically disqualify the most qualified nurses; Mexican nurses who have been living in the U.S. with proper documentation are often better acclimated to the U.S. hospital environment and have developed English skills, but have typically been out of work longer than recent immigrants.

Differences in the health care delivery and education systems of the two countries make it difficult for Mexican nurses to get certified in the U.S. Health care experts have commented that the two countries' education systems are very different philosophically. U.S. nursing education tends to emphasize individual autonomy and general problem-solving skills, while Mexican nurses are often trained by doctors and see themselves as

extensions of the physicians. While Mexican nurses are usually technically proficient and knowledgeable, they often lack the broad-based science education that U.S. nursing students receive. They also tend to do poorly on NCLEX questions related to specialty areas such as psychiatric nursing or pediatric care.⁴⁹ Paula Gomez, Executive Director of the Brownsville Community Health Center, adds that it takes time for nurses from Mexico to adapt to some of the new, more complex technologies used by U.S. hospitals. She comments that the differences in the two nations' technologies prove challenging for newly immigrated nurses, but that the nurses quickly learn new technologies and adapt to their new clinical setting.⁵⁰ According to José Fernandez-Peña, the Executive Director of the Welcome Back International Health Workers Assistance Centers, U.S. educational institutions often won't give credit to foreign-trained professionals for their prior education (such as anatomy courses), which presents an additional obstacle to gaining licensure in the U.S.⁵¹

Healthcare policymakers in the U.S. and Mexico are often concerned that importing nurses from Mexico could lead to a brain-drain and lesser-quality health care in Mexico. However, many health professionals point out that Mexico is not facing a nursing shortage so much as a fiscal squeeze, and that there are more trained nurses than available jobs in certain areas of Mexico. Some argue that the movement of qualified nurses from Mexico to the U.S. will ultimately improve the practice of nursing in Mexico as nurses will return to Mexico with expanded English and clinical skills, and the cross-border movement of nurses is likely to bring new resources to Mexican nursing schools. Training more Mexican nurses in the U.S. would also produce a cadre of workers who could work bi-nationally and potentially help improve the quality of care at Mexican hospitals.

Fears that Mexican nurses could take jobs from qualified Americans don't appear to have much merit, though there is persistent concern about the impact that the influx of foreign nurses practicing in the U.S. have on wages and working conditions. Department of Labor studies have shown that foreign-trained nurses do not take jobs away from U.S. nurses. Foreign nurses work in urban underserved areas where many American nurses do not want to work, and often cover the night shifts and nursing home jobs that many U.S. nurses do not want to take.⁵² Those in the nursing profession note with concern that foreign nurses have not been compensated for working undesirable shifts, as a domestic nurse would be. While this allows hospitals to cut costs and fill a need, U.S. nurses point out that this practice is likely to suppress wages and make the profession less attractive for U.S. students. It is also important to note that many of the nurses included in the Department of Labor's statistics as temporary RNs actually end up working and being paid as nurse aides. While the health care community will ultimately have to provide better working conditions and wages to attract and retain nurses in the profession, in the short term foreign nurses may help quell the growing crisis in our hospitals and clinics.

Strategies for Breaking Down some of these Barriers

Health policy experts have proposed a variety of ideas to simplify the certification process for foreign nurses. Some people believe that the nursing examinations need to be

modified, while others believe the TBNE regulations should be changed. A handful of model programs now offer refresher courses for nurses from Mexico who plan to take the TOEFL, CGFNS, and NCLEX exams.

Model Programs that Bring Mexican Nurses to the U.S. for Training

UTB Pilot Program

The University of Texas at Brownsville plans to address the nursing shortage in the Rio Grande Valley by piloting a program to help Mexican nurses get their U.S. certification. Dean Dr. Eldon Nelson explains that UTB commissioned a study of the nursing shortage in the Brownsville area in 2001. The study found that the four hospitals in Cameron County had nearly 300 openings for nurses, and that the nurse shortage was affecting the care that patients were receiving in the county. The program leaders estimate that there are probably at least 300 more nurse openings in the clinics and doctors offices in Cameron County.⁵³

UTB began to implement its new educational program in January 2003. The program will accept 20 nurses who are currently certified in Mexico, and will place five program graduates at each of the four hospitals. Program participants will receive 40 hours of English and clinical training a week for six months. Most of the students will reside in Matamoros and commute to Brownsville for the program with INS-provided laser cards, but the school is looking into student visas (M-1 and F-1 visas) that would allow the students to live in the U.S. during the program.

Dr. Nelson anticipates that the program's combination of English and clinical training will lead to higher passage rates on the certification exams than in the past. Program participants will attempt the TOEFL approximately 10 weeks into their training. The Language Institute on UTB's campus will administer the TOEFL, while a nurse educator will oversee the hospital-based clinical training and English language lessons that will prepare the participants for the CGFNS examination. The NCLEX will provide a greater challenge, but Dr. Nelson hopes that the clinical component of the program will hone the nurses' language and science skills and lead to higher success rates than in the past.

UTB has sought both public and private monetary support for the program. The training, living expenses, and exam fees will cost approximately \$14,000 to \$17,000 for each student. While the program is costly, Dr. Nelson points out that many hospitals are already paying \$10,000 to \$12,000 signing bonuses to U.S. nurses and spending tens of thousands of dollars to recruit nurses from other countries. UTB will ask each student for a \$500 good faith commitment to ensure that the students are serious about the program.⁵⁴ The four hospitals will bear the brunt of the cost, but Dr. Nelson plans to ask the legislature for funding this spring. Dr. Nelson hopes to persuade the Mexican government to offer nurses housing in Matamoros for the duration of the program.

Nurses Helping Nurses

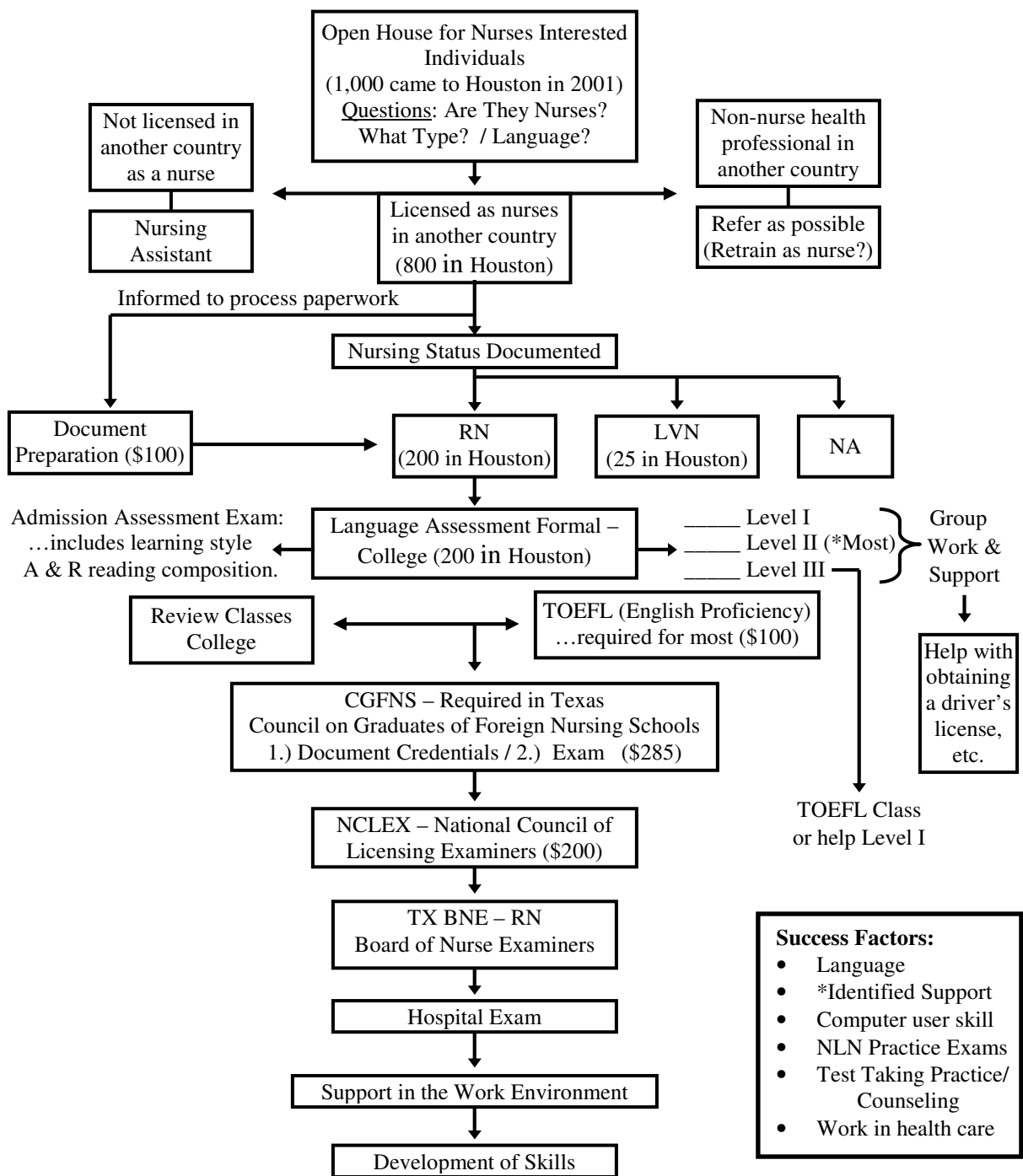
Emergency room nurse Jacqueline Crespo Perry founded the Nurses Helping Nurses program in Houston in 2000 to help immigrant nurses attain their Texas nursing licenses. Perry was aware that the nursing shortage was interfering with health care delivery in Houston. Forty-one percent of the 369 nursing jobs at the LBJ Hospital where Perry worked were unfilled, and patients were experiencing long waits in emergency rooms, closed operating rooms, and delays for elective surgeries because of the shortage. Perry suspected that a number of foreign nurses were “sitting at home not doing anything” in the midst of the shortage because they did not have the tools they needed to pass the certification exams. In September 2000, Perry held an open house to find out how many foreign-licensed nurses might be interested in a program to prepare them for the U.S. certification exams. She had no idea how many people would show up for the open house, and was surprised when approximately 1,000 came and expressed their interest in the program.

The Nurses Helping Nurses Program said that it is receiving funding from the Workforce Training Fund, which is supported by local businesses and the city of Houston. The Greater Houston Partnership administers the fund through its Workforce Training Committee. The fund will provide about \$25,000 to help cover training costs. However, Perry says that more funds will be needed to pay for the program.

The East Texas AHEC

The Dallas-Fort Worth Area Health Education Center (DFW AHEC) is currently developing a review course to prepare Hispanic Nurses for the NCLEX-RN. The DFW AHEC reports that nurses from Mexico and Central and South America currently have a 9 percent NCLEX passage rate in Texas. The AHEC plans to raise this rate to 50 percent through its new review course, and envisions assisting program graduates with job placement after they pass the exams.⁵⁵

**Figure 6.1.
Model Program: Immigrant Nurse to Texas Nurse Pathway**



Adapted from: East Texas AHEC, *Immigrant Nurse to Texas Nurse Pathway* (Galveston, Texas, October 2001) (flyer).

This program (as depicted in Figure 1.1) is a joint venture of the DFW AHEC, which is a branch of the East Texas AHEC administered by UTMB in Galveston, and the Dallas Fort Worth Hospital Council.

The AHEC has developed its new program in response to requests for more nurses in the community.⁵⁶ Last year, a focus group within the DFW AHEC determined that the AHEC could strengthen its nurse workforce by offering free ESL classes to immigrant nurses. As the focus group began its plans to provide free ESL classes, it learned that there was actually an even greater interest in a one-year LVN program that would combine English and clinical training. The Dallas Area Hispanic Nursing Association sponsored a series of meetings to discuss a review course for immigrant nurses. The AHEC then invited several nursing schools and hospitals, including UT Austin, Arlington, Dallas VA, Houston VA, and UTMB, to discuss education programs for Hispanic nurses. The response was positive, and several key employers from the area expressed their interest in hiring graduates from the program.

The DFW AHEC anticipates that its selection process for the program will lead to higher success rates on the NCLEX exam. Last year, 600 nurses responded to AHEC's advertisements about the program. Nearly all of the respondents were Hispanic, and most came from Mexico. The organization immediately cut out over half of the respondents because they did not possess proper documentation to reside in the U.S. AHEC pared this number down to approximately 85 nurses after comparing the nurses' qualifications to the TBNE's regulations. Many of the nurses were excluded on the grounds that they did not meet the 24-month requirement in TBNE Regulation §2.174. AHEC hopes that it will be able to place the 100 respondents who were excluded for the 24-month regulation in LVN school, and envisions helping these students upgrade to RN status after they become certified LVNs.

Program Coordinator Michael Denis envisions that the program's emphasis on individualized attention will help many of the nurses pass the licensure exams.⁵⁷ AHEC plans to break the 86 nurses into classes of approximately 20 individuals. The program will target the nurses' individual weaknesses over the course of 12 weeks. English lessons will include the nursing terminology found on the CGFNS and NCLEX exams. Nurses without computer experience will be given opportunities to practice computerized test-taking. The program will also focus on basic science, and will cover specialized practice areas that are particularly weak.

Denis concedes that not all of the program participants will pass the exams, but anticipates that half of the nurses will succeed. So far, two of the four nurses who have taken the CGFNS that took review classes with the DFW AHEC have passed the NCLEX. Program participants have little to lose, as they only pay a \$20 fee to enter the program.⁵⁸

While the AHEC is primarily focused on training immigrant nurses already residing in the U.S., it hopes to cement an agreement with the Mexican government to bring nurses from Mexico to the U.S. in the near future. AHEC's East Texas Regional Director, Steve Shelton, suggests the development of a four-year program that would allow nurses to

study for two years in Mexico and enter the U.S. on a student visa for two additional years of study. Such a program would allow nurses to graduate from a U.S.-accredited school with bilingual health care experience. As a two-year graduate of a U.S. school, the nurse would then only have to pass the NCLEX.⁵⁹

If the DFW AHEC program succeeds, it could be expanded to the other AHEC branches. As the East Texas AHEC network alone consists of eight community-based centers that serve 111 counties and over 14 million people, the program could have a substantial impact on the development of a quality health workforce that includes nurses and other professionals from Mexico. From 1991 to 2001, the East Texas Area AHEC provided more than 386 hours of continuing education programs to 1,706 nurses, and helped place 26 nurse practitioners in its region.⁶⁰ The AHEC's new emphasis on training foreign nurses signifies that communities are thinking of creative solutions to solve our nursing shortage.

Regulatory Reform

“If regulation is to be a viable element in consumer protection, demonstrating its contribution to the public good, it must evolve in concert with the economic, political, intellectual and technological environments in which its licensees work.”⁶¹

Changes in Texas regulatory law could possibly make it easier to credential foreign nurses and fill the nursing slots that are open in the most underserved areas. Proponents of administrative and legislative change have suggested the CGFNS, the 24-month rule and the procedure for taking the NCLEX could all be simplified or abolished without affecting the caliber of licensed nurses in Texas.

Some health professionals and policy analysts argue that Texas should eliminate the CGFNS exam requirement to simplify the certification process for foreign nurses. The CGFNS contains much of the same material as the NCLEX, and is often considered to be redundant and unnecessary. Approximately 20 percent of the states in the U.S. do not require the CGFNS. Under current law, foreign nurses can get certified in one of the states that do not require the exam, such as California or Arizona.⁶² The nurses can then seek reciprocity in Texas and gain their licenses without ever taking the CGFNS.

Some policy experts say that the CGFNS exam is becoming less attractive to U.S. employers, and most agree that it holds less utility for those internationally trained nurses already residing in the U.S. The process of taking the exam can take from 6 to 12 months, as individuals must apply for the exam and wait two months to take it, and then an additional two to three months until they obtain the results. CGFNS exam results are typically not published nor mailed to the nurse until after the application deadline for the next exam. The nurse then has to wait another year to get the results of the next exam. Additionally, the CGFNS exam may be prohibitively expensive for some nurses, as it costs \$295 and additional fees of \$325 must be paid for Visa Screen to the ICHP, a division of the CGFNS. The fact that the exam is only given three times per year may also pose difficulties for some nurses.⁶³ While the test is designed to prevent nurses who

could likely not pass the NCLEX from coming to the U.S., the rationale for the test may not really apply to nurses already living in the U.S.

In light of such concerns, the Texas BNE and the Foreign Nurse Task Force of the TNA are considering whether the test is truly necessary for nurses who are already residing in the U.S., though they point out that the CGFNS can be a good indicator of success on the NCLEX. By eliminating the CGFNS exam, applicants for licensure must be sure to be adequately prepared to take the NCLEX as those who fail the exam three times have to be re-educated before they can qualify to take the licensure exam again.⁶⁴ The TNA task force will recommend that the TBNE continue to require the CGFNS certification of education, unencumbered licensure and English proficiency. Applicants already living in the U.S. would be given the option of taking the CGFNS and the NCLEX or the NCLEX alone for licensure. Such a change would bring make the TBNE requirements the same as current VisaScreen requirements.

Some health professionals argue that the 24-month rule found in TBNE Regulation §2.174 should be eliminated because it unfairly keeps qualified individuals from the practice of nursing. The regulation leaves no leeway for qualified nurses who have been out of work for even 24 months and a day. Many foreign nurses who have worked the requisite 24 months are unable to procure the needed documents from their home countries. In fact, the Foreign Nurse Taskforce of the TNA and the TBNE have also recognized this barrier and are likely to recommend that the TBNE Board consider adjusting the regulation when they meet in April 2003. The Board will be asked to consider making the practice requirements for foreign trained nurses the same as for other out-of-state nurses, which stipulates that individuals need to have practiced 24 months out of the last four years.⁶⁵ Like domestic nurses, those foreign nurses who have not met the practice requirement, but have the other qualifications necessary to take the NCLEX exam, would take a refresher course to qualify for licensure. Should this proposal be approved, Texas might be able to use a greater number of the experienced, proficient nurses within its borders. Stephanie Tabone of the Texas Nursing Association predicts that the NCLEX will be offered worldwide by 2005.⁶⁶ This change could increase the number of Mexican nurses who immigrate to the U.S., as nurses might be more willing to invest the time and money to relocate to a new country if they have passed one of the major hurdles to certification before moving.

Some U.S. universities have also begun to address the obstacle presented by the 24-month rule by providing one year of training to foreign-trained nurses. Students participate in the training during the year period in which they are filing their paperwork to take the CGFNS and NCLEX exams, and the program affords them the opportunity to have patient contact and fulfill the requirement that they have supervised clinical practice for 24 of the 48 months that is stipulated by some states.⁶⁷

In addition, the administration of the NCLEX test itself could be modified in order to remove barriers for foreign nurses who seek certification in the U.S. Because many foreign nurses are unfamiliar with computerized testing, some have suggested that a paper NCLEX option might be more viable for many immigrant nurses. Because nurses

need to have computer proficiency in many healthcare institutions in the U.S., a better alternative would be for the state to provide computer training and mock computerized tests for nurses who lack experience with computerized testing.

Streamlining Licensure Requirements

The credentialing of Mexican nurses would be easier if the licensure requirements between the two nations were more similar. The Caribbean region has already had a great deal of success harmonizing its basic nursing education curricula. Since 1993, nurses in over ten Caribbean countries have been taking the same licensure exam. The mutual recognition of credentials has resulted in “almost complete regional mobility.”⁶⁸ The streamlining of professional standards between the U.S., Mexico, and Canada would likely lead to increased regional mobility much as it has in the Caribbean. Caribbean schools have also made efforts to develop nursing education equivalent to that of the U.S. Because English is widely spoken in the Caribbean, and the healthcare bureaucracies are similar, standardization could be feasible in the future.

Additionally, greater collaboration between nursing schools in the United States and Mexico could facilitate more compatibility in the qualifications of nurses from the two countries. Currently limited exchanges exist between U.S. and Mexican nursing schools, though there is some interest amongst nursing faculty in expanding cross-border training opportunities. U.S. nursing schools could potentially collaborate with Mexican schools that are seeking U.S. accreditation. The U.S. school could advise the Mexican faculty as they go through the process, though even if the Mexican program was accredited in the U.S., the school would need to obtain a waiver from the National Council of State Boards of Nursing in order to waive the CGFNS requirement for their students.

UTMB Nursing School staff suggested that an alternative approach would be for U.S. nursing programs to partner with Mexican nursing programs on curriculum and coursework so that a student at the Mexican school could obtain a nursing degree from the U.S. institution. Such a partnership could be arranged through faculty exchange, the use of distance learning technology such as web-based courses, and clinical supervision via tele-health technology. While this could be a potentially promising means to create greater continuity in the qualifications of U.S. and Mexican nurses, both a lack of funding and the severely limited availability of nursing faculty in the United States present serious barriers to establishing such a partnership.⁶⁹

Conclusion

Both the U.S. and Mexico could benefit from increased collaboration to address critical nursing workforce needs. The licensing of Mexican nurses in the U.S. could help alleviate the country’s nursing shortage, especially in underserved areas along the border that need bilingual health professionals. Mexican-trained nurses stand to gain meaningful employment and send money home to their communities in Mexico.

Barriers such as English proficiency, cost, visas, and TBNE regulations that require nurses to have worked during certain timeframes make it difficult for many nurses to

receive their certification in Texas. Several health care organizations are now piloting programs that would offer Mexican nurses a chance to review their English, basic science, and clinical skills for the licensure examinations. An unknown number of highly qualified nursing personnel residing in the U.S. might be persuaded to get their licenses if they did not have to take both the CGFNS and the NCLEX. Proponents of regulatory reform argue for the elimination of CGFNS for those already residing in the U.S. and making changes to the way the NCLEX is administered. Many health professionals also agree that the 24-month rule in TBNE regulation §2.174 is cumbersome and unnecessary. It is likely that the TBNE will address these concerns in the near future. These types of simple regulatory reform coupled with a greater availability of education refresher courses could make it easier for Mexican nurses to get their certifications and fill open slots in the U.S. nursing work force. Increased numbers of qualified, bilingual nurses who are culturally competent to work in the U.S. could lead to improved health care in both the U.S. and Mexico.

As nursing professionals in the U.S. strive to achieve greater continuity in requirements and afford greater workforce mobility in the states, it is important to look forward and consider mechanisms which would encourage compatibility and mobility between the U.S. and Mexico. Certainly, greater collaboration between nursing schools in the U.S. and Mexico, including faculty and student exchange, distance learning, and partnering on accreditation, would be an important step towards integrating the healthcare workforces of these neighboring nations.

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Chapter 7. Nursing Schools in Mexico: An Overview

by George Rivas

The North American Free Trade Agreement (NAFTA) provided the framework necessary in establishing a shared health service within the three nations of North America. Despite this, relatively little is known in the U.S. about nursing schools in Mexico. What follows is a brief attempt to describe nursing schools in Mexico, the accreditation process of such schools, nurses and their role in Mexico, and model programs in existence that would facilitate cross-border certification.

Nursing Schools in Mexico

There are over 250 nursing school programs throughout Mexico.¹ For those wishing to practice at the *licenciado* level, Mexico has 23 schools that offer *licenciado* training in nursing.² In 2000, there were approximately 5,000 students who enrolled in a nursing program for the first time.³ In 1999, approximately 1,800 students graduated with a degree in nursing.⁴ It is still a field that consists largely of women. For example, the *Universidad Autónoma de Nuevo León* nursing had 666 students enrolled during the 2001-2002 school year. Of those, 606 were women.⁵ Much like the U.S., the nursing school curriculum consists of a mixture of basic science courses in addition to clinical sciences. Typically, the student will study basic sciences when starting the curriculum and eventually focus on the clinical sciences during the last two years of study. For example, at the *Universidad Autónoma de Nuevo León*, the first two years include anatomy and physiology, biochemistry, microbiology, physiopathology, and pharmacology.⁶ In total, the first two years at UANL consist of 18 classes that are made up of basic sciences, professional and personal development, and nursing, the primary emphasis being on basic sciences.⁷

During the next two years, students takes classes more specific to their careers. At nursing school, these classes have more of a clinical basis and are more concerned with the practice of nursing. The UANL, for instance, describes the second two-year cycle as follows: “*Nivel Educativo que prepara para el cuidado especializado, Administración e Investigación en Enfermería*” [The educational level that prepares students for specialized care, administration, and research in nursing.]⁸

Classes at this point include advanced nursing, introduction to the study of nursing, research, and general administration, among others.⁹ The classes in this stage are focused on developing administrative skills in the field of nursing, research methodologies, and personal and professional development.¹⁰

Throughout both the first and second cycles, there are classes on personal and professional development. These are classes that are usually part of most standard curricula in any program. Classes such as art appreciation and professional ethics would fall under this category. Recently, the UANL nursing program and other programs

within the university have added computer skills courses and English courses in order to make their graduates more marketable.¹¹

Though most nursing schools in Mexico have a program similar to that at UANL, there is no standard nursing curriculum throughout Mexico. Thus, the curriculum can vary to some degree by nursing school, though with the development of an accrediting body variances in nursing school curricula are beginning to diminish. The *Universidad Autónoma de Coahuila*, for example, also teaches much of the basic sciences, such as anatomy, physiology, and microbiology, during the first two years, but does not actually start the specialized portion of the curriculum until about the sixth semester.¹² It is at this time that students begin studying administration, surgical techniques, and intensive care.¹³

The main cause of the varied curricula of nursing schools has to do with the educational program and curricula approval process. In order for a school to award degrees in nursing, a school simply has to be approved to do so by the Secretary of Public Education (SEP). It should be noted that “the lack of educational standards across the Mexican Republic does not mean that the preparation of nurses has not been regulated.”¹⁴ The process is best described in *An Assessment of North American Nursing*, written by the Trilateral Initiative for North American Nursing, that states:

The approval process consists of two stages: an academic approach and a legal and administrative approach. The academic approach begins at the school with the approval of the curriculum by the Teacher’s Academy (*Academia de Maestros*). It is then approved by the School Technical Advisory Council (*Consejo Técnico Consultivo Escolar*) and is sent to the Councils on Plans and Programs (*Consejos de Planes y Programas*) of the central academic area of the relevant educational institution for final approval. Once this stage is approved, a legal process is initiated with the General Professions Directorate (*Dirección General de Profesiones, or DGP*) of the SEP in order to obtain legal registration from the government.¹⁵

The SEP sets somewhat uniform standards regarding the duration, curricula, and graduation requirements for the *licenciatura* level of nursing.¹⁶

In 1983, in order to address a growing number of complaints regarding the quantity and quality of nurses in Mexico, a national organization was created to attempt to standardize nursing education in Mexico. The Interinstitutional Commission for the preparation of Health Care Resources (*Comisión Interinstitucional para la Formación de Recursos Humanos para la Salud, or CIFRHS*) sought to “*Identificar las áreas de coordinación entre las instituciones educativas y las de salud así como entre el sector educativo y el sector salud, en el proceso de formación de recursos humanos para la salud que requiera el Sistema Nacional de Salud*” [identify areas of coordination between educational and health institutions as well as the health and education sectors in order to develop the human resources required by the national health system.].¹⁷

According to the CIFRHS website, nursing education falls under the Committee for Planning and Evaluation (*Comité de Planeación y Evaluación*), a subcommittee of the CIFRHS.¹⁸ Eventually, the CIFRHS developed what it called the *Basic Standards of Nursing*, a basic set of standards and guidelines for all practicing levels of nursing in Mexico, including the *licenciada*, *technica*, and the *auxilia* nurses.¹⁹ The *Basic Standards* addressed issues related to the curricula, the role of educators, students and admission requirements, school resources, community service, and program evaluation.²⁰ Though the *Basic Standards* were endorsed by most of the officiating bodies, such as the SEP and most state governors and health secretaries, most schools failed to adopt these standards, nor did these standards ever become official.²¹

Private universities in Mexico do not typically follow the same process of accreditation as public universities. There are approximately 2,300 private schools in Mexico that offer a *licenciatura*, according to the SEP website.²² One of the major concerns is that most private schools often cut corners, resulting in graduates with a substandard education, since they are not directly accountable to the SEP.²³ This is usually not an issue if the private school has been incorporated by a public university or the SEP. In this case, the private university must offer the same curriculum as the public university that incorporated it.²⁴

Accreditation of Nursing Schools

Much like in the U.S., there is a professional organization in Mexico that evaluates and then decides to accredit each educational program within the country. The organization responsible for evaluating nursing programs is the *Federación Mexicana de Facultades y Escuelas de Enfermería* (The Mexican Federation of Nursing Schools and Faculties, or FEMAFEE).²⁵ FEMAFEE was formed in 1967 and was originally called the *Asociación Nacional de Escuelas de Enfermería* (the National Association of Nursing Schools, or ANEE). It later became the *Federación Nacional de Escuelas de Enfermería* (the National Federation of Nursing Schools or FENAFEE), before becoming FEMAFEE in 1998. According to its mission statement, FEMAFEE seeks to ensure the quality of nursing education throughout the country. Although FEMAFEE has been around for some time, it wasn't until 1998 that it developed a standardized accreditation basis called *Sistema Nacional de Acreditación de Programas de Formación de Licenciados en Enfermería* (National System of Accreditation for Programs of Training Graduates in Nursing, or SNA-E).²⁶

There are only a handful of schools that have received SNAE accreditation. These schools with an accredited nursing school include the Universidad Autónoma de Nuevo León, the Universidad Autónoma de México, the Universidad de Morelos in Nuevo León, and the Universidad Autónoma de Querétaro. Although accreditation does improve the reputation of the school, it is voluntary and is not required to operate.²⁷ FEMAFEE describes SNAE accreditation as voluntary, external from each program, developed by knowledgeable people, temporary as accreditation has to be renewed every five years, trustworthy, and objective and transparent.²⁸

The Process of Accreditation

The SNAE accreditation process is composed of four main steps: request, self-evaluation, verification visit, and the ruling.²⁹ To begin the evaluation process, a request must be made to FEMAFEE by the director of the academic program that is seeking accreditation. FEMAFEE responds by sending a letter outlining the conditions and requirements of the process in addition to sending the self-evaluation instrument. The next step is the self-evaluation. Following the form provided by FEMAFEE, an evaluator who is not the director or the program coordinator completes the evaluation.³⁰ The instrument addresses many things, such as curriculum, equipment, budget, and faculty. It is an arduous process that requires the involvement of administrators, students, and faculty. When the self-evaluation is finished, it is returned to FEMAFEE.³¹

Once FEMAFEE receives the self-evaluation form, it sets up a site visit to examine the facilities and to conduct interviews. The date of the site visit is generally left to FEMAFEE. The site investigation is usually conducted by a committee of academicians and is two days in length. During this time, the investigators conduct interviews with students, professors, and administrators in order to determine whether the program meets the standards set forth by FEMAFEE in the SNAE. All of the pertinent information is compiled in a briefing to FEMAFEE that addresses each individual criterion in the instrument as well as any recommendations for the program.

Finally, FEMAFEE issues its findings after calculating the score received by the program. If the school received a score between 80 percent and 100 percent, then the program is accredited.³² If the score was between 60 percent and 80 percent, then the program can be accredited, provided that it implements the recommendations of the committee in a determined amount of time.³³ Any school that scores less than 60 percent cannot be considered accredited and will have to reapply for accreditation once it has implemented the recommendations of the committee.

Nurses

There are two primary types of nurses in Mexico. The first tier consists of licensed nurses (*enfermeras licenciadas*). Licensed nurses are like registered nurses in the United States in that they are trained in a broad variety of subjects and can later become specialty nurses (*enfermera especialidades*) with further training and education. To become a licensed nurse as in the United States, one must have what would correspond to a high school diploma upon entering a nursing program at a university. Prior to entering a nursing school in Mexico, an applicant must pass a general admissions examination at the institution to which they are applying.³⁴ Additionally, during the years of 1998 and 2001, FEMAFEE was working on the development of a nursing school exit examination with the National Center for Higher Education Evaluation (*Centro Nacional de Evaluación de Educación Superior*, or CENEVAL).³⁵ The reasoning behind the development of the entrance examination was to evaluate the plans of study as well as the academic preparedness of the graduates.³⁶ At this time, the exam is purely voluntary and will serve

as an opportunity for those that take it to demonstrate their knowledge of the nursing subject matter to potential employers.

The duration of the training is typically four years and includes a wide variety of subjects including basic sciences and hands on training.³⁷ Upon graduating from a nursing school, before a license is awarded the graduate must perform six months to two years of community service. It is important to note that there is no national examination to become a licensed nurse in Mexico.³⁸ Following the community service period and certification of instruction by a nursing school, a nurse is considered licensed by the secretary of education rather than from any nursing organization. Of the 81 percent of nurses that worked for the two largest employers of nurses in Mexico in 2000, the Mexican Institute of Social Security (IMSS) and the Secretary of Health (SSA), only 6 percent of them were licensed.³⁹ It should be noted that to get a job as a nurse in Mexico one must have at least a *tecnico* degree.

The role of the *licenciada* in Mexico roughly corresponds to the role of a registered nurse in the United States. Initially, a *licenciada* will work under the supervision of an experienced nurse until completion of an initial “probationary” period.⁴⁰ A *licenciada* typically is involved with direct patient care and addresses day-to-day care of the patient as well as assisting a doctor in such areas as surgery when necessary.⁴¹ However, one of the key differences in Mexico is that there has not been as big a push to have nurses operate independently of a doctor when necessary as there has been in the United States.⁴² Additionally, “once graduates receive their licenses, they are not required to renew or update it.”⁴³ This is contrary to the nursing education requirements in the United States, where a registered nurse is required to participate in continuing education programs.

The second tier of nurses in Mexico is equivalent to a licensed vocational nurse (LVN) in the United States and is known as a technical nurse (*enfermera tecnica*). Becoming a technical nurse in Mexico is very different from becoming a licensed nurse. Prior to entering a training program, an applicant should have a graduation certificate from a junior high. This type of training doesn’t take place at the university level, but rather at private schools, some of which may be affiliated with a university.⁴⁴ The duration of the program is about three years. Like licensed nurses, technical nurses must also perform up to two years of community service before receiving an actual nursing license.⁴⁵ Furthermore, they will either be supervised by a more experienced nurse or a physician.⁴⁶ Sixty percent of all nurses who work for IMSS and the SSA are trained at the technical level.⁴⁷ It is problematic that sometimes there does not appear to be a differentiation between the *licenciada* and the *tecnica*, as some schools offer an integrated high school and nursing program that typically lasts from three to four years.⁴⁸ It should be noted that Mexico is now emphasizing the development of *enfermeras licenciadas* more than the development of *enfermeras tecnicas*, gradually phasing them out.⁴⁹

In addition to the two primary types of nurses, three less-common kinds of nurses exist in Mexico. The first is the *auxilio* level. These kinds of nurses can be better described as nursing assistants.⁵⁰ The education required is graduation from junior high followed by a

six-month certificate program at an institution that offers the program.⁵¹ The work of these nurses consists of assisting the other nurses with day-to-day work. *Auxilio* nurses are far less common than they used to be,⁵² and there are fewer and fewer training programs for *auxilio* nurses in existence.

The *maestría* nurse corresponds roughly to a master's degree in nursing here in the U.S. It is a step higher than that of a *licenciado* or registered nurse. As in the U.S., the *maestría* must have completed undergraduate studies followed by a master's degree in nursing. Most nurses at this level are involved with research rather than with direct patient care.⁵³

Finally, the highest level of nursing that can be attained in Mexico is the *doctorado* level. Education required is the equivalent of an undergraduate degree, a master's degree, and a Ph.D. in nursing. Again, most of the nurses that are at the *doctorado* level are found doing research or teaching at a nursing school rather than in patient care.⁵⁴

Model Programs

There are no formally established programs at this writing that allow a Mexican-educated nurse to easily become licensed in the U.S. That being said, there are many opportunities for an aspiring nurse to study nursing in the U.S. for a short period of time. Many nursing programs in Mexico have set up exchanges with nursing schools in other parts of the world including the U.S.⁵⁵ UANL has set up, for example, agreements with the University of Texas at Austin, the University of Missouri, and the University of Michigan at Ann Arbor.⁵⁶ The purpose of the exchange is more for cultural and communicative goals rather than to seek licensing in the U.S. Often, such programs last no more than a month and upon completion, the student returns to Mexico and finishes his program and is licensed in Mexico after meeting the necessary requirements.⁵⁷

There do not appear to be any formal programs established at American universities that specifically target Mexican citizens. When addressing the cultural needs of the growing Mexican population in the United States, most health professions target Mexican Americans who are bilingual and share a similar culture. The University of Texas at Pan American Nursing School currently has no Mexicans who are enrolled in the program, according to Dr. Carolina Huerta, the dean of the nursing school at UTPA.⁵⁸

This certainly is not due to a lack of interest. There is certainly potential for collaboration between American and Mexican nursing schools. Recently, several nursing school faculty at the University of Texas Medical Branch in Galveston expressed some interest in the possible development of a distance learning course that could be used to prepare Mexican Nurses for the CGFNS exam and the National Clinical Licensing Exam (NCLEX) in addition to clinical English.⁵⁹ UTMB has experience designing and maintaining a distance education curriculum as they currently offer an online program allowing someone who is an RN to become a BSN, and a master's program in gerontology.⁶⁰ The only materials required to run a distance learning program are an Internet connection or CD-ROMs with the course in cases where no Internet connection is available. Regarding international programs, UTMB has experience in running a

nursing clinic via telehealth in Antarctica.⁶¹ Of course, prior to setting up a distance learning course, the curriculum would need to be developed through a joint effort with both participating institutions and the issue of how this distance learning course is connected in the framework of certification would also need to be addressed.⁶²

Another possibility for further cross-border collaboration between the United States and Mexico is the National League for Nursing Certification (NLN). Basically, the NLN is responsible for accrediting nursing programs in the United States and has been doing so since 1952.⁶³ The mission statement of the NLN is as follows: “The National League for Nursing advances quality nursing education that prepares the nursing workforce to meet the needs of diverse populations in an ever-changing healthcare environment.”⁶⁴ According to a representative of the Texas Nurses Association (TNA), UANL is going to work with the NLN in order to try and get accreditation.⁶⁵ Whether or not the NLN and the UANL have reached any formal agreement is not known at the time of this writing. Many of the schools in the U.S. with which the UANL already has established agreements, such as UTMB, UT-Arlington, and UT-Houston, are encouraging this action.⁶⁶

NLN accreditation might reduce much of the difficulty involved with credentialing Mexican nurses in the United States. “NLN accreditation would mean the university [UANL] would be equivalent to nursing schools in this country [United States] in terms of coursework, etc.”⁶⁷ The possible implications of UANL being accredited could mean, among other things, that graduates from UANL would be qualified to take the NCLEX directly.⁶⁸ Furthermore, if the school has NLN accreditation, it may be possible for it to become certified by the CGFNS. However, CGFNS not only certifies the content of the education, it also examines the language ability of the graduates.⁶⁹ Language ability is perhaps the greatest obstacle a Mexican nurse must overcome in order to work in the United States and makes up a critical component of all of the nurse education/ training programs in development, such as Dr. Eldon Nelson’s at UT-Brownsville, or Michael Denis’ with the East Texas Area Health Education Center (AHEC) in Dallas. An example of this was described by Stephanie Tabone, who described a program to bring Mexican nurses in order to get them prepared for their master’s. It was found that out of 30 nurses, all were clinically competent, however almost all of them struggled with learning English. Out of the 30, only two of them overcame the difficulties of learning the language.⁷⁰

CGFNS also would like to see the Mexican license more subject to disciplinary actions. Currently, Mexican nursing licenses are given for life and cannot be “removed for any infraction of competency” (as it can be in this country). So establishing that the license is unencumbered is difficult for CGFNS.”⁷¹ Specifically, in the United States if a nurse receives a complaint it will be investigated by the board of nursing that has jurisdiction of the area if it is found to be a “violation which the board of nursing is authorized to take disciplinary action.”⁷² After the investigation, disciplinary action will be either be taken or not according to the findings of the investigation. In Mexico, “complaint management is dealt with according to penal code or institutional discipline and dispute resolution process.”⁷³

Conclusion

This basic sketch of Mexican nursing schools is not at all comprehensive. It is merely a brief introduction to the subject in order to facilitate a dialogue between nursing schools and accreditation organizations among the two nations.

Notes

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³ Asociación Nacional de Universidades e Instituciones de Educación Superior, *Estadísticas de la Educación Superior, 2000. Población de Licenciatura en Universidades e Institutos Tecnológicos*. Online. Available: <http://www.anuies.mx>. Accessed: March 6, 2003.

⁴ Ibid.

⁵ Email from Dr. Jose Nicolas Barragan Codina, Director of International Accreditation, Universidad Autónoma de Nuevo León, "Re: Envio," to George Rivas Jr., November 7, 2002.

⁶ Universidad Autónoma de Nuevo León, *Licenciatura en Enfermería*, Monterrey, Mexico (pamphlet).

⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Interview by George Rivas Jr. with M.S.P. Silvia Espinoza Ortega, Director, Nursing School, Universidad Autónoma de Nuevo León, Monterrey, Mexico, November 7, 2002.

¹² Universidad de Coahuila, *Licenciado en enfermería*. Online. Available: <http://www.admisiones.uadec.mx/carreras/nsuperior/licenenfer.htm>. Accessed: July 29, 2002.

¹³ Ibid.

¹⁴ Commission of Graduates of Foreign Medical Schools, *The Trilateral Initiative of North American Nursing: An Assessment of North American Nursing* (Philadelphia, Penn., 1996), p. 25.

¹⁵ Ibid., p. 80.

¹⁶ Ibid., p. 23.

¹⁷ Comisión Interinstitucional para la Formación de Recursos Humanos para la Salud, *Acuerdo por El que Se Crea la Comisión Interinstitucional para la Formación de Recursos Humanos para la Salud*. Online. Available: <http://www.cifrhs.org.mx/documentos/Acuerdo.CIFRH.doc>. Accessed: February 9, 2003.

¹⁸ Ibid.

- ¹⁹ Commission of Graduates of Foreign Medical Schools, *An Assessment of North American Nursing*, p. 24.
- ²⁰ *Ibid.*, p. 26.
- ²¹ *Ibid.*, p. 24.
- ²² Secretaría de Educación Pública, *Estadística Histórica del Sistema Educativo Nacional*. Online. Available: <http://www.sep.gob.mx/work/appsite/nacional/index.html>. Accessed: February 9, 2003.
- ²³ Interview by George Rivas Jr. with Dr. Raul Garza Garza, Sub-Director Medico de Hospital Christus Muguerza, Monterrey, Mexico, November 8, 2002.
- ²⁴ Commission of Graduates of Foreign Medical Schools, *An Assessment of North American Nursing*, p. 28.
- ²⁵ Espinoza Interview.
- ²⁶ Federación Mexicana de Asociaciones de Facultades y Escuelas de Enfermería AC, *Instrumento de Autoevaluación Para Acreditación de Progrmas de Enfermería de Nivel Medio y Medio Superior*. Online. Available: <http://www.enfermeria-tampico.uat.mx/documentos%20instituciones/Instrumentoautoevaluacion.htm>. Accessed: February 9, 2003.
- ²⁷ *Ibid.*
- ²⁸ *Ibid.*
- ²⁹ *Ibid.*
- ³⁰ *Ibid.*
- ³¹ *Ibid.*
- ³² *Ibid.*
- ³³ *Ibid.*
- ³⁴ Commission of Graduates of Foreign Medical Schools, *An Assessment of North American Nursing*, p. 29.
- ³⁵ Federación Mexicana de Asociaciones de Facultades y Escuelas de Enfermería AC, *Antecedentes*. <http://www.femafee.org.mx/antecedentes.htm>. Online. Available: <http://www.femafee.org.mx/antecedentes.htm>. Accessed: February 10, 2003.
- ³⁶ *Ibid.*
- ³⁷ Jamie Dudensing, "The Nursing Shortage: Possible Solutions" (Professional Report, Lyndon B Johnson School of Public Affairs, The University of Texas at Austin, 2002), p. 7.
- ³⁸ Espinoza Interview.

- ³⁹ Secretaria de Educación Pública (SEP), *Dirección General de Profesiones: Enfermería* (Mexico D.F., Mexico, 2002), pp. 41-51.
- ⁴⁰ Commission of Graduates of Foreign Medical Schools, *An Assessment of North American Nursing*, p. 29.
- ⁴¹ Espinoza Interview.
- ⁴² Interview by George Rivas Jr. with Paula Gomez, Executive Director, Brownsville Community Health Center, Brownsville, Texas, October 12, 2002.
- ⁴³ Commission of Graduates of Foreign Medical Schools, *An Assessment of North American Nursing*, p. 29.
- ⁴⁴ Dudensing, "The Nursing Shortage: Possible Solutions," p. 7.
- ⁴⁵ Ibid.
- ⁴⁶ Commission of Graduates of Foreign Medical Schools, *An Assessment of North American Nursing*, p. 29.
- ⁴⁷ SEP, *Dirección General de Profesiones: Enfermería*, pp. 41-51.
- ⁴⁸ Commission of Graduates of Foreign Medical Schools, *An Assessment of North American Nursing*, p. 34.
- ⁴⁹ Colunga Email.
- ⁵⁰ Espinoza interview.
- ⁵¹ Ibid.
- ⁵² Ibid.
- ⁵³ Ibid.
- ⁵⁴ Ibid.
- ⁵⁵ Ibid.
- ⁵⁶ Ibid.
- ⁵⁷ Ibid.
- ⁵⁸ Email from Dr. Carolina Huerta, Dean of the School of Nursing, The University of Texas at Pan American, "RE: nursing credentialing in the US," to George Rivas Jr., January 14, 2003.
- ⁵⁹ Interview by George Rivas Jr., David Warner, and Gina Armatangelo with Dr. Elizabeth Anderson, Dr. Edilma Guevara, Zena Mercer, and Dr. Phyllis Waters, School of Nursing Faculty, The University of Texas Medical Branch at Galveston, Galveston, Texas, January 17, 2003.

⁶⁰ Ibid.

⁶¹ Ibid.

⁶² Ibid.

⁶³ National League for Nursing, *About NLN, History of the National League for Nursing: Supporting Nursing Education for Over a Century*. Online. Available: <http://www.nln.org/aboutnln/info-history.htm>. Accessed: February 10, 2003.

⁶⁴ Ibid.

⁶⁵ Email from Stephanie Tabone, Texas Nurses Association, "RE: NLN Accreditation of UANL," to George Rivas Jr., December 11, 2002.

⁶⁶ Ibid.

⁶⁷ Ibid.

⁶⁸ Ibid.

⁶⁹ Ibid.

⁷⁰ Ibid.

⁷¹ Ibid.

⁷² Commission of Graduates of Foreign Medical Schools, *An Assessment of North American Nursing*, p. 172.

⁷³ Ibid.

Chapter 8. The Healthcare Needs of a Changing Population: Workforce Shortages in the U.S.-Mexico Border Region and the Case for Culturally Competent Care

by Andrea Tirres and Gina Amatangelo

Introduction

Stretching for more than 2,000 miles, the U.S.-Mexico border region includes four U.S. states and six Mexican states. Characterized by a low per capita income, a rapidly growing population, and local infrastructure that has not kept pace with demands, the border region faces significant issues relating to health. Hepatitis A is two to three times more prevalent along the border than in the rest of the nation and the incidence of tuberculosis on the border is twice the national average. If the 43 border counties in Texas were classified as one state, it would rank third in the death rate from hepatitis and other liver diseases and third in the death rate from diabetes mellitus.¹ Estimates of uninsured persons living on the U.S. border range from 25 percent to as much as 40 percent. The region faces challenges with respect to the supply of health care providers, retention of these providers, and availability of culturally sensitive health care professionals.

This paper evaluates the need for doctors, nurses, and dentists in the U.S.-Mexico border region, identifies cross-border programs that address these groups as well as federal initiatives to support medically underserved areas, and outlines the case for culturally competent health care providers. This paper focuses heavily on the needs in the Texas border region. However, it is important to note that this focus is illustrative of demographic trends and health care challenges that more expansive U.S. regions are facing, or will soon face. In short, the healthcare challenges faced by the border are not strictly unique to this geographic region. In Ligonier, Indiana, the Hispanic population saw an increase of 352 percent from 1990 to 2000.² The two physicians in this small town of slightly more than 4,000 residents do not speak Spanish, though one of the physicians has hired Spanish-speaking office staff to serve as interpreters. In Georgia, Latino health care advocates are pressing the state to adopt a new licensing process that would ease the shortage of health care providers in the Latino community. Under the proposal, foreign-trained nurses and doctors would be able to practice alongside licensed professionals for a specified period of time.³ In Houston, three hospitals plan to resolve the “dire shortage of interpreters” by hiring more interpreters, attracting more certified volunteers, and potentially paying interpreters a higher fee.⁴ In the coming decades, in light of demographic trends, the growing number of Latinos in the United States, and a greater sense of global interdependence, the challenges of workforce supply and diversity are likely to take on greater national and international relevance.

Making the Case for Culturally Competent Health Care Practitioners

Approximately one in four Americans are classified by the U.S. Census Bureau as a member of one of the four largest racial/ethnic minority population groups: African American, Latino/a/Hispanic, Native American, or Asian/Pacific Islander. According to the 2000 U.S. census, Hispanics or Latinos (of any race) comprise approximately 32 percent of the state populations in both California and Texas.⁵ Latinos, already the largest ethnic minority in California, are projected to be the largest ethnic minority in the U.S. in 2025. By 2050, approximately one in three Americans will be a person of color.⁶

A recent Institute of Medicine report found that racial and ethnic minorities in the U.S. receive lower quality health care than whites do, even when insurance status, income, age, and severity of conditions are comparable. Key findings of this congressionally mandated report include:

- Minorities are less likely to be given appropriate cardiac medications or to undergo bypass surgery.
- Minorities are less likely to receive kidney dialysis and transplants.
- Minorities are less likely to receive appropriate cancer diagnostic tests and treatments.
- Minorities are less likely to receive the most sophisticated treatments for HIV infections.
- Minorities are more likely to receive some less desirable procedures, such as lower limb amputations for diabetes and other conditions.⁷

Simply gaining access to preventive and primary care is more of a challenge for Latinos and African Americans than whites. In 1996, 30 percent of Latinos, 20 percent of African Americans, and 16 percent of whites did not have a usual source of medical care. Since 1977, the gap between Latinos and whites with no usual care has widened while the margin between African Americans and whites has not seen notable fluctuation.⁸

Even when access to the health care system is gained, many Latinos face language barriers in communicating with their care providers. The Commonwealth Fund 2001 Fund Health Care Quality Survey found that compared to non-Hispanic whites or African Americans, Hispanics, upon gaining access to the health care system, have more difficulty understanding doctors and understanding written health information. In fact, the study found that there is a “great unmet need for trained, Spanish-speaking medical interpreters.” According to the survey responses:

Forty-four percent of Hispanics surveyed reported that they “always,” “usually,” or “sometimes” had a hard time speaking with or understanding their doctors. Yet, only half of those who needed an interpreter reported “always” or “usually” having access to one.⁹

While being able to communicate in a patient's language is necessary for health care providers to provide optimal care, a Health Resources and Services Administration (HRSA) report cautions that being able to speak in a client's language "does not always guarantee effective communication between the client and the provider. That is, communication is more than simply shared language; it must also include a shared understanding, and a shared context, as well."¹⁰ In addition, it is worth noting that in discussing language communication, there are distinct services that can be provided. These include interpretation, which refers to the spoken word; translation, which refers to the written word; and medical interpretation, which refers to the ability to interpret within the medical context.

In planning for the future and meeting the needs of underserved populations, the Commonwealth Fund 2001 Survey asserts that policies that, "seek to reduce the number of uninsured Hispanics and improve the quality of their medical encounters are essential if the nation's health care system is to become more responsive to the needs of this population." It points to the "double burden" that Hispanics face in lack of health insurance and limited English proficiency and further supports policies that "increase the availability of trained medical interpreters and the provision of health care services in community or public health centers."¹¹

Given the existing gaps in the quality of health care afforded minorities, access to health care, and today's increasingly growing minority populations, evaluating the benefits and potential drawbacks of promoting culturally competent health care is even more critical. Cohen suggests that in dealing with the reality of today's patient population, health care providers "must have a firm understanding of how and why different belief systems, cultural biases, ethnic origins, family structures, and a host of other culturally determined factors influence the manner in which people experience illness, adhere to medical advice, and respond to treatment."¹²

Some of these differences across cultural groups are further explained by Davidhizar, Bechtel, and Giger in their transcultural assessment model. The model accounts for differences across cultural groups in six areas: communication, space, time, social organization, environment, and biological variations. In their conclusion, they write that by recognizing these differences, care can be provided both efficiently and effectively. They caution that providers "must be aware that varying behaviors that are the products of past experiences and cultural beliefs may have a significant impact on how individuals respond to treatment regimes and patient education."¹³ In effect, a provider who is culturally competent has greater leverage in assuring that a patient understands his/her condition, follows his/her treatment regime, and responds positively to the prescribed treatment. As a result, the optimal level of care is provided to the patient.

Defining Cultural Competency

Many in the medical arena agree that the need for culturally competent healthcare providers is essential in today's world. What is cultural competency and why is it important? There is not one universally accepted definition of cultural competence.

Various government agencies, associations, researchers, and academics have offered their definition of cultural competence. Some of these definitions include the following:

The term *cultural competence* denotes the knowledge, skills, attitudes, and behavior required of a practitioner to provide optimal health care services to persons from a wide range of cultural and ethnic backgrounds.¹⁴

Cultural competence...describes the ability of systems to provide care to patients with diverse values, beliefs and behaviors, including tailoring delivery to meet patients' social, cultural, and linguistic needs.¹⁵

Cultural competence comprises behaviors, attitudes, and policies that can come together on a continuum: that will ensure that a system, agency, program, or individual can function effectively and appropriately in diverse cultural interaction and settings. It ensures an understanding, appreciation, and respect of cultural differences and similarities within, among, and between groups. Cultural competency is a goal that a system, agency, program or individual continually aspires to achieve.¹⁶

In identifying programs that deliver culturally competent care, HRSA writes that culture is usually interpreted in its broadest sense where race and language are the "primary recognizable markers of group membership." In addition to race, language, and ethnicity, however, there are other characteristics "that contribute to a person's sense of self in relation to others. These may be more specific or general cultural subcategories based on shared attributes (such as gender or sexual orientation), or shared life experiences (such as survival of violence and/or trauma, education, occupation, or homelessness).¹⁷

While the majority of literature on cultural competence focuses on the relationship between the patient and physician, it is important to note that organizations must also play a role for health improvements to take effect.¹⁸ According to McLaurin, culturally competent organizations:

- Are reflected in policies, structures, attitudes, and practice;
- Are committed to ongoing professional and staff training;
- Are composed of a workforce that reflects the client cultural mix;
- Allocate resources for translation and interpretation;
- Provide services and programs adaptable to diverse needs of populations; and
- Evaluate treatment outcomes by racial, ethnic, and language groups.

The benefits of providing culturally competent healthcare from the organization's standpoint and the provider's standpoint are many and speak both to improved patient care and competitive business practices. Certainly, some of the impacts of providing culturally competent care are not so easily measured and may not be fully realized within a given time frame. Among the cited benefits include:

- Increased appropriate testing and screening;

- Fewer diagnostic errors;
- Avoidance of drug complications;
- Greater adherence to medical advice;
- Increased health seeking behavior;
- Successful patient education;
- Expanded choices of clinicians;
- Reduced practice liability; and
- Reduced disparities in health outcomes.¹⁹

Additional benefits include:

- Improved quality of services and outcomes;
- Response to consumer needs/marketing;
- Meeting accreditation/contract/regulatory requirements;
- Reduced liability/malpractice;
- Supported student/workforce diversity initiatives;
- Dealing with personal experiences; and
- Achieved social justice.²⁰

Cultural Competency as a Guiding Principle

National organizations such as the Pew Commission in 1995 and the Joint Commission of the Accreditation of Healthcare Organizations (JCAHO) in 1996 have identified cultural sensitivity and culturally appropriate care as relevant and a priority. The Pew Commission found that if the “incidence and prevalence of health problems in minority communities are to be overcome,” quality care must be culturally sensitive.²¹ JCAHO mandates that staff be educated in providing culturally appropriate care. In 2002 the American Medical Association’s Minority Affairs Consortium identified the need to increase minority enrollments. The association supports cultural competence and plans to promote cultural competence learning.

In government, the Department of Health and Human Services’ Office of Minority Health in 2001 established standards for organizations to provide “culturally and linguistically appropriate services.” The Bureau of Primary Health Care (BPHC) sponsors programs that provide primary health care to underserved and uninsured populations. The BPHC exists to “provide culturally and linguistically appropriate, high quality, comprehensive, coordinated primary and preventive care developed and implemented at the community level with empowered consumers driving the system.”²² The BPHC has released several documents aiming to integrate cultural competence Bureau-wide. These include the Cultural Competence Monograph Series, Hispanic Cultural Competence Primer, and *Cultural Competency: A Journey*.

In Texas, House Bill 757 of the 77th Legislature established the Health Disparities Task Force. The bill was signed by Gov. Rick Perry in June 2001 and became effective on September 1, 2001. The charge of the task force is to eliminate health and health access disparities in Texas. It is composed of nine members representing business, labor, government, charitable or community organizations, racial or ethnic populations, or community-based health organizations. The task force assists TDH in achieving the following goals among multicultural, disadvantaged, and regional populations:

- To eliminate health and health access disparities;
- To reorganize department programs to eliminate those disparities;
- To investigate and report on issues related to health and health access disparities; and
- To develop short-term and long-term strategies to eliminate those disparities.²³

How is Cultural Competence Acquired?

While most agree that a culturally competent workforce is a necessity given the growing demographics of our nation's ethnic minorities and subsequent language gaps between patient and health provider, fewer agree on the means to this end. Some approaches to attaining culturally competent healthcare providers rest in teaching providers how to be sensitive and responsive to the customs and beliefs of ethnic minorities. One example of this approach is seen through Marquette University's Diversity Project. Not long after the Institute of Medicine's *Unequal Treatment* report was released, Marquette University set up a new curriculum. The Diversity Project aims to prepare future physician assistants to treat patients while "taking into account their customs, religious beliefs, and cultural norms." The director of the program notes that there is a move to have this kind of program integrated into medical schools to "foster sensitivity and respect for other people."²⁴

Educational institutions are not the only entities implementing cultural competency programs. Kaiser Permanente and Harvard Pilgrim are among a handful of HMOs which have introduced cultural sensitivity training programs. Kaiser Permanente offers continuing medical education courses with a cultural sensitivity component related to patient communication while Harvard Pilgrim offers three-day diversity training programs. Other groups incorporating similar training include Seattle-based Cross Cultural Health Care Program and Baltimore's Medical Education Group.²⁵

Other proponents of cultural competency contend that cultural competency cannot simply be taught. Instead, they believe that health care providers must be exposed to ethnic diversities in a working environment and once more, opportunities to ethnic minorities to work in the healthcare field must be expanded. In their article identifying four practical reasons to increase diversity in the health care workforce, Cohen, Gabriel, and Terrell write:

Only by encountering and interacting with individuals from a variety of racial and ethnic backgrounds can students transcend their own viewpoints and see them

through the eyes of others. A heterogeneous campus helps students to recognize that their own opinions are influenced by their unique race, gender, origin, and socioeconomic status.²⁶

Diversifying the Health Workforce

Many believe that in order to increase the cultural competency of U.S. healthcare professionals, it is necessary to diversify the healthcare workforce. A recent study by the Institute of Medicine on racial and ethnic disparities in health care recommends strengthening the stability of patient-provider relationships in publicly funded health plans. The study notes that “patient and provider relationships will also be strengthened by greater racial and ethnic diversity in the health professions.”²⁷ This racial concordance is associated with “...greater patient participation in care processes, higher patient satisfaction, and greater adherence to treatment (Cooper-Patrick et al., 1999). In addition, racial and ethnic minority providers are more likely than their non-minority colleagues to serve in minority and medically underserved communities (Komaromy et al., 1996).”²⁸

In the two largest states along the U.S.-Mexico border, the racial/ethnic diversity within the healthcare profession does not reflect the racial/ethnic composition of the population being served. In California, Latinos comprise 30 percent of California’s population and only 4 percent of the states’ physicians. In Texas where Hispanics account for 32 percent of the population,²⁹ only 12.5 percent of the primary care physicians are identified as Hispanic. Representation of black primary care physicians is even smaller at 4.1 percent. Hispanic nurses are underrepresented in Texas as well: 78.8 percent of nurses in Texas are Caucasian and 7 percent are Hispanic.³⁰

A bill introduced in the senate of the 78th Texas Legislature (2003) may give some relief to border counties designated as health professional shortage areas (HPSAs). Senator Eliot Shapleigh’s proposed Texas Health Improvement Act includes provisions to train, recruit, and retain health care professionals and practitioners along the U.S./Mexico border. S.B. 342 establishes a Border Health Corps for practitioners in medicine, dentistry, and nursing, giving room for other health care professions to be included. Border Health Corps participants would be eligible for grant loan repayment assistance in exchange for two years of service in a border HPSA. In addition, S.B. 342 calls for the development of strategies between institutions of higher education and the Texas Higher Education Coordinating Board in recruiting and retaining students from ethnic or racial backgrounds that are underrepresented in Texas institutions of higher education.

In addition to the Texas Health Improvement Act, another policy proposal would address access to medical education along the border. After assessing the Texas’s medical education needs in July 2002, board members of the Texas Higher Education Coordinating Board recommended that if a new medical school were to be built, El Paso and the lower Rio Grande Valley meet desired criteria.³¹ At the same time, board members urged legislators to ensure that the state’s seven public medical schools were fully funded before allocating resources to a new school. El Paso and the lower Rio Grande Valley of Texas are strong candidates for a new medical school for three primary

reasons. Both these areas are markedly underserved in contrast to the state and the nation. El Paso has 110 physicians per 100,000 people while the Rio Grande Valley has 119 physicians per 100,000 people, well below the national average of 196 physicians per 100,000 people and the state average of 152 physicians per 100,000 people. Additionally, both these communities have large minority populations. Lastly, these two areas have extensions of existing academic health centers with Texas Tech and The University of Texas Health Science Center San Antonio. While legislators and health professionals applauded the board's recommendations, it is uncertain whether legislation clearing the way for a medical school on the border will make any headway given the multimillion budget shortfall facing this legislative session.

Cultural Competency: The Wave of the Future?

No doubt, the topic of providing culturally competent care has been raised to a new level with national organizations, government agencies, and private providers advocating its benefits and adopting their own culturally competent guidelines and programs. As Dr. Elena Rios, president of the National Hispanic Medical Association, puts it, "cultural competence has become a watchword in medicine."³² But does cultural competence work? One American Medical Association (AMA) news story on cultural competency and managed care states that:

Physicians generally support diversity training but aren't sure whether cultural competence works. "We know a lot about diabetes among Latinos and heart disease among blacks," but similar studies don't exist on the effectiveness of cultural competence, says Dr. Gilbert. "The whole issue is so new, we're merely scratching the surface."³³

What is perhaps the most comprehensive field report to date, "Cultural Competence in Health Care: Emerging Frameworks and Practical Approaches," offers some perspective in evaluating this question:

The literature review revealed that few studies make the link directly between cultural competence and the elimination of racial/ethnic disparities in health care. Health care experts in government, managed care, academia, and community health care, on the other hand, make a clear connection between cultural competence, quality improvement, and the elimination of racial/ethnic disparities.³⁴

Thomas S. Inui, M.D., member of the Institute of Medicine's Committee on Understanding and Eliminating Racial and Ethnic Disparities in Health Care that produced *Unequal Treatment*, cautions that cross-cultural training in medical schools and residency programs may actually backfire in the form of promoting "ethno-medicine." "Ethno-medicine" encourages generalizations about different groups' experiences of pain and illness. Dr. Inui explains that:

If done in a simple-minded way, ethno-medicine is another set of simple facts to memorize about racial and ethnic sub-populations. It can add up to simple-

minded stereotypes and a formulaic approach such as, “If this patient is Hispanic, I must be careful about overestimating the amount of pain he is in because they are demonstrative about pain.” Such simple recipes do not promote deeper thinking or decision-making about what’s happening in a doctor-patient interaction.³⁵

The effectiveness of providing cultural competency may be more fully understood as more programs adopt its basic tenets and more time lapses allowing for longitudinal studies. One thing is clear: cultural competency is shaping the direction of health care. A clear example of this is a recent mandate by the Office of Civil Rights (OCR) regarding linguistic services in the field of health care.

Translation Requirements: A Current Debate

Accompanying the growth in racial/ethnic population groups will be the use of languages other than English in every facet of American life. The 2000 Census reports that in Texas, 31.2 percent of the population speaks a language other than English at home, and in California, that percentage is slightly higher at 32 percent.³⁶ How the medical community responds to the need for translators and interpreters, federal mandate or not, is one part of the equation in delivering culturally competent care.

In August 2000, the OCR released guidelines requiring physicians and other health care providers to provide and pay for interpreter services for patients with limited English-speaking abilities if they receive reimbursement from Medicaid, the State Children’s Health Insurance Program (SCHIP), or the Temporary Assistance to Needy Families Program (TANF). These guidelines are meant to more fully explain policies to enforce Title VI of the Civil Rights Act which state that, “No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance.”

The American Medical Association (AMA), all 50 state medical associations, and about 50 specialty medical and dental groups have stated their opposition to what some call an “unfunded mandate.”³⁷ The AMA has called for a moratorium on the rules and in a December 2002 letter to the Office of Management and Budget wrote that the association is “strongly opposed to allowing the burden of funding written and oral interpretation services for limited-English-proficiency (LEP) patients to fall on physicians.”³⁸ Instead of widening the services to LEP patients, the mandate could have the opposite effect. The AMA went on to write that “Forced to absorb this type of cost for all Medicaid non-English-speaking patients, many physicians will decide not to treat any Medicaid patients. The net effect of this federal policy would thus be to discourage treatment of those patients who may be most in need of care.”³⁹

Current Medicaid reimbursement rates fall significantly below interpreters’ fees. According to the AMA, in California, Medi-Cal pays \$24 for an established-patient visit while interpreter services average \$158-\$180 per hour. In Minnesota, Medicaid pays \$365.58 per visit, with interpreter fees averaging \$70 to \$90.⁴⁰

The California Medical Association has sent a letter to the Health and Human Services suggesting funding sources to pay for translation services. These include new state and federal monies, and funding requirements for managed care plans. Washington State has been cited as a model in providing translation services with mixed funds. In response to complaints about access to interpreter services in health care, Washington began a program in 1991 to pay for interpreter and translation services. Federal and state dollars support the program with an equal 50/50 match. Approximately 25,000 cases are provided for each year at an estimated cost of \$10 million.⁴¹

Given the disparities in health care across minority groups and the growing recognition of cultural competency as an important element in providing quality health care, various entities, from medical schools to government agencies to legislators, are responding to unmet needs. In perhaps one of the most medically underserved geographic regions, the U.S./Mexico border merits discussion for the challenges it faces in providing care and for the collaborative programs/efforts that have been developed in response to these challenges.

The Need: Healthcare Workforce Shortages in the Border Region

Texas Border Region

The Texas Border region faces a persistent shortage of healthcare professionals, which is exacerbated by a continuously growing population in the region. According to the Texas Comptroller, the Texas border region consists of 43 Texas counties: Atascosa, Bandera, Bexar, Brewster, Brooks, Cameron, Crockett, Culberson, Dimmit, Duval, Edwards, El Paso, Frio, Hidalgo, Hudspeth, Jeff Davis, Jim Hogg, Jim Wells, Kenedy, Kerr, Kimble, Kinney, Kleberg, La Salle, Live Oak, Maverick, McMullen, Medina, Nueces, Pecos, Presidio, Real, Reeves, San Patricio, Starr, Sutton, Terrell, Uvalde, Val Verde, Webb, Willacy, Zapata, and Zavala.⁴² Hispanics account for approximately 85 percent of the Texas border region's population.⁴³ In this region 28 border counties are classified by the federal government as Health Professional Shortage Areas with fewer than one physician per 3,000 people.⁴⁴

Texas is in the lower range of the national benchmarks of 57 to 66 primary care physicians per 100,000 population, occasionally falling below the line.⁴⁵ According to the Texas Department of Health, the ratio of population to primary care physician is 12 percent higher for the border region than for the rest of the state, putting the border region well below the national average. This ratio is based on the Texas Department of Health definition of primary care physicians as "practitioners specializing in general or family medicine, pediatrics, obstetrics and gynecology, and internal medicine." The rural counties in the border region are the most dramatically affected, with five rural counties reporting no primary care physicians and seven rural counties reporting only one physician.⁴⁶

**Table 8.1
Population-to-Primary Care Physician Ratio**

Texas Border region	Texas Border region (excluding Bexar County)	Texas Border (Rural)	Texas
1,752:1	2,023:1	2,791: 1	1,562:1

Source: Texas Department of Health, *Supply and Trend Studies*. Online. Available: <http://www.tdh.state.tx.us/stateplan01/splych2.pdf>. Accessed: May 6, 2003.

In 1999, the breakdown of physicians in Texas was 55 percent specialists and 45 percent primary care physicians. This is nearing the desired 50/50 goal that was endorsed by the American Medical Association and adopted by the 67th Texas Legislature.⁴⁷

Nursing shortages are also a concern for the border region, and although the number of nurses in the border region has risen in recent years, it has not kept pace with population growth.⁴⁸ Nurse practitioners and physician’s assistants are licensed to perform diagnostic and therapeutic services under the supervision of a physician and can help to improve access to care.⁴⁹ Official statistics regarding the availability of nurse practitioners, certified nurse midwives, and physician’s assistants reveal that the ratio of population to provider in the border region is 24 percent higher than the state average. It is also important to note that these population figures do not fully account for “winter Texans,” retirees who spend part of the year in the border region.⁵⁰

**Table 8.2
Current Distribution of Nurse Practitioners and Physician Assistants in
Border Region: Population to Mid-level Provider Ratios**

	Texas Border Region	Texas Border Region (excluding Bexar County)	Texas
Nurse Practitioners	9,790:1	105,685:1	11,317:1
Physician Assistants	11,170:1	12,964:1	10,563:1

Source: Texas Department of Health, *Supply and Trend Studies*. Online. Available: <http://www.tdh.state.tx.us/stateplan01/splych2.pdf>. Accessed: May 6, 2003.

The population-to-dentist ratio in the border region is 39 percent higher than the state average, and the ratio in the border region, excluding Bexar county, is nearly twice that of the state ratio, indicating a serious shortage of dentists in the region.⁵¹

Table 8.3
Current Distribution of General Dentists: Population-to-Dentist Ratio

Texas Border Region	Texas Border Region (excluding Bexar County)	Texas
3,831:1	5,479:1	2,748:1

Source: Texas Department of Health, *Supply and Trend Studies*. Online. Available: <http://www.tdh.state.tx.us/stateplan01/spplych2.pdf>. Accessed: May 6, 2003.

The California Region

It appears that though the health professional shortages in the Texas-Mexico border region are the most severe, some border counties in California also face challenges in attracting and maintaining health care workers, particularly in rural areas.

The California border region consists of San Diego and Imperial counties, which have populations of more than 2.8 million and 145,000, respectively. Neither of these counties is designated as Health Professional Shortage Areas. According to the Center for Health Professions and the University of California, San Francisco, the supply of physicians is more than adequate to serve the needs of the state. However, they note that there is a poor distribution of physicians, with an over-supply of specialists in some areas, and an undersupply of generalist physicians in others. The border counties of San Diego and Imperial are among those counties which have a shortage of generalists.

A 1996 national survey revealed that California has the lowest ratio of employed nurses per 100,000 people of any state. California's average was 566 per 100,000, compared to the national average of 798 nurses per 100,000 people. Subsequent California state surveys have confirmed this low state ratio. Within California, the survey revealed that Los Angeles and the south-central valley have the lowest rates of employed registered nurses.

Model Programs

While health officials have recognized that disease knows no boundaries and have formed binational commissions, work groups, and programs to address health issues ranging from tuberculosis to immunizations, there are surprisingly few programs in the border region that aim to expose health professionals to curriculum, cultural practices, and/or clinical experience in the neighboring country. Efforts to provide doctors, nurses, and dentists with this type of cross-border collaboration in training have been met with impediments including immigration issues and a lack of financial support.⁵² As a result, existing programs have not reached a significant number of health professionals.

This section provides an overview of existing programs that address the healthcare workforce shortage in the border region and/or provide increased opportunities for cross-

border training of healthcare professionals. The discussion begins with a brief overview of federal support to address health care workforce needs. It is then followed by descriptions of current programs in border states which, in part, exist to increase cross-border collaboration in training healthcare professionals or to assist foreign nationals living in the U.S. to seek accreditation in their fields. Looking to the future, this section ends with a description of a proposed medical school along the Texas-Mexico border region, which, if approved, could provide future opportunities for greater cross-border training of doctors and nurses.

Federal Programs

Reducing the disproportionate impact that disease and illness have on border residents and increasing the general health status of the border region are important goals at the U.S Department of Health and Human Services (HHS). The U.S./Mexico Border Health Commission, created in July 2000 by joint action of the U.S. and Mexican governments, works to provide international leadership and optimize the health and quality of life along the U.S./Mexico border. The Commission's goals include creating "Healthy Borders 2010 Objectives" that are pertinent to the region.⁵³

Various federal initiatives administered by the Health Resources and Services Administration work to assure the availability of quality health care to low income, uninsured, isolated, vulnerable and special needs populations including the U.S.-Mexico border region population.⁵⁴ These initiatives that work to address primary health care needs and the development of service delivery capacity are strategically relevant to border health workforce issues. The initiatives are listed below.⁵⁵

- *The Bureau of Primary Health Care (BPHC)* with a budget of approximately \$1.4 billion (FY 2002) supports the Health Centers Program, Programs for Special Populations, State and Clinical Infrastructure, 340B Drug Pricing Program, evaluation, and research. Through BPHC, HRSA invests more than \$1 billion each year to assist migrant, homeless, and community health centers across the country in providing oral health, mental health, outreach, respite care, and pharmacy services to more than 10 million people.
- *The National Health Service Corps (NHSC)* works to serve the approximately 41 million people who lack access to primary health care⁵⁶ by helping medically underserved communities recruit and retain primary care clinicians, dentists, and mental and behavioral health professionals. More than 23,000 health professionals have served with NHSC since 1972. Current field strength totals more than 2,700 clinicians/health care professionals are serving medically underserved populations and communities. NHSC professionals frequently practice in rural medically underserved communities, which includes the U.S.-Mexico border area.
- *Two health information/referral toll-free lines* specifically targeted to the Hispanic community nationwide are being hosted by the Office of Minority Health. They are the Prenatal Hotline (1-800-504-7081) and the *Su Familia* Help Line (1-866-783-2645).

- *Programs with a special focus on underserved and vulnerable populations* and on improving the diversity and quality of the health care workforce have particular significance for the border communities. They are being sponsored by the Bureau of Health Professions (BHP) through a FY 2002 appropriation of approximately \$820 million. They include the National Health Service Corps (NHSC) mentioned earlier, Centers of Excellence, Health Careers Opportunity Program and the Minority Faculty Fellowship, Scholarships for Disadvantaged Students, Faculty Loan Repayment Programs, Health Professions and Nursing Training, Health Professions Training for Diversity, Interdisciplinary Community-Based Linkages Programs, Public Health and Nursing Workforce Development, Health Education Assistance Loans, Workforce Information and Analysis, and the Area Health Education and Training Centers.
- *HIV/AIDS*. HRSA provides quality primary care and support services to individuals infected and affected by HIV through the HIV/AIDS Bureau (HAB), which administers the Ryan White Comprehensive AIDS Resources Emergency (CARE) Act (FY 2002 funding approximately \$1.91 billion). HAB programs include Emergency Relief Grants to metropolitan areas, AIDS Education and Training Centers (AETC), and AIDS Dental Services Programs. Five Special Projects of National Significance (SPINS) grants were made to community based organizations (CBOs) throughout the border region.
- *Maternal, Infant, and Child Health*. Programs such as the Maternal and Child Health (MCH) Block Grant to States provides resources to state-administered border programs that aim to improve the health of women, infants, children, adolescents, and their families. For example, some Healthy Start programs were funded specifically to provide services to women and children residing in border communities.
- *Rural Health*. HRSA's Office of Rural Health Policy (ORHP) contributed \$225,000, in FY 2000 and 2001, to the Border "Vision Fronteriza" project. Since 1999, Border Vision Fronteriza has enrolled over 21,000 children into SCHIP and Medicaid. Additionally, ORHP is funding a research study at Texas A&M University to examine the use of the "promotora" model in Texas and Arizona and is supporting the rural health care delivery system through the Rural Hospital Flexibility Grant Program (Flex) that helped convert 12 rural hospitals into CAHs across Arizona, New Mexico, and Texas.
- *Information Technology*. Through its Office for the Advancement of Telehealth in the HIV/AIDS Bureau (\$39.1 million in FY2002), HRSA is a leading national supporter and developer of telehealth and electronic information and telecommunications technologies for health-related activities that have had a positive impact throughout the border.

Since 1996, HRSA has intensified its work aimed at improving the health status of people living in the border region by naming border health as a priority. The following programs and activities were specifically developed to address the needs of the border region.⁵⁷

- *Reducing the number of Tuberculosis (TB) cases along the border* is a goal addressed collaboratively by HRSA, the Centers for Disease Control and Prevention (CDC), and local health officials in the border region through programs aimed at improving the diagnostic and treatment skills of health care providers.
- *Thirteen new community health center clinic/access points* were established in border communities through HRSA grants since 1998. Additional grants were recently awarded to expand the capacity of eight existing border community health centers.
- *Border HIV/AIDS Project.* The primary goal of the five border SPNS programs and the HIV/AIDS Evaluation and Technical Assistance Center is to develop models of community-based health care networks that reduce barriers to early identification of HIV disease and assure entry to high quality primary health care for border residents.
- In FY 2003, the Spanish radio news *HealthLine Texas en Español* is covering health news stories of interest to Texas' Spanish-speaking population, particularly those residing in the Texas/Mexico border region.

Finally, national and international cooperative projects offer hope toward the creation of a critical mass of collaborative efforts needed to effectively address border workforce issues and challenges. These programs are outlined next.⁵⁸

- HRSA has environmental healthcare-related agreements with the U.S. Environmental Protection Agency (EPA) to train clinicians and “promotoras” on pesticide and environmental health interventions at HRSA/BPHC funded health centers and other community-based organizations throughout the border region. For example, during 2000-2001 HRSA participated with EPA, the U.S. Department of Housing and Urban Development (HUD), public health officials of Sonora, Mexico, and the *Juntos Unidos-Border Health Foundation* in conducting a successful safe water project. Also, HRSA provided a small amount of matching funds to a much larger EPA-funded project *Agua Para Beber* (the “Drinking Water Project”) that served a total of 630 “colonias” households in Arizona/Sonora. This program also induced a similar if smaller initiative in El Paso.
- Under an agreement between HRSA/BPHC and the Center for Mental Health Services/SAMHSA, both agencies are supporting Children and Adolescents-at-Risk Projects to reduce depression, suicides, and child and drug abuse in Arizona and California border communities.
- Another HRSA/BPHC agreement signed recently with the National Heart, Lung, and Blood Institute/NIH will create three *Su Salud, Su Corazon* regional training sites for training “promotoras” on promoting heart health.
- Jointly funded projects with the Robert Wood Johnson Foundation and the Texas A&M University will create an integrated health outreach information and health education system to isolated “colonias” in Hidalgo County, Texas.

- *U.S./Mexico Border Diabetes Initiative.* HRSA is working with representatives from diabetes control programs in Arizona, California, New Mexico, Texas, the Centers for Disease Control (CDC), and Mexico on programs for the research, prevention, and control of diabetes.
- *The Binational Border Health Information Systems (BBHIS)* facilitates the exchange of information and epidemiological response between the public health authorities of the states of Chihuahua (Mexico), New Mexico, and Texas. More specifically, the purpose of the system is to implement the EPI-FAX health alert instrument that provides urgent notification between public health authorities, to develop a binational technical publication about border public health issues, and to establish a network for cooperation among public health authorities.

Border Programs

Bridge to Employment Program

This partnership between Johnson & Johnson, El Paso Community Foundation, Margarita Miranda de Mascarenas Foundation, and the *Escuela de Enfermeras* (School of Nursing) aims to increase the supply of trained nursing and health care professionals with a particular eye towards the industrial health care field in Ciudad Juarez. Approximately 40 percent of Juarez’s workforce is employed in the industrial sector. Located at the northern end of the state of Chihuahua, Ciudad Juarez has experienced tremendous growth, with total its population currently estimated to be between 1.5 and 2 million people.

The Bridge to Employment Program provides two types of scholarships: 1) general scholarships to current nursing students, and 2) teaching scholarships to encourage nursing graduates to pursue certification. Graduates of the *Escuela de Enfermeras* in Juarez currently receive the equivalent of an LVN certification. With a teaching scholarship, a student has the opportunity to become a certified nurse through curriculum at the *Universidad Autonoma de Ciudad Juarez* (UACJ). Once coursework is completed at UACJ, a student obtains a degree comparable to that of an RN degree in the U.S.

The El Paso Community Foundation in conjunction with the *Escuela de Enfermeras* and the Johnson & Johnson facility has sponsored community fairs at 24 secondary schools in Ciudad Juarez. These fairs support learning for youth interested in the nursing profession through hands-on activities.⁵⁹

Health Careers Border Education Project

The Health Careers Border Education Project “promotes the education of U.S./Mexico border healthcare students and practitioners with an international perspective.” Eligible participants include medical students, nursing school students, residents, physicians, nurses, health workers, and *promotoras* (health educators). Individuals from the four participating universities—University of California San Diego, *Universidad Autónoma de Baja California*, University of Texas at El Paso, and *Universidad Autónoma de Ciudad*

Juarez—participate in full-term or short-term cross-border exchanges. Curriculum may include preclinical courses, elective courses, continuing education courses, learning joint classes, clinical observations, mentoring, and travel study. Initial funding for the HCEP was awarded by the Border PACT (Border Partners in Action)/CONAHEC (Consortium for North American Higher Education Collaboration), University of Arizona-Tucson, the Ford Foundation, and the William and Flora Hewlett Foundation. In March 2003, a proposal for funding is expected to be submitted to expand the program to include two Canadian universities.

The UACJ/UTEP short-term exchange took place in March 2002 and May 2002 with eight Juarez participants and fifteen UTEP participants. Each exchange entailed one week of UACJ students staying on UTEP's campus for the entire duration and with UTEP participants crossing the international bridge every morning into Juarez. This was a non-credit program.⁶⁰

FEMAP-Hospital de la Familia

Founded in 1973, FEMAP is a Mexican charity whose founding objective is health. It has over 40 affiliates throughout Mexico. In Ciudad Juarez, FEMAP operates *Hospital de la Familia*, a 100-bed hospital that employs 97 physicians. It is the only accredited hospital in Juarez. Through the *Hospital de la Familia*, FEMAP raises money for the nursing school in Juarez.

Several foreign schools have arrangements with the *Hospital de la Familia* to conduct training there including Rutgers, a Kansas university, and a medical school in Belize. In addition, El Paso Community College students and UTEP students do training at *Hospital de la Familia* through Project Vida, an El Paso clinic.⁶¹

Non-border Collaborative Efforts

UNM/UAC Tabled Proposal

Though not located within the typically defined “border” region, it is worthy to note dialogue that occurred between the University of New Mexico (UNM) at Albuquerque and the *Universidad Autónoma Chihuahua* (UAC). UNM was trying to bring in 30 nursing students from UAC to address the nursing shortage in New Mexico. These students would have been trained at UNM and would have stayed in New Mexico after their curriculum completion. Concerns about state certification issues and by nursing associations were expressed. Advancements on this proposal have not been seen.

The level of cross-border exposure relating to medical, nursing, and dental students may also be seen in a smaller scale through university curriculum or individual initiatives. For example, students from the Texas Tech El Paso campus do a rotation in pediatrics at the *Universidad Autónoma Ciudad Juárez* medical school. A University of Arizona student did his internship at a hospital in Nogales, Sonora.

Welcome Back: International Health Workers Assistance Centers

The Welcome Back program was founded to address several critical needs in California's healthcare workforce. By providing a means to bring internationally trained healthcare professionals who are already residing in California into the healthcare workforce, the program's founders hoped to increase the number of individuals willing to work in underserved communities, and to diversify the healthcare workforce.

Hispanics/Latinos are underrepresented in the health workforce nationwide, and the disparity is particularly notable in California. Though 31 percent of the state's population is Latino, only 4 percent of nurses and doctors, and 6 percent of dentists in California are Latino.⁶² Recognizing the need for more health care professionals who understand the language and culture of the populations that they are serving, the Welcome Back program looked to the pool of foreign trained healthcare professionals who are already residing in California.

The project was launched the auspices of the Francisco Bay Area Regional Health Occupations Resource Center (RHORC), with funding from the California Endowment. The program helps internationally trained healthcare professionals to navigate the state's licensing system and obtain the necessary credentials required to work as health professionals in the United States, through counseling, education, and job placement.

In the first year of operation, the program focused on identifying barriers to licensure and practice for foreign-educated healthcare professionals living in the U.S. The assessment identified language as a critical barrier for these professionals and noted a strong interest in a English for Health Professionals course. The other barriers that the staff identified were financial constraints, time constraints, and limited knowledge about the U.S. healthcare system. Additionally, some internationally trained individuals pointed out that educational institutions in the U.S. would not give them credit for their prior education (including anatomy and other relevant coursework). The program set out to address these barriers through a series of services and course offerings to participants, including study groups for licensure exams, counseling on alternative healthcare career paths, and coursework to prepare individuals for accreditation, including an introduction to the U.S. healthcare system. The staff also provides participants with detailed information about licensure requirements in California.⁶³

José Ramon Fernandez Peña, founder of the Welcome Back program, initially envisioned that participants would be required to provide 200 hours of volunteer service as healthcare workers in medically underserved areas after receiving their licenses. However, in conducting the needs assessment for the program, the staff realized that this requirement was not realistic for many in the population served by the program given that they were often working two jobs, and/or had families. Rather than imposing the volunteer requirement, the program has maintained a commitment to exposing participants to public health and the current workforce shortage problems that California faces, and has asked participants to sign a statement of personal commitment to give back to the communities most in need of healthcare.⁶⁴

Welcome Back has only worked with immigrant health professionals living in the United States and does not aim to “import” more healthcare workers. The program does not have the capacity to assist undocumented immigrants in gaining legal residency status, though they do provide referrals to legal aid agencies which can provide that type of service.

The program currently has outreach offices in San Diego, Los Angeles, and San Francisco. The Welcome Back project in San Francisco is a partnership between the San Francisco State University and San Francisco City College and is currently in its second year of operation. The first year of the program was dedicated to identifying the barriers for immigrants who are trained as health professionals to practicing in the field in the United States.

After the initial year assessing barriers for internationally trained healthcare professionals, the project began to offer services to individual immigrants who are seeking licensure as health professionals in the United States. At the time that they entered the program, 60 percent of the individuals were not practicing in the health profession, and were typically employed full-time though primarily at lower wages than they would earn as health professionals. Of the remaining 40 percent who were working in health care prior to participating in the program, the majority were not practicing at the level at which they are trained, many working as certified nurse assistants or dental assistants. The project provides individual guidance to participants, helping them to assess their career goals and to determine whether they would like to become licensed in the U.S. in their original health profession or whether they should consider seeking additional education to pursue another aspect of the health field. They also offer opportunities for participants to gain exposure in different aspects public health careers, and to network with health professionals through career fairs and other events.

Welcome Back San Francisco offers several courses aimed at preparing their participants to pass licensure requirements in the United States. The organization sponsored the development and pilot testing of the curriculum for a course entitled “Introduction to the U.S. Health System,” which is now being offered by the San Francisco City College. The program has also funded additional offerings of a City College LVN refresher course which provides students with one semester of theory, and three hospital rotations to prepare them for the LVN licensure exam. All of the courses are non-credit courses and free to participants. Should the program move to a “for-credit” system, participants would be required to pay \$11 per credit, and the program would remain a relatively low cost option for eligible immigrants seeking career opportunities in the health field.⁶⁵

The San Diego program has begun to provide courses for foreign-trained medical professionals through the local community college, including NCLEX (RN licensure exam) preparatory courses, a dental board review course, and a pilot course on the USMLE. In addition to providing these professionals with an orientation guide on the licensure process, the center has also provided career guidance and placement services, such as helping participants to find residency programs. Welcome Back San Diego is also working with Rosemont College to establish opportunities for internationally trained

nurses to become RNs through a one year program, or to attend a masters program and become a nurse practitioner.⁶⁶

As of October 2002, 2,906 individuals had participated in one or more of the services provided by Welcome Back. Sixty-five percent of the participants were from Spanish-speaking countries, the majority from Mexico.

Conclusion

Given the persistent shortage of healthcare professionals along the U.S./Mexico border, the disparities in health care delivery for minority populations, the growing Latino population, and the demand for culturally sensitive health care delivery, there is an urgency to expand and increase funding for programs that address current unmet healthcare needs. As we move into the new century with expanded concepts of the border and greater global interdependence, the challenges that all communities face will be even more fully realized. More broadly, the current under-representation of minorities in the health care field and the growing recognition of cultural competence as an important element in eliminating health disparities and providing quality care gives cause to invest in the recruiting, training, and retention of health professionals with diverse backgrounds to work in diverse communities. It is critical that the U.S. and Mexico seek additional means to collaborate on the training of healthcare professionals to ensure greater consistency in the quality of care available to individuals. Because such programs have impacted limited communities to date, it is necessary to identify and more aggressively address the barriers which impede professionals from being trained or being able to practice in their neighboring country.

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