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# International Models of Nursing<sup>1</sup>

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### EXECUTIVE SUMMARY AND RECOMMENDATIONS

The future of nursing in the United States will be shaped by an array of factors and forces—and each of these, in turn, will be shaped by the myriad international factors and forces created by globalization. This paper describes general trends and broad themes in globalization and international nurse migration, profiles nursing education, regulation and utilization in various countries, and relates them to the future of nursing, both in the United States and globally. It describes foreign-educated nurses in the United States workforce within the context of global variances in nursing education programs, credentialing mechanisms, and employment practices. It also provides a global snapshot of education and regulation in historic and emerging countries that have supplied migrant nurses to the U.S. workforce and describes their migration patterns.

The paper envisions a future with international models of nursing education, regulation and practice. Thus, the impact of international and regional trade agreements is described as they serve as catalysts for these international models. The paper asserts that nursing reform in the United States must be understood and envisioned within an international and historical context that integrates global trends and issues. Against this backdrop, the implications of migration and globalization for education, service delivery and health policy in the United States are identified and discussed.

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<sup>1</sup>The responsibility for the content of this article rests with the authors and does not necessarily represent the views of the Institute of Medicine or its committees and convening bodies.

### Trends in International Migration

Worldwide, demand for nurses exceeds supply and chronic shortages are characteristic of the current global nurse workforce. The 2006 World Health Report (WHO, 2006) identified shortages of human resources as a critical obstacle to the achievement of the Millennium Development Goals (MDGs) for improving the health of global populations.<sup>2</sup> Moreover, the report identifies the importance of nursing as an integral element of health systems' infrastructure.

Various studies also have documented the important link between nurse staffing levels, service delivery and health outcomes, suggesting that important issues exist with respect to how the nursing health workforce is managed. One important factor that has received considerable attention is the mobility and migration of nurses and their impact on the global delivery of health services (Kingma, 2006).

Globalization of the nursing workforce must be viewed within the context of the worldwide development of the knowledge economy. This phenomenon identifies intellectual capital as a valuable asset and encourages the export of education and knowledge workers as significant contributors to a country's economy. For example, national policies in the Philippines and India support the export of nurses (Healy, 2006; Thomas, 2006) with China and Korea beginning to follow a similar path (Fang, 2007).

The importance of the nurse export business is reflected in the exploding growth of nursing schools in the Philippines and India, and in the large sums of money received through remittances.<sup>3</sup> Many countries, such as India and China, see the current demand for nurses as a business opportunity. Khadria (2007) describes the process in India as "business process outsourcing" (BPO). It includes comprehensive training, recruitment and placement programs for popular destinations, like the United States and the United Kingdom. It is assumed that these growing markets facilitate care as a global product delivered by migrating nurses.

Worldwide, the education and regulation of nurses is highly diverse and varies considerably in scope and complexity. Despite these international differences, a number of factors allow nurses to migrate throughout the world, creating continuous challenges to the maintenance of nursing education, practice and regulatory standards. For example, the United States is unique in having created

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<sup>2</sup> WHO estimates that the world needs to increase the number of health workers by more than four million. WHO defines health workers to be all people engaged in actions whose primary intent is to enhance health, such as doctors, nurses, midwives, and others.

<sup>3</sup> The World Bank defines remittances as the personal earnings international migrants send back to their family and friends. Remittances represent an important source of added income and stability for individuals, families, and communities. Remittances play a significant role in reducing the level and severity of poverty (each social determinants of health) and contribute to the economic development in many low and middle income countries.

CGFNS International to address these issues, thus creating a comprehensive data base on variances in nursing, education, regulation and practice worldwide, making it a global resource.

A major challenge for all countries is to establish workforce planning mechanisms that effectively meet nursing resource requirements in terms of supply and demand. In that regard, nursing shortages in the United States mirror the growing interdependency of labor markets throughout the world and the need for national and international nursing workforce policies. The challenge for workforce planning related to the global migration of nurses, however, is to focus not only on the number of nurses entering the country, but also on the number of nurses leaving the country, the number of new nurse graduates and the effect of internal migration, such as the movement of nurses from state to state and from rural to urban areas. Also essential is an understanding of the education and licensure systems of migrating nurses to ensure a proper skill mix for the nursing workforce of a country (Kingma, 2006).

Thus, the global nurse workforce must be viewed, not only within the context of the health status of nations, government investment in health budgets, nurse/health care migration, economic realities, and working conditions but also within the context of the diverse preparation and practice of its practitioners.

### **Recommendations for the Future of the U.S. Nursing Workforce**

The authors believe that the Committee has an unparalleled opportunity to challenge the status quo in nurse utilization and to significantly contribute not only to a national but also a global health workforce agenda. Such an agenda requires reliable, stable and competent nurses functioning at all levels of health care systems. The authors have provided specific recommendations for your consideration, and present them within a contextual framework that acknowledges the historic and current leadership role U.S. nursing plays in the international nursing community. That framework suggests that the Committee's recommendations will have dramatic domestic and global implications. The authors have identified six recommendations for action:

1. Promote targeted educational investment in foreign-educated nurses in the U.S. nursing workforce.
2. Promote baccalaureate education for entry into nursing practice in the United States.
3. Harmonize nursing curricula.
4. Add global health as subject matter to undergraduate and graduate nursing curricula.
5. Establish a national system that monitors and tracks the inflow of foreign-educated nurses, their countries of origin, the settings in which

they work, and their education and licensure to ensure a proper skill mix for the U.S. nursing workforce.

6. Create an international body to coordinate and recommend national and international workforce policies.

***Recommendation 1: Promote Targeted Educational Investment in Foreign-Educated Nurses in the U.S. Nursing Workforce***

One response to the global shortage of nurses is to increase the number of nurses produced. Scaling up the health workforce is on the global agenda (Vujicic et al., 2009). Likewise, the growing demand in the United States for nurses and the predicted nursing shortfall require that the United States increase its number of nurses and nurse faculty (Buerhaus et al., 2009).

The clear linkage between quality nursing education and health outcomes identifies that nursing education and continuing professional development are essential elements when tackling nursing workforce challenges for the future delivery of care. Moreover, there is a clear linkage between quality nursing education and health outcomes. Since substantial numbers of foreign-educated nurses hold baccalaureate degrees, targeted opportunities for education should be directed at encouraging them to complete masters and doctoral nursing programs as preparation for clinical and faculty leadership roles. This approach would increase the applicant pool for graduate study and enlarge faculty numbers. In addition, it would prepare foreign-educated nurses with graduate degrees to serve in faculty and leadership roles in their home countries when they return—an approach used in many professions to upgrade a country’s knowledge and skill base by profession. CGFNS data identify that many foreign-educated nurses have completed master’s degree programs but are hired to only work in staff nurse positions, suggesting underutilization or lack of consideration for other nursing or faculty roles (CGFNS, 2002).

***Recommendation 2: Promote Baccalaureate Education for Entry into Practice in the United States***

Baccalaureate programs are on the rise internationally. In most cases, the rise of baccalaureate nursing programs represents a focused, often mandated, policy agenda—without the complex history that has framed baccalaureate education in the United States. The Philippines moved to the baccalaureate for entry into the profession in the mid-1980s. Canada also requires the baccalaureate for entry for new graduates in most provinces. The United Kingdom has moved to university preparation of first level nurses. Mexico and India are phasing out their non-baccalaureate nursing programs. The Ukraine has scaled up its nursing programs, as well, in order to enhance the profession in the country and to increase

the global marketability of its nurses. This international trend toward mandated baccalaureate education for entry into the profession places the United States in a less progressive and less competitive position in the global nursing community.

Although the Bologna Process<sup>4</sup> directly concerns Europe and its immediate neighbors, it has generated global attention because harmonization of nursing standards in this large geographical area will have worldwide implications (Zalalequi et al, 2006). It has heightened awareness in many countries of the need for baccalaureate education in nursing, motivating them to move toward the baccalaureate as the entry into practice credential.<sup>5</sup>

Because the requirements and competencies of the Bologna Process and the Tuning Project<sup>6</sup> identify the need to address educational equivalences and differences in nursing education and qualifications worldwide, careful comparisons between education systems will be necessary for the foreseeable future. For example, competencies and hours of instruction of clinical practice will need to continue to be assessed when countries import nurses.<sup>7</sup>

Although baccalaureate education for entry into U.S. nursing has been controversial since 1965 (ANA, 1965), the present complexity and high technology used to practice nursing in all settings requires now and in the future that nurses be grounded in science and critical thinking. The rise of baccalaureate education globally, coupled with the Bologna Process, suggests that the United States must upgrade its educational standards for entry into the profession. The profession needs to muster the political will to make this unrealized goal a reality—not only to address quality gaps in educational preparation, but also to be a credible player in the future domestic and global health care labor market.

### ***Recommendation 3: Harmonize Nursing Curricula***

U.S. nurse educators should form strategic partnerships to share nursing knowledge and exchange information and best practices state-to-state and regionally. The U.S. nursing education community should promote sustainable global knowledge networks and the open exchange of tools that promote curricula in-

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<sup>4</sup>The Bologna Process creates the European Higher Education Area by making academic degree and quality assurance standards more comparable and compatible throughout Europe. The Bologna Process currently has 46 participating countries committed to “Harmonizing the Architecture of the European Higher Education System.” It is named after the place it was proposed, the University of Bologna, Bologna, Italy.

<sup>5</sup>Canada, India, and the United Kingdom are examples of countries implementing baccalaureate education for nursing.

<sup>6</sup>The “Tuning Project” is a methodology utilized with the Bologna Process that establishes reference points and builds templates for learning outcomes and competencies for specific academic disciplines.

<sup>7</sup>U.S. immigration law requires that foreign-educated nurses seeking U.S. employment must have their credentials evaluated in terms of comparability of education, English language proficiency, and licensure validity.

novation based on learning outcomes. Sustained investment in nursing education must become a national and world priority.

***Recommendation 4: Add Global Health as Subject Matter to Undergraduate and Graduate Nursing Curricula***

To better prepare nurses to work within a globalized health system, U.S. nursing programs should include courses on global health. Such courses would focus on the characteristics of health systems world wide with course content including, for example, high exposure to infectious diseases, underinvestment in health system infrastructure, deteriorating working conditions and acceleration of health professional migration. This would prepare U.S. students to better deal with the migrating nurse workforce and its future demographic characteristics.

***Recommendation 5: Establish a National System that Monitors and Tracks the Inflow of Foreign Nurses, Their Countries of Origin, the Settings in Which They Work, and Their Education and Licensure***

A comprehensive database that collects, monitors, and tracks information about foreign-educated nurses in the U.S. workforce would play a significant role in formulating health care policy. Such a database would assist governmental and private agencies regarding the education, skill mix, practice, and immigration patterns of immigrant nurses—all necessary data to intelligently inform health planning and policy decisions.

***Recommendation 6: Create an International Body to Coordinate and Recommend National and International Workforce Policies***

Globalization has created a world market for a globalized nursing workforce. For nurses to take advantage of these opportunities, mechanisms are needed that compare the education and qualifications of applicants against global standards. Such an entity would acknowledge that mobility is a core element of globalization and recognize the need for international standards of minimal competence. The United States should work closely with the International Council of Nurses (ICN) in pursuing this goal.

The *2006 World Health Report* (WHO, 2006) focused on health and human resources and identified the central role regulators play in the protection of the public. It also acknowledged that factors such as migration are placing existing approaches to regulating professionals under considerable strain. While regulators generally have well established standards and processes for initial registration, this is not usually the case for determining continuing competence. Ensuring

the competence of health professionals remains an important regulatory issue that is now being framed in the broader context of promoting patient safety and advancing the quality of health care services. Ensuring the competency of health professionals entering the United States remains an important priority—as it is for other countries.

In short, a newly established standard of continued competence needs to be offered globally. This new standard must, at a minimum, measure the aptitude, knowledge and skills of nurses around the world and predict their ability to succeed in patient care in global health care environments. The challenge is to incorporate into workforce planning, the development of appropriate quality assurance processes and mechanisms that encompass foreign providers and educational programs in such a way as to ensure predictability and competence in the workforce (Aiken et al., 2004; Kingma, 2006; Little and Buchan, 2007).

## OVERVIEW OF INTERNATIONAL NURSING EDUCATION AND REGULATION

### Key Issues and Challenges in Nursing Education

Although nurses share a common professional history, internationally their educational preparation, regulation, and practice patterns are highly diverse and vary considerably in complexity and scope. There are differences in credentialing requirements that include professional licensure, use of titles, and accreditation of educational programs (ICN, 2003). Because of these world-wide differences, the skill mix of the nursing workforce also is diverse. Thus, the globalization of the nursing workforce must be viewed not only within the context of the health status of nations, government investment in health budgets, nurse/health care migration, economic realities, and working conditions but also within the context of the diverse preparation and practice of its practitioners.

Achieving global standards for the education of nurses is a vision of many nursing professionals, and has been promoted by the ICN for over a century. However, achieving that goal remains unrealized and is complicated by the variations in nursing education throughout the world. Many countries specify university-level education as the minimum entry requirement for nursing—but the idea of university education for nursing remains challenging, with disparities being common in the programs currently offered in different parts of the world. Compounding the issue is the number of countries that still consider initial nursing education at the secondary school level to be adequate.

Educational programs also vary in type, number, size, and degrees offered. For example, all nurses from the Philippines complete a baccalaureate degree. Denmark, Ireland, New Zealand, and Spain also have single programs for qualifying as a nurse. On the other hand, in the United Kingdom, nurses receive either a nursing diploma or a degree. In the United States there are three educational

pathways to become a registered nurse: a 2-year associate degree, a 3-year diploma program, or a baccalaureate degree. Also in the United States the model of nurse-midwife is common, for other countries midwifery is considered a profession separate from nursing. In short, universal nursing education standards have not been achieved.

Entry-level professional nursing programs are designated as diploma, associate degree or baccalaureate. Diploma programs are the most prevalent, worldwide, with baccalaureate programs on the rise. However, many countries are experiencing faculty shortages, which substantially impacts the number of nurse graduates from all programs. For instance, schools in Vietnam and Eastern Europe still operate under the practice of physicians serving as the majority of nursing faculty. Other countries, such as those in the Middle East, do not have the infrastructure to support higher education and nurses must travel abroad to be educated as faculty. In many countries shortages of nursing faculty relate to cultural, social and economic norms about the education, status and role of women. In many instances most patient care jobs are held by female nurses while administrative and faculty jobs are held by male nurses or doctors. The shortage of experienced nursing faculty, worldwide, adds to the challenge of establishing and maintaining standards (Blythe and Baumann, 2008).

Action by the World Health Assembly (WHA) in 2001 included the development of global standards for the initial education of nurses. This was followed in 2006 by the World Health Organization (WHO) Task Force on Global Standards in Nursing and Midwifery Education and in 2009 by the WHO publication, *Human Resource for Health: Global Standards for the Initial Education of Professional Nurses and Midwives*. The WHO goal of global standards is to establish educational criteria and ensure outcomes that (1) are based on evidence and competency; (2) promote the progressive nature of education and lifelong learning; and (3) ensure the employment of practitioners who are competent and who, by providing quality care, promote positive health outcomes in the populations they serve (WHO, 2009).

Many source and recipient countries have established educational programs to ease the transition of migrant nurses. For example, colleges and universities in Canada have created courses to respond to knowledge deficiencies. Canada also has created prior learning assessment and recognition (PLAR) initiatives that provide practical validation of immigrant nurse competencies in lieu of and/or in conjunction with course work (Hendrickson and Nordstrom, 2007). Because there can be language and cultural adaptation issues, countries like the United Kingdom require foreign nurses to undergo orientation to the local culture of health care upon their arrival in the United Kingdom (Kingma, 2006).

Blythe and Baumann (2008) state, “While international and national nursing bodies are focusing on international standards for nurses, more inclusive movements for educational harmonization that involve national governments are underway. One of the most significant is the Bologna Process.” The purpose of



the Bologna Process is to make academic degree standards and quality assurance standards comparable and compatible throughout Europe. The process extends beyond the EU to include some 46 countries.

Global standards continue to be a goal of the future. In the meantime, countries must work to ensure an adequate source of health professionals to provide care for current and future patient needs. Ideally, global standards will be guidelines that serve as benchmarks for the profession. The commitment of the United States to pursue this goal would have a significant impact on its realization.

### **Key Issues and Challenges in Nursing Regulation**

#### *Regulatory Structure*

In addition to differences in education, the nursing profession varies by country in how it is regulated. Many countries have had statutory nursing regulation for years, regulation that ensures a safe and competent nursing workforce. However, there are still countries with no nursing regulation, rules, or other regulatory mechanisms that emanate from the government. In still other countries there is provision for nursing regulation, either in statute or in other systems of rules, however, for various reasons no mechanisms exist that establish a legal framework for nursing as an autonomous regulated profession (ICN, 2009a). Some examples of regulatory systems include:

- A single regulatory authority, such as the Nursing and Midwifery Council (NMC) in the United Kingdom.
- A national/governmental body that determines basic competencies but has no regulatory authority, such as Denmark, Ireland, and Taiwan (ICN, 2009a).
- Regions acting as autonomous units with the government setting standards for only some of the jurisdictions, for example, Spain (ICN, 2009a).

Therefore, as nurse migration accelerates, it should be recognized that the standards, competencies and qualifications required to practice as a nurse vary globally.

#### *Licensure*

All countries do not license nurses. Some countries require nurses to pass an examination after completion of their nursing education before they can practice. Nurses in the Philippines, Australia, Thailand, Japan, Singapore, the Cameroons, Korea, and Poland take a licensing exam that provides national licensure and registration as a first level (registered) nurse. Other countries, such as Nepal and Mexico, do not require a post-graduation examination. The nursing schools

administer an exit or qualifying examination and upon passage, the student is granted a diploma. The diploma allows the graduate to practice as a nurse.

While some countries provide national licensure, still others license nurses by province or state. Countries such as India only allow nurses to be licensed in one state at a time. In Canada, nurses are licensed by the individual provinces. Each province has its own educational structure and regulatory authority; however, nurses licensed in one province can achieve licensure by endorsement in another province. In the United States nursing licensure is at the state rather than the national level. The United States does not offer a single nursing license that is recognized and valid in all states and territories within the United States. Instead, each state controls the practice of nursing within its borders. The nurse must be licensed in the state in which he/she is employed. The United States does offer the mutual recognition model of nurse licensure, which allows a nurse to hold a license in his or her state of residency and to practice in other states, subject to each state's practice law and regulation. Under mutual recognition, a nurse may practice across state lines unless otherwise restricted (NCSBN, 2009a).

As part of emerging practices around increased migration, some countries test nurses' competencies before they leave their country of origin. For example, the National Council of State Boards of Nursing administers the U.S. Nurse Licensure Examinations (NCLEX-RN<sup>®</sup> and NCLEX-PN<sup>®</sup>) in major cities around the world to test the competencies of nurses who desire to migrate to the United States to work. Pass rates of foreign-educated nurses on the NCLEX-RN examination are generally in the 48–52 percent range but vary by country of education and experience with multiple-choice testing.

A number of U.S. states require that foreign-educated nurses take the CG-FNS Qualifying Exam<sup>®</sup> as a prerequisite for licensure. Annual CGFNS Validity Studies over the last 5 years indicate that foreign-educated nurses who pass the CGFNS Qualifying Exam on the first attempt have an 88–92 percent chance of passing the NCLEX-RN examination on the first attempt, which is comparable to, and in some cases higher than, the pass rates of U.S. graduates taking the NCLEX for the first time. Table J-1 depicts the 2007 NCLEX pass rates of U.S. and internationally educated nurses as well as nurses educated in the countries that are historical and emerging suppliers of registered nurses to the U.S. workforce. Statistics for foreign educated nurses who sat for the NCLEX-PN examination also are provided because many registered nurses who are unable to pass the RN examination go on to take the PN licensure examination.

Other countries that import nurses, such as Canada, also give their licensing examinations abroad. Saudi Arabia and the United Arab Emirates give licensure examinations in the Philippines and India for potential immigrants to their countries. Still other countries ensure a supply of foreign-educated nurses by establishing agreements with governments, where nurses are comparably educated to supply quotas of nurses for defined periods (Kingma, 2006). Both the United Kingdom and Japan have such arrangements with the Philippines.

**TABLE J-1** NCLEX Examination Statistics, 2007

Country	NCLEX-RN Pass Rates	NCLEX-PN Pass Rates
U.S. educated, first-time takers	85.5%	87.3%
Foreign educated, first time test takers	52.0%	48.6%
<b>Historic Supply Countries</b>		
• Philippines	49.2%	58.3%
• India	66.2%	39.1%
• Canada	65.3%	79.7%
• United Kingdom	66.7%	66.7%
<b>Emerging Supply Countries</b>		
• China	53.8%	53.8%
• Jamaica	50.9%	26.5%
• Nigeria	25.5%	69.4%
• Mexico	43.8%	00.0%

SOURCE: NCSBN, 2009c.

### *Registration*

Registration of nurses is an administrative process that allows the government agency responsible for health and safety to track and monitor health care professionals. In some countries, such as the United Kingdom, registration is the recognition by the professional regulation body that the nurse has completed all educational requirements to practice as a nurse. In countries in which licensure by examination is required, registration by the regulatory body documents that the nurse has passed the examination and met all requirements to be listed on the registry. Registration requires an initial fee, and in most countries, periodic payment of fees to maintain that registration.

Graduates of nursing programs in such countries as Peru, Columbia, the Dominican Republic, the Ukraine, Armenia, Russia, and other Eastern European countries are not required to hold licenses. The graduate nurse's diploma serves as the permit to practice the profession of nursing. The nurse's professional standing is maintained by the school of nursing, the Ministry of Health, or the professional association.

With the trend of increasing globalization and mobility of the nursing workforce, regulators are under increasing pressure to deal with the myriad number of nurses who wish to move from their country of origin to work in new jurisdictions. Because regulations vary considerably in complexity and scope, not all countries or jurisdictions are able to absorb these mobile nurses into their workforce. In general, countries that receive significant numbers of foreign-educated nurses employ a variety of regulatory approaches to ensure that migrating nurses are prepared to practice competently and safely in new, and often unfamiliar,

health systems and cultures. For example, in the United States foreign-educated nurses must meet federal requirements for obtaining an occupational visa and then state requirements for licensure before they can be employed as a nurse.

### *Nursing Titles*

Titles are used to inform the public of the scope of practice and the professional identity of a health care worker. Titles may differ by country. The nurse's role and responsibilities also may differ by country, although the titles may be the same. Commonly, there are four categories of titles: first-level or registered nurse, second-level or practical nurse, specialty-midwife, and nonprofessional level.

In the United Kingdom and its former colonies, as well as in South Africa, the registered or first-level nurse may have a diploma or baccalaureate in nursing. The enrolled nurse is considered a second-level nurse, has 1–2 years of education, and reports to a registered nurse or doctor. In some countries, midwives and nurses whose initial education was in a specialty, such as entry-level psychiatric nurses, are only licensed to practice their specialty. Some countries have community health nurses who are neither registered nor enrolled. Table J-2 presents the education and title variations in select countries. These countries represent diversity geographically, culturally and developmentally. They also are countries from which we expect increasing numbers of nurses who are interested in migration.

## INTERNATIONAL MODELS OF NURSING

All countries, including the United States, require that professionals who enter the country to work meet certain educational and/or licensure requirements. Those seeking to practice nursing are no exception. Although there are no universal standards of education, the nursing profession, through international health care and nursing bodies and catalyzed by the ICN, has established baseline standards for entry into nursing education programs.

These standards posit that professional nursing is an entry-level profession whose education begins upon completion of secondary school (high school). Vocational or second level nursing education is conducted either before or after secondary school or is a program that is part of the secondary school curriculum. In most instances, entry into higher education requires completion of secondary education. Initial education is the first program of education required to qualify as a professional nurse.

### **First-Level Nurses**

ICN has established guidelines and advocates for educational standards for first level, general nurses. The ICN *Guidelines for National Nurses Associations*

**TABLE J-2** Titles of Nursing Personnel from Select Countries

Country	First Level	Second Level	Others
Brazil	Nurse Diploma or BSN	Technical or Auxiliary	
Canada	State Registered Nurse	Enrolled Nurse	Registered Midwife
Columbia	General Nurse		
Ethiopia	Junior or Senior Clinical Nurse Chief Staff Nurse	Health Assistant	Assistant Clinical Nurse Assistant Public Health Nurse Public Health Nurse Midwife
Israel	Licensed, Registered, Graduate, or Qualified Nurse	Practical Nurse	Midwife
Lebanon	Registered Nurse or Technical Superior	Technical Nurse	Psychiatric Nurse Midwife
Nepal	Registered Nurse		Auxiliary Nurse Midwife Auxiliary Nurse and Midwife
Peru	Registered General Nurse	Auxiliary/Midwife	
Poland	Nurse	Assistant Nurse	Midwife
Ukraine	Medical Sister Medical Sister in the Specialty of Pediatrics		Midwife Feldchers

*on Development of Standards for Nursing Education and Practice and Competencies for the Generalist Nurse* are used by countries as a benchmark to set their curricula and to measure their comparability to recommended standards. ICN has described the scope of preparation and practice to enable the generalist nurse to have the capacity and authority to competently practice primary, secondary and tertiary health care in all settings and branches of nursing. Completion of a country's initial nursing education identifies one as a registered nurse (RN, licensed nurse, professional, or qualified nurse). An RN is defined as one who (a) has successfully completed a program of education approved by the nursing board/council, (b) has passed the examination established by the nursing board/council (if appropriate), and (c) continues to meet the standards of the nursing board (ICN, 2003).

### Second-Level Nurses

The defining factors differentiating professional nursing from vocational/practical nursing are the educational requirements for admission to the nursing program, the educational program requirements, the curriculum, and the stan-

dards and scope of practice for the discipline. Often, nurses who are considered as first level in some countries (i.e., Germany, former Yugoslavia, Taiwan, and Mexico) do not meet the criteria for such a designation in the United States. In the United States and many other countries a student pursuing education as a professional nurse must have completed secondary school (high school). This means that the student has completed 11–12 years of elementary (primary), middle and secondary school. Candidates for vocational nursing programs in other countries may enter those education programs after completing only 8–9 years of elementary/primary or middle school. In some instances, the nursing program is combined with secondary education. The United States meets and exceeds the ICN Guidelines for admission to nursing programs; however, nurses migrating to the United States present a variety of educational backgrounds.

### *Vocational Nursing Programs*

Vocational programs consist of theoretical courses in science and nursing competencies along with clinical experience. The length of the program varies from 12 to 18 months. Vocational education has a greater concentration on clinical experience than professional nursing. It does not incorporate the social sciences, research, management and autonomy of practice that professional nursing programs include.

Not all countries recognize vocational nursing or have a licensure or registration process for such graduates. Ironically, some countries that have labeled their nurses as first level have educational programs that are quantified by the United States and other countries as second level (vocational) because they do not occur post-secondary or their curriculum is not comparable to that of a first level nurse. When graduates of these programs immigrate to other countries, such as the United States, they are deemed to be practical or vocational nurses. This has been a frequent occurrence for nurses educated in Mexico, Eastern Europe, and Taiwan.

### **Professional Nursing Programs**

Professional nursing education programs are conducted at the post-secondary level. The students' nursing education is conducted after the 11th or 12th grade. Nursing courses are separate from the secondary or high school curriculum, which is documented by a diploma, certificate or examination. Use of these three terms varies depending on the country of education and language.

Associate degree (AD) nursing programs are conducted at the community college level. The AD nurse is primarily a Western phenomenon, with very few AD programs located outside the United States. Korea has an associate degree program that is 3 years in length. China uses the title "associate degree" for programs that would be considered diploma programs elsewhere.

Several AD programs have begun in the Philippines; however, like practical nursing programs, they have not been accredited by the Commission on Higher Education (CHED) or approved by the Professional Regulation Commission (PRC). A number of the AD programs in the Philippines have sought affiliations or partnerships with U.S. community colleges or accredited AD programs to ensure recognition of their nurse graduates. One such program started in 2009 as a partnership with Fresno City College in California. After completing a year of study in the Philippines, the nurse attends Fresno's AD program and earns a dual diploma.

Prior to 2000 most nursing programs in Mexico were considered to be comparable to second level U.S. programs. Since then, the nursing profession and academic and health officials in Mexico have worked to scale up nursing education and the nursing workforce in that country. The ultimate goal is baccalaureate prepared nurses. However, many of its existing nursing programs are 2–3 years plus one year of community service. Those programs are seeking to be recognized as comparable to the U.S. associate degree.

Professional nursing programs may differ in the theoretical and clinical courses that are taught. In certain provinces in India male nursing students are not permitted to provide maternal/infant care (obstetrics). This effectively is a barrier to migration as obstetrics is considered a cornerstone of basic nursing education, and a receiving country such as the United States would find the education deficient. The male would have to return to school to acquire the requisite education to be eligible to be licensed as a nurse in the United States. Certain countries in the Middle East have prohibited women from attending nursing school, so their graduates are men. The result is that a significant number of male nurses from those countries have migrated to the United States. Recently, women-only nursing schools have been started in Jordan.

### *Community/Military Service*

In a number of countries, service requirements must be met before a nurse's education is considered complete and a license is granted. Such program requirements are considered as a citizenship responsibility. In some countries, that service is payback for the student's public funding of education. Nurses in Mexico must complete a 1-year community service before they are granted licensure. Other countries, such as Egypt, Eritrea, and Israel, may require a period of military service before the nurse's education is deemed complete. The nurse will not be registered until service requirements are fulfilled.

### **Alternate Educational Pathways**

Historically, the United Kingdom and its former colonies (e.g., Nigeria) allowed alternative education paths for those wanting to be nurses. A student

could enroll in a generalist program, either diploma or university based, and upon completion of the program be eligible to provide general nursing care to patients across the continuum of life.

A second alternative was the specialist path, through which the student chose to be educated as a psychiatric or pediatric nurse or a midwife. Students received little or no education in general nursing or in the areas outside their chosen specialty. Upon graduation, the student was licensed and registered as a specialist. If the student desired to be a generalist (first-level) nurse, additional education and licensure were required. In some countries these alternative programs are on the decline, in part as a response to the ICN Guidelines and the expectations of the global nursing community. It should be noted that in the United States specialization in nursing is at the graduate level rather than at entry level programs.

Some countries have combined nursing specialist programs with general nursing. In addition to the specialist courses in pediatric, psychiatric/mental health or community health nursing or midwifery, the student is required to take general nursing courses in addition to, and concomitantly with, their specialty courses. Graduates of the program can practice as general, first level nurses and/or as specialists. Several nursing schools in Germany have combined their pediatric nursing specialist program with general nursing. Graduates meet the requirements to practice as first level nurses as well as pediatric nurses. The Ukraine has established midwifery programs that incorporate general nursing courses in medical, surgical, pediatric and psychiatric nursing. Graduates are midwives but are not limited to just providing care to pregnant women.

### **Physician to Registered Nurse Programs**

The worldwide nursing shortage, demand for first-level nurses, and recruitment of foreign-educated nurses have spawned a recent phenomenon—physician to registered nurse programs. In some countries many physicians are unemployed or underemployed and may work alternatively as nurses. One such country is Kazakhstan. A graduate of a medical college in that country who is granted the qualification of obstetrician will also be allowed to be employed as a Registered Nurse of General Practice.

Physicians who want to find employment overseas often discover that their medical education does not meet the criteria for medical practice in the country of intended migration. For this reason many physicians have sought to be recognized or licensed as nurses in countries experiencing nursing shortages. Although physicians and nurses may take the same science courses and have similar clinical exposure, medicine and nursing are distinct disciplines with different orientations and cultures. In most countries, including the United States, the physician cannot become a nurse *de facto* as desired without supplemental education. The distinct and different regulatory expectations of the two disciplines in the United States increase this complexity.



Typically, the physician will need 12–18 months to complete nursing science and clinical courses. In the United States these programs are modeled after the accelerated RN to BSN tract. Other models are specific to physicians. Physician-to-RN programs tend to be located in states with large, recent-immigrant populations. Immigrant physicians who have not met the criteria to practice medicine in the United States have been viewed as excellent candidates for accelerated nursing programs, which increases nursing numbers and diversity representation.

St. Petersburg University in Russia has a specific Physician-to-RN program that is marketed internationally as a way to facilitate migration and with the promise of economic security. The courses are taught in English. In the Philippines a large number of nursing schools now offer nursing programs for physicians with the physician being given transfer credit for previous education. The Philippines has significant unemployment of nurses which suggests that the incentive for these programs is migration.

Mexican physicians have been attracted to Physician-to-RN nursing programs developed by U.S. recruiters affiliated with hospitals in Southwest Border States. Health care professionals who are bilingual and have cultural competency skills are aggressively recruited by employers where there are significant Spanish speaking populations. Reportedly, there is underemployment of physicians in Mexico—and nursing offers economic security and migration opportunities. Because Mexico is part of the North American Free Trade Agreement (NAFTA), visa quotas do not limit nurses and this provides an added incentive for physicians to pursue the nursing profession.

Two Physician-to-RN programs that have been successful in the United States are conducted by Lehman College in New York, part of the State University of New York (SUNY) system, and Florida International University, in Miami, Florida. Programs such as these demonstrate unique responses to the global nursing shortage. Because these programs are a new phenomenon, there has been no measurement to date of the integration of these graduates into the culture of nursing in the United States.

## MIGRATION AND THE GLOBAL NURSING WORKFORCE

### Globalization of Nursing

Migration is the movement of people across borders, usually for the purpose of acquiring a new residence and employment. It can occur within countries (internal) or across national borders (external)—through daily commuting, seasonal relocation, particularly from colder to warmer climates, rural/urban shifts, and internationally (Davis and Richardson, 2009). The annual flow of international migration has continued to increase over the past decades—to the point that in the early 21st century it is estimated that 1 out of every 35 individuals worldwide is an international migrant (Kingma, 2006).

U.S. immigration policy is shaped by both political factors and the concerns of the health care community. It has evolved over time to respond to the country's need not only for various labor skills but also for health care delivery. Foreign-educated nurses have been a part of the U.S. workforce since World War II.<sup>8</sup> However, their recruitment has ebbed and waned as the health care system has been challenged by demographic, economic and workforce changes, as well as changing immigration laws (Nichols et al., 2009). Thus, the flow of foreign-educated nurses into the U.S. workforce is unpredictable and shaped by multiple, dynamic international and national forces. The absence of a national system to monitor inflow patterns further complicates the understanding of the impact of foreign-educated nurses on the U.S. health care workforce.

Cumulative CGFNS data from 1978 to 2000 indicate that the majority of foreign-educated nurses seeking to migrate to the United States were educated in the Philippines (73 percent), followed by the United Kingdom (4 percent), India (3 percent), Nigeria (3 percent), and Ireland (3 percent). That profile has now changed. Although nurses educated in the Philippines continued to be in the majority in 2008, their overall percentage declined from 73 percent to 59 percent—while the percentage of nurses educated in India increased from 3 percent to 19 percent. Canada (5 percent) and the Republic of Korea (3 percent) are now among the top countries of education of nurses seeking an occupational visa, while the number of nurses coming from the United Kingdom and Ireland has declined (Nichols et al., 2009).

### *Factors Affecting Migration*

Nurses and other allied health professionals have many reasons for migrating—reasons usually identified as push factors (reasons for leaving their own country) and pull factors (reasons for choosing a host country). Push factors may include such things as poor wages and working conditions, poverty, civil war, little opportunity for advancement, and other factors that make living and working in a country difficult. Pull factors are those that make a host country desirable and include such things as better living conditions, higher wages, greater professional opportunities, and better work environments (Davis and Richardson, 2009).

In a CGFNS International survey (2007), foreign-educated nurses in the United States most frequently cited poor wages and few jobs (due to the nursing shortage, underutilization of nurses and maldistribution of nurses) as the primary reasons for leaving their home countries (push factors). The United States was identified as the destination country of choice because of such pull factors as better wages and working conditions, an improved way of life, and greater op-

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<sup>8</sup> In 1977 the U.S. Departments of State, Labor, Health Education and Welfare, and the Immigration Service mandated that CGFNS be created to assess the education and licensure credentials of foreign-educated nurses seeking employment in the United States.

portunity for advancement. Many of the nurses had friends and family members living in the United States, another pull factor.

The world is seeing a sharp increase in the number of highly skilled workers moving across international borders (Kingma, 2006). Health care professionals, including nurses, make up a significant portion of that increase. Workforce planning is essential if the global migration of nurses is to be addressed effectively. Such workforce planning, however, requires not only data on the number of nurses entering a country, but also on the number of nurses leaving the country, the number of new nurse graduates, and the effect of internal migration, such as the movement of nurses from state to state and from rural to urban areas (Buchan and Sochalski, 2004).

The 2004 National Sample Survey of Registered Nurses (BHP, 2004) indicated that the number of RNs who received their education outside of the United States increased by about 1.3 percent between 2000 and 2004. Nearly 90 percent (89,860) of foreign-educated RNs were employed in nursing, with the majority concentrated in a handful of states in 2004. Almost 70 percent of foreign-educated RNs worked in six states: California (28.6 percent), Florida (10.7 percent), New York (10.4 percent), Texas (7.5 percent), New Jersey (6.9 percent), and Illinois (5.6 percent). The survey also found that foreign-educated RNs (64.7 percent) are more likely than the U.S. registered nurse population overall (56.2 percent) to be employed in hospitals and more likely to be staff nurses (72.6 versus 59.1 percent of employed RNs overall).

CGFNS International (2002) conducted a survey of foreign-educated nurses to generate baseline data that might better guide policy and inform both the profession and the public about the trends in nurse migration to the United States. The findings from this study are summarized below and place the nurse immigrating to the United States within the larger framework of global migration. Results were based on a sample of 789 foreign-educated nurses (461 U.S. registered and 328 non-U.S. registered) through a 76-question telephone interview. The survey revealed pertinent data on the immigration, education, licensure, and employment characteristics of foreign-educated nurses in the United States and provides one of the few such databases in the United States.

### **Foreign-Educated Nurses in the U.S. Workforce**

Registered nurses entering the United States for purposes of employment tend to be female, younger than their U.S. counterparts, and educated in either diploma or baccalaureate programs in their home countries. They are generally licensed in their home countries and have worked for a number of years before migrating to the United States (CGFNS, 2002).

Nearly two thirds of those who responded to the survey worked for some time as nurses in their home countries and most continued to hold a current foreign nursing license after entering the United States. Work experience ranged

from a low of 1 to 5 years to a high of 16 years and longer—but did not figure into job placement or promotion in the United States.

The overwhelming majority worked as staff nurses in a hospital setting in the United States, with the most common specialty areas being adult health and critical care. Seventy percent of the employed registered nurses worked in hospital settings, and 15 percent worked in nursing homes or extended care facilities. Less than 5 percent worked in community health despite the emphasis on that area in many nursing programs internationally. This may be due to the fact that community health nursing in the United States requires that the nurse function more independently than in a hospital setting; have an in-depth understanding of the U.S. health care system; have the communication skills necessary to bridge diverse populations; and be well acclimated to U.S. nursing practice. Since it takes foreign-educated nurses approximately 12 months to become fully acclimated, most tend to work in hospital and long term care facilities.

Eighty-one percent of the employed registered nurse respondents reported feeling moderately or extremely satisfied with their jobs as registered nurses, with most reporting that their nursing experience in the United States had met their expectations. The overwhelming majority indicated that it was certain or likely that they would be employed in nursing 5 years from the date of the survey.

Since graduating from their basic nursing education programs, 188 of the 789 survey participants, or 24 percent, had gone on to complete a formal academic program—161 completing a program in nursing. Forty percent of the 188 respondents obtained a baccalaureate degree, 26 percent an associate degree, and 13 percent a master's degree.

Most of the participants spoke at least one language in addition to English. Overall, 15 percent reported using a non-English language on the job, with Spanish being the most common. The majority indicated that they had experienced no difficulty speaking or understanding English in their work setting. Of those who did experience difficulty, telephone situations presented the greatest challenge. Almost two thirds of those who noted difficulty in speaking or understanding English had taken steps to improve their language proficiency.

Transitioning to the United States workforce presented numerous challenges for respondents, particularly related to immigration, licensure and entry into practice. Information on the U.S. health care system and on nursing in the United States, facilitation of the immigration process, and an in-depth, culturally sensitive orientation were methods suggested by respondents for easing their transition.

### *Comparison to the 2000 National Sample Survey of Registered Nurses*

Overall foreign-educated nurses in the CGFNS sample were approximately 10 years younger than participants in the 2000 National Sample Survey. A higher percentage of U.S. licensed foreign nurse graduates were educated in diploma (43.4 percent) and baccalaureate programs (38.8 percent) than in the NSSRN, in

which 29.6 percent of registered nurses were educated at the diploma level and 29.3 percent in baccalaureate programs. Although associate degree programs are not common internationally, 12.6 percent of respondents in the CGFNS survey did indicate that they completed a two-year nursing program. This is far less than the 40.3 percent of nurses in the NSSRN. Foreign nurse graduates were more likely to hold a baccalaureate degree as their basic nursing preparation than their U.S. counterparts.

Registered nurse participants in the CGFNS survey tended to have a higher employment rate overall (87.5 percent) compared to participants in the National Sample Survey (81.7 percent). A greater percentage of foreign nurse graduates worked full time as registered nurses as compared to the National Sample Survey of Registered Nurses (NSSRN), while the rate of part-time employment was higher among participants in the NSSRN. The most common work setting for nurses in both samples was the hospital. A greater percentage of foreign-educated nurses worked in long-term-care settings compared to nurses in the National Sample Survey. Interestingly, fewer foreign-educated nurses reported working in a community health setting in the United States than respondents in the NSSRN, despite the fact that much of nursing practice internationally tends to be in the community.

Participants in the CGFNS survey (30 percent) were more likely to complete additional academic nursing or nursing-related preparation following their basic nursing education than participants in the NSSRN (18.6 percent). As in the NSSRN, the highest level of academic preparation most often achieved by foreign nurse graduates was the baccalaureate degree. When these data were categorized by ethnic/racial group, those who identified themselves as Asians and Hispanics in the CGFNS survey were more likely to hold a baccalaureate degree than those who identified themselves as Black/African and Caucasian. In the NSSRN, Asians and Black/African Americans were more likely than Hispanics and white (non-Hispanics) to hold a bachelor's degree (CGFNS, 2002).

There are no data documenting the number of U.S.-born nurses who attend nursing schools outside the United States. CGFNS is aware of nurses who were educated in countries such as Germany because their parents were military or government employees. Those nurses are treated as foreign-educated nurses who were born outside the United States and must go through an educational credentialing process to ensure the comparability of education. A positive bonus is that they are English proficient and often multilingual.

A recent phenomenon is the establishment of off shore schools, such as St. Kitts International School of Nursing, which are recruiting U.S. students who have not been able to enroll in U.S. nursing programs because of the shortage of faculty and seats. Reportedly, there are Filipino students who are U.S. born or permanent residents who are returning to their parents' country where there are an abundance of nursing schools to enroll in a nursing program with the intent of returning to the United States to be licensed and to practice. Enrollment data

also show that there are significant numbers of nursing students who are immigrants enrolled in U.S. nursing schools. This is especially reflected in schools that have a high number of international students. Howard University's nursing school reportedly has had enrollments of over 50 percent of its students who were immigrants.

### **Transition to U.S. Practice**

In an effort to augment descriptive data about foreign-educated nurses in the United States, CGFNS International investigated challenges the nurses confront in their transition to U.S. practice by surveying members of the American Organization of Nurse Executives who employed foreign-educated nurses. The study's outcomes indicated that employers recognize the need to address the transition issues of foreign-educated nurses. Precepting, clinical assessment, and a more extensive orientation were the most common measures put in place by nurse executives working in hospitals that employed foreign-educated nurses. Precepting was the measure identified by nurse executives as the most critical to a successful transition (Davis and Kritek, 2005).

Additional services provided to aid in the transition were English language classes, temporary housing assistance, classes on medical slang and idioms, and assertiveness training. Cultural workshops for staff, orientation to the U.S. health care system, and cultural and regional socialization activities, such as welcome and support groups, also were cited as measures introduced to facilitate transition to practice (Davis and Kritek, 2005). Many nurse executives indicated that personal interaction with the nurse prior to coming to work in the hospital helped to make the foreign-educated nurse more comfortable in the new surroundings. Personal interaction included formal "buddy" and pen pal programs through which staff corresponded with foreign-educated nurses prior to their arrival.

The cost of orienting a foreign-educated nurse is generally comparable to that of a new graduate but is influenced by a number of factors: the similarity of the health care system in the nurse's home country to that of the United States; the similarity of the nurse's scope of practice to that of U.S. nurses; the nurse's command of the English language; the amount of clinical experience the nurse had prior to entering practice in the United States; and the amount of orientation to the United States and its health care system by the recruiting firm, if one is used.

### *Challenges During Transition to Practice*

Although most foreign-educated nurses look forward to working in the United States, their adjustment to practice can be affected by several factors, such as the health care system of the nurse's home country, language competence, knowledge of medications and their administration, and familiarity with technology (Edwards and Davis, 2006).

- **Variations in Health Care Systems:** The more similar a nurse's health care system is to that of the United States, the easier the transition and the more comfortable the nurse is in the clinical setting, focusing more on specific practice needs than on the transition process itself. Foreign nurse graduates consider receiving information about the U.S. health care system as the most necessary component of clinical orientation. Because health care systems vary greatly from country to country, they believe it is essential to have an understanding of how the U.S. system works in order to function competently within that system.

Orientation to the health care system should include a description of the health team, its members, and their roles. Information on how the system is accessed by patients and the nurse's role in management of care also should be included. Although nurses educated outside the country will not come to understand the system thoroughly until they work within it, preliminary knowledge helps to make the transition to U.S. practice less stressful (Davis and Kritek, 2005).

- **Language Competency:** Nurses for whom English is a second language have repeatedly indicated to CGFNS that perception of their nursing competence by patients and health care personnel is tied to their ability to speak English as a native English speaker. Employers cite language competence as the most critical skill that foreign-educated nurses need during their first year of practice in the United States (Davis and Kritek, 2005).
- **Knowledge of Medications and Pharmacology:** Western medicine relies heavily on drugs to treat patient illness, many of which are not used in other countries. Some of these medications are available internationally but have different trade names, while others are not yet known internationally, making it difficult for the nurse entering U.S. nursing practice. Medication administration can be intimidating, mainly because of the volume of medications given on a daily basis in the United States and the various medication routes. Most of the errors made by foreign-educated nurses in their first year of practice are related to medication administration (Davis and Kritek, 2005).
- **Proficiency in Technology:** The U.S. health care system relies heavily on technology for diagnostic, preventive, and palliative care—much more so than other countries around the world. Because foreign-educated nurses tend to work in adult health and critical care units in hospitals, they are confronted with technology on a daily basis as they transition to U.S. practice. However, foreign-educated nurses participating in a joint CGFNS/Excelsior College study on their perception of readiness for practice in the United States indicated that technology was one of the areas in which they felt least prepared (Edwards and Davis, 2006).

### Acculturation to the United States

Acculturation—the process of adapting or learning to take on the behaviors and attitudes of another group or culture—is an essential aspect of working in a host country. For nurses transitioning to practice in the United States, it generally takes 4 to 6 months to become fully productive and 12 months to feel fully acclimated to the new setting (Adeniran et al., 2005).

Acculturation can be divided into four phases: acquaintance, indignation, conflict resolution, and integration. Familiarity with the process of acculturation helps foreign-educated nurses know what to expect within their first year of practice in a new culture and new work environment. It also helps employers to plan an orientation that addresses the foreign nurse graduate's needs when entering practice in a host country.

The “acquaintance phase” of acculturation occurs from entry into the culture to 3 months post arrival. It is the stage of initial contact, during which time there is excitement about the new life and new place of employment. This is the time that foreign-educated nurses become oriented not just to the practice environment but also to the community—the time during which they begin to develop a supportive social network of both colleagues and friends (Adeniran et al., 2005).

The “indignation phase” occurs 3–6 months after arriving in a host country. The feelings of excitement about the new position and the new environment give way to feelings of anxiety, which can lead to a sense of isolation and psychological discomfort. Understanding the U.S. health care system and their role in it, and determining what is expected of them and how quickly it is expected, can become overwhelming for foreign-educated nurses. It is during this time that a preceptor is critical. The support that preceptors provide is invaluable because they have knowledge of the system and contacts within and outside of the system. This also is the time that the foreign-educated nurse needs to rely on family, friends and colleagues for support, especially those who have been through a similar experience (Adeniran et al., 2005).

Now also is the time for foreign-educated nurses to seek out regional support groups designed to help immigrants adapt to their new life. Such support groups are generally comprised of individuals with the same ethnic background who have been through the same immigration and transition processes and are willing to share their experiences with those who are new to this country (Nichols et al., 2009).

The “conflict resolution phase” generally occurs 6–9 months after arrival in a host country. This is the time when foreign-educated nurses need to clarify their new roles, gain insight into problem solving, and make personal and professional decisions about their new workplace and community. During this phase they may feel that they are a part of two cultures—their native culture and its work values and the culture of the U.S. health care system and U.S. nursing (Adeniran et al., 2005).



It is in this phase that preceptors and colleagues should help foreign-educated nurses determine what values and beliefs are essential to them. What values and knowledge from their own culture make them comfortable as a nurse in the United States? Which of the values of the new culture and the new workplace can they incorporate into their practice as a nurse? What aspects of nursing practice in the United States do they find difficult to adopt—and why? Exploring these issues with a preceptor, or someone familiar with the process of adapting to a new culture and work environment, will be invaluable to the adjustment of the foreign-educated nurse (Nichols et al., 2009).

The “integration phase” of acculturation occurs 9 to 12 months after arrival. Foreign-educated nurses now experience renewed enthusiasm for their work and their new country, have reconciled the differences between their native culture and their host culture, and are confident in their ability to practice as a nurse in the new culture. It is a time when foreign-educated nurses know they made the right decision to migrate—a time when they will have a sense of belonging to the new culture and, most importantly, a sense of the skills and knowledge that they bring to the profession (Nichols et al., 2009). Because acculturation can take up to a year, preceptors should be available to foreign-educated nurses during that entire time.

### **Foreign-Educated Nurses and Safe Practice**

Foreign-educated nurses generally demonstrate safe practice within 6 months of entering practice. Employers report that there are few, if any, differences in practice after that time. Most errors made by foreign-educated nurses occur during the first 6 months of practice. They usually are errors in medication administration, and tend to occur after preceptorship has been concluded. Nurse executives report that the error rate of foreign-educated nurses is comparable to that of new U.S. graduates. Overall, the experiences of hiring foreign nurse graduates are viewed as positive—mainly due to the characteristics of the nurses themselves (Davis and Kritek, 2005).

### **Summary**

During the last 10 years CGFNS International has conducted studies in an effort to provide data that may assist the U.S. health care community with integrating the foreign-educated nurse into the health care delivery system. These studies provide a glimpse of the overriding concerns and issues that have particular impact on recruitment and utilization best practices. The findings, however, are best understood within the context of the diverse education and licensure systems of foreign-educated nurses, since this diversity has significant impact on the skill mix of the U.S. nursing workforce.

The following sections of the paper provide an overview of the education

(entry level) and regulatory systems in two groups of countries: those that traditionally have provided registered nurses to the U.S. nursing workforce and those countries that are emerging as sources of migrating nurses. Summary tables are provided to better make comparisons among the supplier countries.

### **HISTORIC SUPPLIERS OF REGISTERED NURSES TO THE U.S. WORKFORCE**

Nurses entering the United States for purposes of employment must undergo a federal screening program as part of the visa process to ensure that their credentials are valid, that their education and licensure is comparable to that of a nurse educated in the United States, and that they are proficient in written and spoken English. CGFNS International was named in the 1996 immigration law as an agency to provide such screening, thus, the CGFNS VisaScreen Program is one of the requirements for nurses seeking an occupational visa to work in this country. CGFNS is an immigration neutral organization and does not make decisions on who actually receives a visa nor does it have oversight of foreign-educated nurses entering the country (see Appendix A, About CGFNS International, Inc.). CGFNS VisaScreen® data indicate that from 2005 to 2009, the top countries of education of applicants were the Philippines, India, Canada, the Republic of Korea, and nurses born outside of, but educated in, the United States (CGFNS, 2010a).

### **Philippines**

#### *Overview*

The Philippines has traditionally been considered a source country, one that prepares nurses for the global market. Filipino nurses can be found in almost all countries around the world. However, the majority of nurses educated in the Philippines have usually migrated to the Middle East, the United Kingdom, Canada, Australia, and the United States. CGFNS VisaScreen data, 2005–2009, indicate that nurses educated in the Philippines and seeking an occupational visa to practice in the United States most frequently identified their intended states of practice as California, New York, Texas, Florida, Illinois, and Vermont (CGFNS, 2010b). It should be noted that some states, such as Vermont and California, are considered “gateway” states. Nurses often obtain licensure in these states because requirements are viewed as less burdensome and then endorse into the actual state of intended practice.

#### *Nursing Education*

Prior to 1984, nursing education in the Philippines was at the diploma and baccalaureate level. Currently, there is only one type of nursing education

program, the Bachelor of Science in Nursing, which is housed in colleges and universities and is 4 years in length. Candidates can apply after completion of 10 years of primary (6 years) and secondary (4 years) education.

Nursing education in the Philippines is modeled after that of the United States and includes courses in the humanities and social sciences, as well as in mathematics and the natural sciences. Nursing content focuses on the four major areas of nursing (adult health, maternal/infant, psychiatric/mental health nursing and nursing of children), as well as community health, nursing research and nursing administration. Nursing courses contain both theory and clinical content, with clinicals being termed “related learning experiences” (CGFNS, 2009).

The number of clinical hours may vary from school to school. Some schools have integrated courses so that certain areas such as psychiatric/mental health nursing and adult health nursing are not individual tracts—a practice in U.S. programs as well. With the advent of technology more programs are integrating simulation to provide clinical experience. Because of the nursing shortage some facilities cannot accommodate students, and those that do, often are unable to accommodate all the students in the clinical areas. Consequently, more and more programs are using simulations to meet the objectives of the related learning experiences.

### *Accreditation*

Education in the Philippines is overseen by two agencies: the Commission on Higher Education (CHED), which is responsible for baccalaureate and higher education programs, and the Technical Education and Skills Development Authority (TESDA), which oversees any program below the baccalaureate level. The Philippine government is promoting the concept of “ladderization” of education. The ladder concept would apply to nursing in the following manner: If an individual entered a nursing program and left at any given point in that education, they would be employable based on the most recent semester completed and certificate achieved according to the following schema:

- At completion of first semester: caregiver certificate. Graduates are able to provide basic care to children, the elderly and the disabled in the home or in an institution—may include course in home management.
- At completion of second semester: nurse aide certificate. Graduates function under the supervision of a registered nurse. Job skills are comparable to nurse aides in the United States.
- At completion of third semester: nursing assistant certificate. Graduates function under the supervision of a registered nurse. Job skills are comparable to a certified nursing assistant in the United States.
- At completion of fourth semester: practical nurse certificate (certified by TESDA). Graduates are able to assist physicians and nurses and are

responsible for direct patient care in hospitals, nursing homes, physician offices, clinics and community agencies.

- At completion of third year: midwifery certificate. Graduates are certified as midwives rather than nurse midwives. Midwives are responsible for the health of both mother and child, only referring to obstetricians if there are medical complications. By law they must have a named supervisor of midwives to ensure safe practice. Midwives work in multidisciplinary teams in both hospital and, increasingly, community health care settings.
- At completion of fourth year: professional nurse degree (must complete Board of Nursing examination given by the Professional Regulation Commission). Four-year education is under the oversight of CHED.

If a school is ladderized, both TESDA and CHED are involved in the educational oversight; if the school is not ladderized, only CHED has oversight. Schools have the option of ladderizing—as of September 2008, 40 percent of schools were ladderized (Personal communication between Nona Ricafort, PhD, Officer-in-Charge, CHED and Barbara Nichols and Catherine Davis, CGFNS, September 17, 2008).

There has been a moratorium on opening professional nursing programs in the Philippines, due primarily to (1) the proliferation of poor quality nursing programs whose graduates are not able to pass the Philippine licensure examination; (2) the high unemployment rate of nurses in the Philippines—it is estimated that over 400,000 Philippine nurses are not able to find jobs; and (3) U.S. immigration retrogression, which has made it more difficult for Philippine nurses to obtain U.S. visas.<sup>9</sup>

In an effort to bolster Philippine nursing education, CHED, in June 2008, mandated a new, 5-year baccalaureate curriculum that would increase both theory and clinical throughout the program. The schools were to implement the curriculum, which is competency based and introduces nursing in the first semester, by the end of 2009 (Personal communication between Hon. Eufemia F. Octaviano, RN, EdD, Chairperson, Philippine Board of Nursing and Barbara Nichols and Catherine Davis, CGFNS, September 17, 2008). Because of opposition to the 5-year program from various factions, including students, prospective students, and their parents, the program is under review and a hold has been placed on implementation.

### *Regulation*

Once the nursing program is completed, the baccalaureate graduate is allowed to sit for the nurse licensure examination, which is administered by the

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<sup>9</sup>Immigration retrogression is a U.S. State Department process that limits the number of visas issued when the number of applicants exceeds the number of available visas.

Professional Regulation Commission (PRC). The examination is given two times a year and consists of five parts: Community Nursing; Maternal and Child Nursing; Medical Surgical Nursing; Fundamentals of Nursing; and Psychiatric Nursing. Questions for the examination are written by the Board of Nursing.

Passing the licensure examination enables the graduate to take the nursing oath, which is required to enter work as a registered nurse in the Philippines. The oath ceremony occurs after successful completion of the licensure examination and is administered by the Board of Nursing or a government official authorized to administer oaths. The nursing license is national in scope and allows the holder to work in all provinces in the Philippines.

The PRC does not recognize or regulate vocational nursing programs, practice or graduates (Personal communication between Hon. Ruth Padilla, Chairperson, Professional Regulation Commission and Barbara Nichols and Catherine Davis, CGFNS, September 17, 2008).

### *Licensure Renewal*

Prior to 2000, registered nurses were required to renew their licenses every three years. As of 2000, registered nurse licensure is valid until either revoked or suspended and does not have to be renewed. However, renewal fees will accrue. Should the nurse require license validation at some time, such as when applying for a visa, he/she must satisfy those back fees before the validation will be performed by the PRC (CGFNS, 2009). Nurses who leave practice and who wish to reenter may do so by paying back fees.

### *Scope of Practice*

According to Philippine law, a person shall be deemed to be practicing nursing when he/she “singly or in collaboration with another, initiates and performs nursing services to individuals, families and communities in any health care setting and across the life span. As independent practitioners, nurses are primarily responsible for the promotion of health and prevention of illness. As members of the health team, nurses collaborate with other health care providers for the curative, preventive, and rehabilitative aspects of care, restoration of health, alleviation of suffering, and when recovery is not possible, towards a peaceful death” (Congress of the Philippines, 2002).

Nurses are expected to provide care through use of the nursing process. Nursing care includes, but is not limited to, “traditional and innovative approaches, therapeutic use of self, executing health care techniques and procedures, essential primary health care, comfort measures, health teachings, and administration of written prescription for treatment, therapies, oral, topical and parenteral medications, internal examination during labor in the absence of antenatal bleeding and delivery” (Congress of the Philippines, 2002).

The scope of practice further allows nurses to “establish linkages with com-

munity resources and coordination with the health team and provide health education to individuals, families and communities. They may undertake consultation services; engage in such activities that require the utilization of knowledge and decision-making skills of a registered nurse; and undertake nursing and health human resource development training and research, which shall include, but is not limited to, the development of advance nursing practice” (Congress of the Philippines, 2002).

The nurse is duty-bound to observe the Philippine Code of Ethics for Nurses and uphold the standards of safe nursing practice. The nurse also is required to maintain competence through continued professional education to be provided by the accredited professional organization or any recognized professional nursing organization.

### *Supply and Demand in the Philippines*

Supply exceeds demand for nurses in the Philippines, with over 400,000 registered nurses unable to find employment in their home country as there were only 60,000 nursing jobs available (Nowhere to train, 2008). The recent immigration restrictions in the United States and the United Kingdom, two of the choice destination countries for Philippine nurses, have further exacerbated the numbers of unemployed nurses in the Philippines. Compounding that problem is the graduation of approximately 100,000 nurses each year, over 40 percent of whom, in recent years, have been unable to pass the Philippine licensure examination. Pass rates have declined from 54 percent in December of 2005 to 39.7 percent in November of 2009.

### *Issues and Challenges*

- **Employment Patterns:** To be eligible to leave the Philippines for employment overseas, nurses must have at least 2 years of work experience in a tertiary hospital. Because of the oversupply of nurses, these types of clinical experiences are not always available to those who seek overseas employment. Consequently, many volunteer to work for experience rather than pay—and still others take non-nursing positions in such areas as call centers and medical transcription. Still others enter family businesses (Mateo, 2008).
- **Physician Retraining:** A phenomena that has emerged in recent years is the retraining of physicians to become nurses so that they can emigrate under the Philippine government’s export policy. Government-regulated health care salaries are so low that it is estimated that 100,000 nurses work outside the profession or migrate to increase their earning capacity (Gorman, 2007). For the same reason physicians are now retraining to

become nurses so that they can migrate to countries in which health care salaries are higher.

- **Remittances:** The remittances sent back home by nurses who have migrated to countries in which the salaries are higher than in the Philippines have had a substantive effect on the Philippine economy and have supported the local population. Remittance refers to the portion of migrant income that, in the form of either funds or goods, goes back into the home country, primarily to support families back home, to cut poverty, and to improve education and health within the family (Focus Migration, 2006). Until 5 years ago, this transfer of funds was thought to be minor. However, nurse remittances alone increased from less than \$2 billion in 1970 to over \$70 billion in 1995 (Seago, 2008).
- **Practical Nurse Programs:** Because of the moratorium on baccalaureate programs, practical nurse programs have proliferated in the Philippines—with one estimate being as high as 200 programs. Practical nurse programs can be part of the four year baccalaureate curriculum (ladderized) or can stand alone. The stand-alone programs must show that the graduate is eligible to matriculate to a 4-year program or that there is an affiliation with a school abroad for completion of the four year baccalaureate program. Practical nurses are not licensed under the PRC but are certified by TESDA.

As of 2008 there was no standardized curriculum for practical nurse programs and considerable use of simulation to meet clinical assignments (Personal communication between Nona Ricafort, PhD, Officer-in-Charge, CHED and Barbara Nichols and Catherine Davis, CGFNS, September 17, 2008). Graduates of these Philippine practical nurse programs, for the most part, do not meet U.S. state requirements for practical nurses and would most likely be identified as nursing assistants or home health aides in most states. However, each state makes this determination based on their rules and regulations for licensure.

Presently, the Professional Regulation Commission, which regulates health care professions in the Philippines, does not recognize, license or regulate practical nursing. It has not established standards for practical nursing education or licensure, nor does the PRC approve practical nursing schools. The major nursing organizations and the Board of Nursing are opposed to the practical nurse programs as well as to ladderization. They have opposed all attempts to change the law regulating nursing to include practical nurses, mainly because of the high unemployment rate of registered nurses in that country (Personal communication between Hon. Ruth Padilla, Chairperson, Professional Regulation Commission and Barbara Nichols and Catherine Davis, CGFNS, September 17, 2008).

## India

### *Overview*

India, in recent years, has been considered a source country for migration, supplying nurses to the workforces of countries such as the United States and the United Kingdom, as well as to the Middle East. Nurses educated in India form the second largest cohort of nurses seeking occupational visas to practice in the United States (CGFNS, 2010a).

Data from the National Council of State Boards of Nursing (NCSBN) also indicate that India is second to the Philippines in the number of nurses taking the U.S. licensure examination, although the numbers are much smaller. From January through September of 2009, 11,854 nurses educated in the Philippines sat for the NCLEX-RN® examination compared to 1,086 educated in India (NCSBN, 2009b). CGFNS VisaScreen data, 2005-2009, indicate that nurses educated in India and seeking an occupational visa to practice in the United States most frequently identified their intended states of practice as Vermont, Florida, California, New York, and Texas (CGFNS, 2010b).

### *Nursing Education*

Nursing education in India is at both the diploma and baccalaureate level. Diploma programs, housed in schools of nursing affiliated with teaching hospitals, are generally 3–3 1/2 years in length and post-secondary in nature, following completion of 12 years of primary and secondary education. Graduates are awarded a Diploma in General Nursing and Midwifery. This enables the graduate to sit for the State Nursing Council Examination and to become registered as a nurse and midwife in India. Three Board examinations are conducted, one at the end of each year. The successful candidate is registered as a nurse and midwife by the respective state nursing council (Current Nursing, 2010).

The course in general nursing and midwifery consists of two years general nursing, one year in community health nursing and midwifery, and a 6-month internship that includes courses in nursing administration and nursing research. India is in the process of phasing out these programs and replacing them with baccalaureate programs. This modeling after the Western Hemisphere is not limited to nursing but is also being experienced in the allied health fields such as physical and occupational therapy.

The Bachelor of Science in Nursing is a generic, 4-year, university-based program entered after completion of 12 years of primary and secondary education. Successful completion of the program allows the graduate to sit for the University Examination and, ultimately, apply for registration with the State Nursing Council.

The 4-year program includes courses in the humanities and social sciences, as well as the physical and biological sciences. Nursing content focuses on the



four major areas of nursing (adult health, maternal/infant, psychiatric/mental health and nursing of children), community health, nursing research, administration and teaching.

The Bachelor of Nursing (post-basic) is a 2-year RN-to-BSN program for those holding a Diploma in General Nursing and Midwifery. The goal of the program, which leads to the Bachelor of Science in Nursing, is the preparation of a generalist nurse. Candidates for the program must be registered nurses who have 2 years of experience and a working knowledge of English (Indian Nursing Council, 2009a).

### *Accreditation*

The Indian Nursing Council is the accrediting body for nursing education in India. The Council is an autonomous governmental body constituted by law in 1947 to establish uniform standards of training for nurses, midwives and health visitors. The Council approves nursing programs and is advisory to the individual state nursing councils and examining boards (Indian Nursing Council, 2009b).

### *Regulation*

Nursing registration in India varies from state to state. Each state has a nursing council comparable to a state board of nursing in the United States, which is responsible for the registration of its nurses. Most Indian states do not require registration renewal. Those that do, require renewal every 3–5 years.

### *Scope of Practice*

India subscribes to the ICN definition of nursing, viewing nurses as qualified and authorized to provide nursing services for the promotion of health, the prevention of illness and the care of the sick. The entitlement to practice as a nurse and/or midwife is determined by the law for nursing and midwifery; that is, the Indian Nursing Council Act of 1947 (ANMC, 2009).

The Bachelor of Science in Nursing Syllabus and Regulations of the Indian Nursing Council, established in 1981, defines the essential elements of nursing practice in India as those that are related to “maintaining or restoring life functions, assessing the physical and emotional state of patients, assessing environmental factors, and formulating and implementing a plan for the provision of nursing care based on scientific principles” (Indian Nursing Council, 2009c).

### *Supply and Demand*

India has experienced what has been termed a significant drain on its nursing labor force due to circular migration. Circular migration is a term used to describe a phenomenon whereby nurses, motivated by higher salaries and better

working conditions work abroad temporarily then return to their country of origin. It should be noted that circular migration often is mandated in agreements between the host and source countries. For example, Cuba allows its nurses to go to Trinidad/Tobago for a period of 2 years after which time they must return home.

Circular migration also may be a matter of public policy to ensure that there is a continuous feed of health care professionals to provide care to the country's citizens or it can be an agreement negotiated by recruiters with a country in order to function in that country. Some utilize such a policy as an educational development model so that the professional returns with international experience, which is then shared with his/her colleagues at home and enhances the quality of education.

Hawkes and colleagues (2009) found that Indian nurses who engaged in circular migration tended to be female and older than the nursing average, with more work experience and greater seniority than the general nursing population in India. It has been argued that circular migration does not produce the same degree of loss to a country's skilled labor force as permanent migration. However, the Hawkes and colleagues (2009) study indicated that the collective labor time spent outside of the country suggests temporary migration may have a profound and underestimated impact on the Indian nursing workforce. They found that the median time of working outside of India was 6 years, a period of time that allowed the nurses to sufficiently increase their incomes. Hawkes and colleagues (2009) further estimated that up to one-fifth of the nursing labor force in India may be lost to wealthier countries through circular migration.

### *Issues and Challenges*

- **Recruitment of Nurses:** As the demand for nurses rises worldwide, commercial recruiters have become increasingly interested in exporting nurses from India to countries experiencing shortages. At present India does not have enough professional nurses to meet its own domestic needs and has a lower ratio than the recommended international norm of 2:1 to 3:1 for nurse/physician ratios. Shortages in rural areas are the most urgent (Khadria, 2007).

Recruitment has focused on Indian nurses because of their education and their ability to speak English. Delhi-based agencies tend to focus on the U.S. market while those in Kochi and Bangalore mainly facilitate the migration of nurses to the Gulf countries, Australia, New Zealand, Singapore, and Ireland. Thus, India is faced with the double challenge of producing more nurses for immigration and at the same time filling more vacancies within India (Khadria, 2007).

## Canada

### *Overview*

Canada is considered both a source and a host country for migration. Many Canadian nurses choose to work in the United States under the North American Free Trade Agreement (Trade NAFTA), either living in Canada and crossing the border daily or moving to the United States temporarily. Canada also may be considered a host country, receiving nurses from such countries as the Philippines, India, Russia and the Caribbean to mitigate its own nursing shortage.

Approximately 10 percent of Canadian nurses seeking entry into the United States under Trade NAFTA are nurses born outside of Canada (CGFNS, 2007). CGFNS VisaScreen data, 2005–2009, indicate that nurses educated in Canada and seeking to practice in the United States most frequently identified their intended states of practice as California, Michigan, New York, Texas, and Arizona (CGFNS, 2010b).

### *Education*

Education and health care are provincial responsibilities under the Canadian constitution. Thus the systems of education are ones in which the decision-making authority is provincial; however, through organizations such as the Canadian Nurses Association (CNA), national coordination is achieved through promulgation of guidelines and standards. CNA is a federation of 11 provincial and territorial nurses' associations and colleges representing more than 136,200 registered nurse and nurse practitioner members, which is approximately 53 percent of employed nurses. Quebec is not a member of CNA.

Nursing education programs in Canada require completion of 12 years of primary and secondary education for entry. There are three types of programs for registered nurses: 3-year diploma programs, which are being phased out, 4-year generic baccalaureate programs and post-basic baccalaureate programs for nurses holding a diploma in nursing that are 2–3 years in length. Alberta and British Columbia also offer entry level psychiatric nursing diploma, certificate and degree programs. Graduates of these programs are not considered general nurses, are licensed under a college or association separate from nursing, and are prepared to work only in the field of mental health.

CNA began advocating for degree preparation of nurses in 1982 and has worked with the provinces to achieve that goal. In 2004 the Canadian Association of Schools of Nursing (CASN) and CNA issued a joint position paper that recommended a baccalaureate degree in nursing as the educational entry-to-practice standard for registered nurses in Canada (CASN and CNA, 2004).

Today, the majority of provinces require the baccalaureate for entry into the profession. Students in Alberta, Manitoba, Quebec, and the Territories can still

choose either a diploma or a degree program to prepare for a career in nursing but they must be aware of the trend toward a university level of education. In all other provinces students must obtain a baccalaureate degree in nursing to prepare for a nursing career. In all provinces the change to the degree as a minimum requirement for entry into practice applies only to new entrants and has no effect on the eligibility of currently registered diploma nurses for continuing registration (CNA, 2009a).

### *Accreditation*

The Canadian Association of Schools of Nursing is officially recognized as the national agency responsible for the accreditation of nursing programs throughout Canada. Accreditation in Canada is a voluntary process, comparable to that of the United States in that it requires a self evaluation report (including information on the nursing program, administration, faculty, students, curriculum, learning resources and graduates) as well as an on-site visit (CASN, 2009). In addition to profession-specific accreditation processes, nursing programs may be reviewed as part of periodic quality review processes established by provincial authorities for universities and colleges.

### *Regulation*

The regulatory system for nursing in Canada reflects the country's federal and provincial/territorial government structure. Health care delivery is the responsibility of the provincial and territorial governments, as is the regulation of all health care professions. Provinces and territories grant responsibility for nursing regulation to professional colleges and/or nursing associations. Therefore, a nurse seeking to practice nursing in a specific province or territory must apply to be licensed and registered by the college and/or association in that province or territory. There is no national license in Canada; each province or territory licenses nurses within the individual jurisdiction (CNA, 2010). The licensure fee, except in Ontario and Quebec, includes both licensure registration and membership in the provincial and national nurses association.

All provinces, with the exception of Quebec, require licensure candidates to take the Canadian Registered Nurse Examination (CRNE) developed by CNA. The CRNE is a multiple choice examination that is competency based and reflects a primary health care nursing model. The examination consists of approximately 300 multiple-choice questions, about 40 percent of which are independent questions and 60 percent are case based.

The framework developed to identify and organize the competencies in the CRNE is designed to assess Professional Practice (accountability for safe, competent and ethical nursing practice); Nurse-Person Relationship (therapeutic partnerships established to promote the health of the person); Nursing Practice: Health and Wellness (recognizing and valuing health and wellness as a resource);

and Nursing Practice: Alterations in Health (care across the lifespan for the person experiencing alterations in health that require acute, chronic, rehabilitative or palliative care) (CNA, 2009b).

The Québec Ordre des Infirmières et Infirmiers du Québec (OIIQ) grants licensure to nurses in Quebec. Two components must be met to obtain a registered nurse license in that province:

- Successful completion of a licensure examination. The Quebec licensure examination, offered twice a year, is a comprehensive examination that includes a written section (short answer) and an objective, structured clinical evaluation section.
- Proof of proficiency in the French language. Quebec law requires that candidates possess a working knowledge of the French language and have proficiency in verbal and written French. Candidates are required to pass a language examination unless they can show completion of 3 years of full-time instruction in a French, post-primary school (OIIQ, 2009).

### *Licensure/Registration Renewal*

License renewal in Canada varies by province, but is generally on an annual basis. Most provinces have continued competency requirements that must be met annually for registration renewal. The Code of Ethics and Standards of Practice of the jurisdiction form the basis of continued competency programs and are the framework that nurses use to reflect on their practice in order to maintain competence throughout their careers (CNA, 2000).

For example, when nurses apply to the College and Association of Registered Nurses of Alberta (CARNA) for a registered nurse practice permit, they must assess their practice by reflecting on the CARNA Nursing Practice Standards (NPS), collect feedback about their practice, identify their learning priorities and report the NPS indicator(s) that they will focus on for the coming year or remainder of the current practice year. Continuing Competence Program (CCP) activities are reported annually. Competence conditions are imposed on a member's practice if the member does not provide evidence of having met the continuing competence program requirements. Members applying for, or renewing, RN practice permits report selected indicators for professional development for the upcoming practice year. At registration/renewal for the subsequent practice year, members report on the implementation of the completed year's learning plan(s) and any influence the learning had on their nursing practice (CARNA, 2009).

### *Scope of Practice*

The activities that registered nurses are authorized to perform are set out in legislation by each province/territory and based on the definition of nursing

within that jurisdiction. While each scope of practice is specific to the respective province/territory, there are similarities. Most address health promotion, illness prevention, and provision of care—with many also focusing on teaching and coordination of care.

Ontario's scope of practice statement, for example, indicates that the “practice of nursing is the promotion of health and the assessment of, the provision of care for, and the treatment of health conditions by supportive, preventive, therapeutic, palliative and rehabilitative means in order to attain or maintain optimal function (CNO, 2009). Nova Scotia's definition of practice, contained within the Registered Nurses Association Act of 1985, also addresses health promotion, illness prevention and the provision of care. It defines nursing as “the application of professional nursing knowledge or services for compensation or the purpose of assisting a person to achieve and maintain optimal health through (1) promoting, maintaining and restoring health; (2) preventing illness, injury or disability; (3) caring for the sick and dying; (4) health teaching and health counseling; or (5) coordinating care (CRNNS, 2009).

### *Supply and Demand*

The Canadian Nurses Association estimates that there was a shortage of nearly 11,000 full-time equivalent (FTE) registered nurses in Canada in 2007, a shortage that is expected to increase to almost 60,000 FTEs by 2022 if no policy interventions are implemented. CNA identified short-term policy solutions to address the shortage that include increasing registered nurse productivity and reducing absenteeism. Long-term solutions focus on reducing registered nurse exit rates, reducing attrition rates in entry-level education programs, increasing enrollment in registered nurse programs, and reducing international in-migration. The combined effects of the policy solutions are believed to be sufficient to eliminate the registered nurse shortage in Canada within 15 years (CNA, 2009c).

### *Issues and Challenges*

- **Aging Nursing Workforce:** Canada, like the United States, is experiencing an aging of its nursing workforce. Recent figures from Canada reveal that registered nurses between age 50 and 54 years make up 17 percent of the workforce, compared to 11 percent in 1994 (Canadian Institute for Health Information, 2008). Over the next 10–15 years both Canada and the United States will experience a large exodus of nurses from their workforces as nurses retire—at a time when demand for nursing and health care is on the rise due to the growth in the older population.

This trend, if left unaddressed, is set to deepen the current shortage of employed nurses, especially if there continues to be a shortfall of new

nurses entering the labor market. It also will affect developing countries where the age profile is often very different but where aggressive international recruitment efforts may drain the supply of nurses in active practice (ICN, 2008). CNA, as noted previously, has taken the lead in recommending short and long term policy solutions for eliminating the nursing shortage in Canada within 15 years.

## United Kingdom

### *Overview*

The United Kingdom has served as both a source and host country for migration. As a host country, the United Kingdom experienced an increase in immigration in the last decade, particularly from India, Australia, the Philippines and sub-Saharan Africa, so that in the early to mid-2000s, there were more overseas nurses entering the country than nurses graduating from U.K. schools.

Nurses educated in the United Kingdom have traditionally migrated to Australia, the United States, New Zealand, and the Republic of Ireland, and also have been recruited to the Caribbean. CGFNS VisaScreen data, 2005–2009, indicate that nurses educated in the United Kingdom and seeking an occupational visa to practice in the United States most frequently identified their intended states of practice as California, Arizona, Florida, New Mexico, and New York (CGFNS, 2010b).

Today, the United Kingdom does not consider nursing a shortage profession and has, in fact, tightened its immigration requirements for overseas nurses. Nurses from the European Union countries may enter the United Kingdom for purposes of employment. While their numbers are not large, they are rising, with most nurses coming from Poland, Romania, Bulgaria, and Germany (NMC, 2009a).

The Nursing and Midwifery Council (2009) reports that the number of overseas nurses entering the Register (excluding nurses from the EU countries) declined significantly from 14,122 overseas entries in 2004 to 2,309 overseas entries in 2008. There was a small corresponding increase in the number of EU educated nurses entering the Register during that same time period—from 1,033 entries in 2004 to 1,872 entries in 2008 (NMC, 2009a).

### *Education*

Prior to the early 1990s, nursing education programs in the United Kingdom were 3 years in length and located in hospital-based schools. Currently, all nursing programs are located in, or affiliated with, university settings. This transition from hospital setting to university began with Project 2000, an initiative to make

nursing a more professional career and to move nursing education into higher education.

Education programs are comprised of a 12-month Common Foundation Programme (CFP) and a 2-year Branch Program in one of the following specialty areas: adult nursing, mental health nursing, learning disability nursing or children's nursing. All students are required to take the Common Foundation Programme for 12 months and then select one of the Branch Programs. Both the CFP and Branch Programs contain 50 percent clinical and 50 percent theory. The Branch Program also allows a period of clinical practice of at least three months towards the end of the program to enable students to consolidate their education and competence in practice. At completion of the program the graduate is awarded a Diploma of Higher Education in Nursing or, if they have completed a degree program, a Bachelor of Science in Nursing (NMC, 2009b).

### *Regulation*

The Nursing and Midwifery Council (NMC) was established under the Nursing and Midwifery Order of 2001 as the successor to the United Kingdom Central Council for Nursing, Midwifery and Health Visitors (UKCC) and the four National Boards for Nurses, Midwives and Health Visitors for England, Northern Ireland, Scotland and Wales. The NMC registers all nurses, midwives and specialty community public health nurses and ensures that they are properly qualified and competent to practice in the United Kingdom. The NMC also establishes the standards of proficiency to be met by applicants to different parts of the register, the standards it considers necessary for safe and effective practice.

By law (Nursing and Midwifery Order 2001), the Register is divided into individual sections with each section having a designated title indicative of different qualifications and education. The registrant is entitled to use the title corresponding to that part of the NMC Register in which he/she is listed. Currently, there are three parts to the Register: Nurses, Midwives, and Specialist Community Public Health Nurses. Each profession has its own education, registration and practice standards (Statutory Instruments, 2002).

To become a registered nurse, an applicant must complete a 3-year program at a school or college of nursing approved by the NMC and linked to a university. Once completed, the graduate must apply for the NMC registry. The NMC evaluates the graduate's credentials and if approved, the graduate may practice as a nurse. Under the Nurse's part of the register the nurse selects the field of practice that corresponds to the Branch Program chosen: adult nurse, mental health nurse, learning disabilities nurse, or children's nurse (NMC, 2009c).

Midwifery programs are 3 years in length, unless the applicant is already on the NMC Register as a registered (adult) nurse, in which case the program is 18 months in length. Midwifery programs also are linked to universities. Specialist community public health nurse programs are 52 weeks in length beyond initial



registration as a nurse or midwife. The NMC established a part of the Register for specialist community public health nurses because it believed that this form of practice has distinct characteristics that require public protection. These characteristics include working with both individuals and a population, which may mean making decisions on behalf of a community or population without having direct contact with every individual in that community. Specialist community public health nursing aims to reduce health inequalities by working with individuals, families, and communities promoting health, preventing ill health and in the protection of health. The emphasis is on “partnerships that cut across disciplinary, professional and organizational boundaries that impact on organized social and political policy to influence the determinants of health and promote the health of whole populations” (NMC, 2009d).

### *Renewal*

Registration must be renewed every 3 years and a retention-of-registration fee paid annually. Those seeking renewal also must submit a signed Notification of Practice form, through which they attest that they have met the Post-Registration Education and Practice (PREP) requirements and are of good health and good character. PREP is a set of Nursing & Midwifery Council standards that are designed to help nurses keep up to date with new developments in practice and encourage them to reflect on their practice. PREP also provides a framework for continuing professional development (CPD), which, although not a guarantee of competence, is a key component of clinical governance in the United Kingdom (NMC, 2009e).

There are two separate PREP standards that must be met for registration renewal: Practice and Continuing Education. To meet the PREP Practice Standard, nurses must have worked in some nursing capacity for a minimum of 450 hours, or have successfully taken an approved return to practice course, within the preceding 3 years. To meet the PREP Continuing Professional Development Standard, nurses must have undertaken and recorded continuing professional development related to their practice over the 3 years prior to registration renewal (NMC, 2009e).

### *Scope of Practice*

The Royal College of Nursing defines nursing as “the use of clinical judgment in the provision of care to enable people to improve, maintain, or recover health, to cope with health problems, and to achieve the best possible quality of life, whatever their disease or disability, until death” (RCN, 2003).

The NMC, which develops the standards of proficiency, recognizes that there is comparability between the standards achieved by all nursing students, and that it is through the application of these standards to practice within the different con-

texts of nursing that defines the scope of professional practice. The standards of proficiency define the overarching principles of being able to practice as a nurse; the context in which they are achieved defines the scope of professional practice. Applicants for entry to the nurses' part of the register must achieve the standards of proficiency in their chosen specialty area (NMC, 2009b).

For example, adult nursing standards of proficiency require the care of adults, from 18 year olds to elder people, in a variety of settings for patients with wide ranging levels of dependency. Adult nursing is patient centered and acknowledges the differing needs, values and beliefs of people from ethnically diverse communities. Adult nurses engage in and develop therapeutic relationships that involve patients and their care givers in ongoing decision making that informs nursing care. They also must have the skills to meet the physical, psychological, spiritual and social needs of patients, supporting them through care pathways and working with other health and social care professionals to maximize opportunities for recovery, rehabilitation, adaptation to ongoing disease and disability, health education and health promotion (NMC, 2009b).

### *Supply and Demand*

In 2008 the United Kingdom determined that it no longer had a nursing shortage and suspended the immigration of overseas nurses. At the same time the government implemented a points-based system for assessing immigration applications, which changed the way individuals from outside the European Union and the European Economic Area can work, train or study in the United Kingdom. The points based system has five tiers ranging from highly skilled individuals who contribute to growth and productivity to youth mobility and temporary workers (UKBA, 2009).

### *Issues and Challenges*

- **Immigration Reform:** Individuals immigrating to the United Kingdom must gain points to qualify for a specific tier before they can apply for permission to enter or to remain in the country. The number of points required and the way the points are awarded depend on the tier the migrant is applying under and will reflect his/her qualifications, experience, age, previous earnings and language competence.

Under the points based system the United Kingdom Border Agency (UKBA) decides who is admitted to or allowed to stay in the United Kingdom. In order to assess this, the migrant nurse will need to provide evidence of a sponsor in the United Kingdom who is licensed by the UKBA. If an overseas qualified nurse has a job offer from a U.K. employer, he or she may be able to apply to work in the United Kingdom as a sponsored skilled worker (UKBA, 2009).

- **Aging Nursing Workforce:** The United Kingdom, along with Canada, the United States, and a number of European States, is facing the challenge of an aging nursing workforce and an aging population. In the United Kingdom an estimated 180,000 nurses will reach retirement age over the next decade (RCN, 2006). In the European Union, concerns about the sustainability of pensions, economic growth and the future labor supply have stimulated a range of policy recommendations to promote the health and working capacity of workers as they age; to develop the skills and employability of older workers; to examine raising the pension age; and to provide suitable working conditions as well as employment opportunities for an aging workforce (European Foundation for the Improvement of Living and Working Conditions, 2007).

### Summary

The historic suppliers of nurses to the United States—the Philippines, India, Canada, and the United Kingdom—generally have education and regulatory systems comparable, but not equivalent to, that of the United States. For the most part, they have moved nursing education into institutions of higher learning, have formal licensure and/or registration systems in place, and have scopes of practice that focus on health promotion and maintenance and the provision of care to the sick. Table J-3 provides a profile of the countries that have been historic suppliers to the U.S. workforce.

### Emerging Suppliers of Registered Nurses to the U.S. Workforce: China

#### *Overview*

China is viewed as an emerging source country for the migration of nurses. However, because nurses educated in secondary school nursing programs make up the majority of nurses in the workforce in China, they do not easily meet licensure requirements in many host countries. The international migration of Chinese nurses began in the early 1990s when the government organized groups of English speaking nurses to work in Singapore and Saudi Arabia. Today, hundreds of Chinese nurses work in these countries every year under a government arranged contract. The Chinese government charges 10–15 percent of the nurses' annual salary as a handling fee for such an arrangement. These contracts usually last about 2–3 years, and then most nurses return to work in their original hospitals. In many cases, returning is required and clearly stated in their contracts (Fang, 2007).

There has been a similar increase in the number of nurses migrating to Australia, with lesser numbers going to the United States. CGFNS VisaScreen data, 2005–2009, indicate that nurses educated in China and seeking to practice in the

**TABLE J-3** Historic Suppliers of Registered Nurses to the U.S. Workforce

	Philippines	India	Canada	United Kingdom
Education for Entry	Baccalaureate	Diploma in General Nursing Bachelor of Science in Nursing	Baccalaureate Diploma (Quebec)	Diploma Baccalaureate Moved from hospitals to universities
Educational Requirements for Entry into Nursing Programs	10 years primary and secondary education	10 years for diploma programs 12 years for Bachelor degree programs	12–13 years based on province 11 years for diploma programs in Quebec	11 years primary/secondary education
Licensure	Examination	Board Examination for diploma programs University Exams for BS programs	Examination	Registration
Licensure Renewal	No, license valid for life	No, most states do not require renewal	Yes	Yes, to maintain registration
Title	Registered Nurse	Registered Nurse and Midwife	Registered Nurse	Registered Nurse (Sister)
Types of Nursing Education in Country	BS in Nursing Practical Nursing MD to BSN program Master of Arts in Nursing Master of Science in Nursing Doctor of Philosophy	Diploma BS Masters Doctor of Philosophy	Diploma Baccalaureate Practical Nursing MS in Nursing Doctorate in Nursing	University-based diploma and baccalaureate programs Advanced practice programs
Number of Nurses in Workforce	Graduate approximately 100,000/year (25% enter nursing workforce)	300,000	230,300 (6% foreign-educated)	500,000 (8% foreign-educated)

	Philippines	India	Canada	United Kingdom
Number of Nurses and Midwives per 10,000 population: 2000-2007	61	13	101	128
Nursing Shortage	In rural areas	Possibly developing	Yes	No
Source/Host Country for Migration	Source	Source	Host/Source	Source. Host status is suspended
In-Country Nursing Issues	Unemployment of nurses/ inability to secure work experience needed to migrate Variable accreditation and standardization of schools Proliferation of nursing schools Chronic low pass rates on PRC nurse licensure exam	Quality of schools Shortage of nurses to meet in-country needs, especially in rural areas	Aging workforce Under staffing in rural areas Educational reform Health policy reform	Immigration of overseas nurses Aging workforce Vulnerability to out-migration Health sector reform Immigration reform
Official Language	Official: Tagalog and English Arabic and Spanish are auxiliary	Official: Hindi Subsidiary Official Status: English for business	Official: English and French	Official: English, Welsh, Scottish form of Gaelic, and Irish
Challenges and Issues	Prepares nurses for export, which fuels proliferation of low-quality nursing schools	Circular migration creates temporary loss of experienced RNs Prepares nurses for export	Nursing shortage Aging of the nursing workforce	Aging of the nursing workforce EU directives and migration of nurses

United States most frequently identified their intended states of practice as California, New Mexico, New York, Michigan, and Pennsylvania (CGFNS, 2010b).

### *Education*

Nursing education programs in China are at the certificate (mid-associate degree), associate degree, and baccalaureate levels and are approved by the Ministry of Education in that country. Mid-associate degree programs are 2–3 years in length and administered by secondary nursing schools that accept candidates who have completed 6 years of primary education and 3 years of junior middle education, usually at 15–16 years of age. The majority of new recruits to nursing enter at this level. However, nurses graduating from these programs would not meet entry requirements to practice nursing in most developed countries unless they completed a separate secondary school education or its equivalent (Fang, 2007).

Associate degree programs are generally 3 years in length and post-secondary in nature. These programs accept candidates who completed 6 years of primary education, 3 years of junior middle education and 3 years of senior middle education. At completion of the program, graduates are awarded a diploma comparable to a nursing diploma in the United States.

The Bachelor of Science in Nursing is a 4–5-year degree program entered after completion of 12 years of primary and secondary education. These programs are administered by medical universities and colleges and government approved.

The national basic nursing education curriculum includes courses in Chinese medicine (i.e., acupuncture), mathematics, Chinese and foreign languages as well as the physical and biological sciences. Nursing content includes pediatric, obstetric and adult health nursing and infectious diseases. Psychiatric nursing became part of the curriculum in the mid-1990s (Fang, 2007).

Future trends in nursing indicate an increase in overall enrollments, particularly in those types of programs that produce nurses who qualify for employment outside of China (Fang, 2007).

### *Regulation*

Since 1994, first-level nurses who graduate from mid-associate and associate degree programs are all required to pass a national registration examination to become licensed. Graduates of baccalaureate programs, until recently, were exempt from this requirement and were granted an automatic license. However, in 2007 the Ministry of Education reviewed this process and determined that graduates of all programs should take the licensure examination. The directive was implemented in May 2009 (Personal communication between Dr. Feng Li, Director, Health and Human Resources Development and Training, Ministry of Health and Barbara Nichols, CGFNS, December 10, 2007).

### *Renewal*

All nurses must renew their license every 2 years. Continuing education courses are required for renewal.

### *Scope of Practice*

China's 1994 Nurses Act described nursing practice as including care that focuses on clinical observation; assisting physicians to complete treatment and administer drugs; implementing care plans through use of the nursing process; patient rehabilitation and education; and quality assurance. Nurses working in public health areas have responsibility for health management along with general practitioners in the community and public health education. Nursing education, administration and research also are nursing functions allowed under the 1994 Act (ANMC, 2009).

### *Supply and Demand*

There is a nursing shortage as well as a high level of unemployment and underemployment of nurses in China. Overall, China has not invested in nurses to meet the health care needs of the public. In fact, the supply of physicians exceeds that of nurses. There is approximately one nurse for every thousand people in China compared to one nurse for every one hundred people in the United States (Fang, 2007). As more funds are invested in health services in China, the health care system will require more nurses and a closer look at their distribution.

### *Issues and Challenges*

- **Enhancement of the Profession:** As a result of limited job opportunities, low salary, and low job satisfaction, many Chinese nurses intend to leave nursing or work outside China (Fang, 2007). Commercial recruiters have expressed a strong interest in recruitment of nurses in China, but to date there are few examples of successful ventures. Fang (2007) suggests that even if the Chinese government were to implement health care financing reforms that led to an increase in nursing jobs and improved work conditions, some level of surplus will remain.

China's nursing education system is huge in size (about 500,000 nursing students in 2005), but weak in quality and career development (Fang, 2007). In addition, nurses in China have to carry a heavy workload and are faced with 10 times the population responsibility compared to U.S. nurses. Hospital demand is for younger nurses, as they are paid less and can handle more physically demanding work loads. As a result, age discrimination is a problem—and it is not unusual to find hospitals dismissing most nurses older than 45 years of age (Fang, 2007).

Future issues for nursing in China include the upgrading of education and the requiring of a baccalaureate degree for entry into the profession; expanding nursing's research base; increasing the globalization of nursing; and creating new cooperative programs worldwide (Smith and Tang, 2004).

## Sub-Saharan Africa

### *Overview*

Sub-Saharan Africa is a geographical term used to describe the area of Africa that lies south of the Sahara. Many of the countries in sub-Saharan Africa are considered sources for the migration of nurses, particularly Nigeria in the West, Kenya and Ethiopia in the East, and South Africa. During the nursing shortage in the United Kingdom in the last decade, nurses from sub-Saharan Africa provided a significant increase in that country's nursing workforce.

Nurses educated in sub-Saharan Africa also migrate to the United States to improve their working conditions and salaries. Using Nigeria as a prototype, CG-FNS VisaScreen data, 2005–2009, indicate that nurses educated in that country and seeking an occupational visa to practice in the United States most frequently identified their intended states of practice as Texas, California, New York, Maryland, Illinois, and Pennsylvania (CGFNS, 2010b).

### *Education*

Most formal nursing education programs began in sub-Saharan Africa in the 1900s. Initial nursing programs educated auxiliary or enrolled nurses, a classification that is comparable to practical nurses in the United States. Entrance requirements generally included 9 years of primary and middle school education. Many countries in sub-Saharan Africa have phased out these enrolled nurse programs; however, faith-based hospitals in some countries have kept enrolled as well as hospital-based professional nurses (Munjana et al., 2005). Generally, countries that eliminate the position of enrolled nurse offer bridge programs for those individuals who seek to transition to professional nursing. Individuals who do not transition often work as nurse aides or health aides.

Professional nurse (RN) education requires completion of a full primary and secondary education (12 years) and 3 years of nursing education. Most schools are hospital based and federally or state funded. There also are university based programs in sub-Saharan Africa: 4-year generic programs that lead to a Bachelor of Nursing degree and 2–3-year post-basic RN-to-BSN programs. Post-basic programs require 2 years of work experience prior to entry.

The nursing curriculum in many parts of sub-Saharan Africa is framed around the medical model, which is considered by some as too westernized for nursing and midwifery requirements in Africa. Opponents of the medical



model believe that there should be a greater focus on community nursing and primary health care—and that the curriculum should be more culturally sensitive (Munjana et al., 2005). There also is a need for faculty with higher qualifications to teach in the programs, since many of the higher educated nurses leave the country through migration.

### *Regulation*

The Nursing Councils of each country are the statutory bodies that develop standards for the profession and regulate the practice of nurses and midwives in their respective countries. They also license and register those nurses who meet the educational requirements, with some countries, such as Nigeria, requiring licensure by national examination.

### *Licensure Renewal*

Licensure renewal is determined by the individual country. Not all countries require renewal of registration; however, when countries do require renewal, it is on an annual or biennial basis.

### *Scope of Practice*

The scope of nursing practice varies by country. In Nigeria, for example, a nurse is a person who has received authorized education, acquired specialized knowledge, skills and attitudes, and is registered and licensed with the Nursing and Midwifery Council to “provide promotive, preventive, supportive and restorative care to individuals, families and communities, independently, and in collaboration with other members of the health team. The nurse must provide care in such a manner as to enhance the integrity of the profession, safeguard the health of the individual client/patient and protect the interest of the society” (NNMC, 2009).

In South Africa, the scope of practice is informed by a competency framework that supports an outcomes-based approach to nursing education and training—rather than a listing of activities that nurses are allowed to perform (South African Nursing Council, 2004). The Acts governing nursing in several African countries, for example Zambia, South Africa, Ghana and Nigeria, allow nurses to enter private practice, with each country setting its own requirements and standards for such practice (Munjana et al., 2005).

### *Supply and Demand*

Sub-Saharan Africa has a smaller number of nurses per population compared to other continents—and these small numbers are inadequate to meet the health needs of the population (see Table J-3). Nursing is predominantly a female pro-

profession at the caregiver level but disproportionately male at the administration level. With the epidemic nature of HIV/AIDS in sub-Saharan Africa there has been an increased loss of nurses due to illness and a loss of nurses who, as females, provide care to their own families that have been ravaged by AIDS. The absenteeism caused by the AIDS epidemic, coupled with the nursing shortage caused by migration and the under-funding of the health sector, has led to an overwhelming increase in the workload of those nurses who continue within the profession (Munjana et al., 2005).

### *Issues and Challenges*

- **Shortage of Health Professionals:** The most significant factor affecting the nursing workforce of sub-Saharan Africa is the shortage of health professionals, especially nurses. This is due in part to a number of factors: migration; the limited supply of new graduates; under-funding of the health sector; attrition due to HIV/AIDS; limited career opportunities; and inefficiencies in the recruitment and retention of nurses. The decision to eliminate the category of auxiliary/enrolled/subprofessional nurses also has exacerbated the shortage of nurses in sub-Saharan Africa because there are not enough professional nurses to meet the health needs of the population (Munjana et al., 2005).

## **Caribbean**

### *Overview*

Generally the Caribbean has been both a source and host country for migration. Because most nurses are educated in English and proficient in spoken English, they have been recruited for positions in both the United States and Canada. To remedy this loss of nurses, many Caribbean countries have had to recruit nurses, primarily from Cuba, Nigeria, the United Kingdom, and other English-speaking countries. Some have resurrected long disbanded diploma programs that subscribed to a traditional diploma curriculum. Using Jamaica as a prototype, CGFNS VisaScreen data, 2005–2009, indicate that nurses educated in that country and seeking an occupational visa to practice in the United States most frequently identified their intended states of practice as Arizona, New York, Florida, and Georgia (CGFNS, 2010b).

### *Education*

Nursing education programs are approved/accredited by the government, the Ministry of Education. Accreditation is a two-part process that consists of a self-evaluation report and a site visit. There are three types of entry-level nursing

programs in the Caribbean: diploma, associate degree and baccalaureate. However, not all Caribbean countries have nursing schools nor do all schools have each type of program. Bermuda is one such country without a nursing program on the island; however, the Nursing Council of Bermuda is currently in consultation with various nursing organizations regarding development (Personal communication between Gaylia Landry, Chief Nursing Office Bermuda Nursing Council and Donna Richardson, CGFNS, by conference call on October 23, 2009).

Diploma programs are 3 years in length and hospital based. In some Caribbean countries, such as Trinidad and Tobago, these had been replaced by associate degree programs. However, because of the severe shortage of nurses, they were reopened and the education funded by the government in an effort to produce more nurses.

Associate degree programs are 2–3 years in length, with the third year being devoted primarily to clinical experiences. Baccalaureate degree programs are 4 years in length. One such baccalaureate program, the International University of Nursing in St. Kitts, includes six semesters of education in St. Kitts and two semesters at an affiliated school in either the United States or Canada. Graduates of the programs earn a dual degree that allows them to take licensure examinations in two countries, provided that state/provincial/territorial requirements are met.

### *Regulation*

The Nursing Council of the individual country is responsible for conducting site visits at schools of nursing for quality checks and to verify the curriculum, including clinical hours, as well as for the licensure and registration of registered nurses and midwives. It serves as the gate keeper to the Caribbean Regional Licensure Examination. Passing the 2-day regional examination permits nurses to practice in any of the Caribbean Community (CARICOM) countries, which include Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, Saint Lucia, St. Kitts and Nevis, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago (Reid, 2000).

The examination allows for standardization of nursing education and reciprocity for nurses among the countries in the region. Guyana, although a member of CARICOM, does not require the regional examination for registration. Countries that are not members of CARICOM have their own processes for the registration of nurses and midwives (World Bank, 2009).

### *Scope of Practice*

The Nursing Councils in the individual Caribbean countries set the standards for nursing practice. The Regional Examination for Nurse Registration in the Caribbean is based on mutually agreed upon competencies for the registered nurse to practice in the region. The treatment of test items, assembling and conducting of

the examinations, scoring of the examination, and student notification of results is the responsibility of each General Nursing Council. The 13 General Nursing Councils with responsibility for Schools of Nursing meet annually as a regional committee to prepare the examinations (Reid, 2000).

### *Supply and Demand*

Although the countries of the Caribbean have a similar history and culture and share common socioeconomic goals, they are highly diverse with respect to health care delivery. The vast majority of nurses work in the public sector (World Bank, 2009).

The Caribbean is in the midst of a critical nursing shortage due primarily to the out-migration of its nurses. On average 42 percent of nursing positions in the Caribbean countries are vacant. Low pay, poor career prospects, and lack of educational opportunities are among the reasons nurses resign (Salmon et al., 2007). Many of these nurses look outside the region for job opportunities in Canada, the United States, the United Kingdom and other countries. Compounding the situation is the lack of resources to prepare nurses to fill the vacancies.

To remedy this situation, nursing and other leaders in the Caribbean created regional strategies for addressing the challenges they face in delivering basic health care within their countries. The region-wide Managed Migration Program, a multilateral, cross-sector, multi-interventional, long-term strategy for developing and maintaining an adequate supply of nurses for the region, is one of the results of that effort (Salmon et al., 2007).

### *Issues and Challenges*

- **Nursing Shortage:** The worldwide AIDS epidemic has taken its toll in the Caribbean, increasing the need for health professionals, especially nurses. This coupled with the loss of nurses to migration has caused a severe shortage of nurses in the Caribbean. While most nurses who have left the country to work in the United States and Canada have traditionally stayed there permanently, some Caribbean countries, such as Trinidad and Tobago, are seeing more circular migration, with nurses returning home after several years abroad. Jamaica has been able to make up for some loss of its nurses by recruiting skilled nurses from inside the region, for example from Cuba and Guyana, as well as outside the Caribbean from such countries as India, Ghana, Burma, Russia, and Nigeria (Salmon et al., 2007).

The Managed Migration Program discussed previously allows governments and stakeholders to work together to ensure that migration is managed so that costs are minimized and benefits maximized to the

countries and to the nursing professionals. There are now several models of migration management in place in the Caribbean:

- **Educating for Export:** Nurses are hired by U.S. partners and the government of the Caribbean country is reimbursed for each nurse. The funds received are to be reinvested in upgrading nursing education (St. Vincent Model).
- **Temporary Migration:** Nurses work for a portion of the time in the host country and the remainder of the time in the Caribbean country. Because nurses pay their own travel costs, the host country is usually close by. For example, Jamaican nurses work for 2 weeks per month in Miami and 2 weeks in Jamaica, gaining additional skills and increasing their earnings while at the same time meeting Jamaican staffing needs.
- **Regional Cooperation:** Countries with the capacity to absorb additional students into their nursing education system have reached agreement with countries that either do not have schools of nursing or the capacity to educate the needed number of nurses. Grenada and Antigua entered into such an agreement through which students from Antigua go through nursing education in Grenada at a minimal cost. The Regional Examination for Nurses Registration and the Common Nursing Education Standards in the Caribbean allow the Grenadian educated nurse to then return and practice in Antigua.
- **International Partnerships:** These partnerships include establishment of an off shore school of nursing to meet the needs of the global market. The International University of Nursing is one such school, originally established to meet the worldwide need for baccalaureate-prepared nurses.
- **Homecoming Programs:** These programs are designed for nurses who have emigrated to give back to their home countries (brain gain) in the Caribbean by working and sharing their nursing expertise. For example, a team from the Guyana Nurses Association in the United Kingdom runs a yearly screening test for hearing in Guyana. The Caribbean Overseas Nurses Association works closely with national nurses associations to explore possibilities for joint programs in developing nursing education and practice.
- **Health and Tourism Model:** In this model, nurses would be recruited from developed countries, such as Canada and the United States, and invited to work in the Caribbean for 6–12 months—with the advertised goal of achieving greater work–life balance.
- **Temporary Movement of Skilled Nursing Professionals:** Bilateral proposals are created to provide incentives for nurses to return to the Caribbean and disincentives to overstay in the host

country. These types of proposals would address the nursing shortage through regional and national socioeconomic development agreements and promote nursing as an independent service activity (Salmon et al, 2007).

- **Practical Nurse Programs:** Graduates of Jamaican practical nurse programs are being considered by the Canadian government for a recruitment initiative to address its shortage of Practical Nurses in the face of an aging population. The Canadian proposal requires the Jamaican educated practical nurse to pass its licensing exam. The participants would be monitored for success and encouraged to enroll in ladder programs leading to associate or baccalaureate degree (Taylor, 2007).

## Mexico

### *Overview*

Mexico is seen as a source country for migration, primarily supplying nurses to the United States to meet shortages. They have especially been recruited to Southwestern Border States. However, because many of the nurses had their nursing education at the secondary school level and in Spanish, they have found it challenging to pass both the CGFNS Qualifying Exam<sup>®</sup> (a prerequisite for licensure in a number of states) and/or the U.S. licensure examination, the NCLEX-RN<sup>®</sup> examination. Consequently, a number of initiatives were put in place by schools and recruiters that assist the nurses in language development and in the knowledge of nursing as it is practiced in the United States. CGFNS VisaScreen data, 2005–2009, indicate that nurses educated in Mexico and seeking to practice in the United States most frequently identified their intended states of practice as Texas, California, and New Mexico (CGFNS, 2010b).

### *Education*

Formal nursing education in Mexico began in the early 1900s with hospital-based programs whose curricula were validated by medical schools. Physicians were in charge of determining the duration of the education, the curriculum, and the admission requirements (CGFNS, 1996). Today, the nursing profession is taking a more active role in self-regulation and standard setting.

As nursing education progressed, two types of programs emerged: diploma and baccalaureate programs. Diploma programs were combined with secondary school, which the individual entered after 9 years of primary and middle school education. Graduates were considered to be first level nurses in Mexico and were given the title of Technical Nurse; however, they were viewed as second-level or practical nurses by institutions in the United States and Canada (CGFNS, 1996). The majority of nurses in Mexico were educated in these programs.

Baccalaureate programs emerged at a later date, are post-secondary in nature, and 4 years in length. Graduates also are considered first-level nurses in Mexico, and their education is considered comparable to registered nurses in the United States and Canada.

Today there are still two types of nursing programs in Mexico: 3-year diploma programs and 4-year degree programs. However, both are now post-secondary in nature and require 12 years of primary and secondary education for entry. One year of community service must be completed before graduates are eligible to be licensed.

### *Regulation*

Students graduating from 3- and 4-year programs must show evidence of having completed all subjects successfully, of having completed their community service, and of having passed their school-administered, professional examination to be licensed. The examination can be taken in groups or independently upon completion of community service.

Students choosing to take an individual examination must prepare a thesis under the guidance of an advisor. Their examination consists of two sections, one oral and one practical. The oral examination is taken before three examiners appointed by the academic department. The practical examination is taken at a hospital, with the department and patient chosen by the examiners. The group examination, prepared by faculty in the nursing schools, consists of a written exam whose content is divided into areas of knowledge. It consists of 1,000 questions and students are allotted 8 hours for completion (CGFNS, 1996).

Once candidates are successful on their chosen examination, they are awarded their degree or diploma. They may then apply for a license (*cédula*) to practice nursing in Mexico, which is issued by the federal government. The General Professions Directorate (DGP), a branch of the Public Education Secretariat (SEP) is in charge of regulating the practice of profession. The profession of nursing in Mexico is not self-regulating (CGFNS, 1996).

### *License Renewal*

A nursing license in Mexico is good for life and does not have to be renewed. Licenses are granted once and can be cancelled only if the licensee breaches any law regulating the profession.

### *Scope of Practice*

Legislation regulating professional nursing practice in Mexico is by means of general professional legislation. The ICN Code of Ethics and the Code adopted by the Pan American Federation of Nursing Professionals are frame-

works recognized by nurses in Mexico and other Latin American countries (Malvarez and Agudelo, 2005).

### *Supply and Demand*

Approximately 65.1 percent of the nursing workforce in Mexico consists of registered nurses (graduates of diploma and baccalaureate programs). The remainder are considered Auxiliary Nurses, a title that is comparable to that of a nurse aide in the United States. Mexico does have some maldistribution of nurses, with fewer working in rural than urban areas (Siantz, 2008).

Mexican officials have sought to upgrade nursing education by requiring completion of a full primary and secondary education prior to entering any nursing program, thus making Mexican-educated nurses more competitive in the global market than they had been when the majority of nurses were educated at the secondary school level. The United States, in particular, recruits Mexican nurses to meet the health and communication needs of its large Hispanic patient population.

### *Issues and Challenges*

- **Nursing Autonomy:** For many years, nursing associations and organizations in Mexico have worked internally and through international organizations and processes, for example ICN, the Pan American Health Organization (PAHO), and the Trilateral Initiative for North American Nursing, to establish the autonomy of nursing over its educational and practice standards and regulation.

Studies show that nursing is a human resource in high demand in developed countries in Latin America, yet, at the same time, suffers from a reduction in collective bargaining power, reduced salaries, cuts in overtime pay, closure of government-level nursing departments, the absence of safety measures in the workplace, loss of professional autonomy, and work overload (Malvarez and Agudelo, 2005). Consequently, to improve their working conditions and their salaries, many nurses educated in Mexico leave to obtain positions in the United States. Table J-4 presents a profile of countries that are seen as emerging suppliers to the U.S. workforce.

## Summary

The emerging suppliers of nurses to the United States—China, sub-Saharan Africa, the Caribbean, and Mexico—are moving toward education and regulatory systems comparable, but not equivalent, to that of the United States. Generally, nursing education is in institutions of higher learning, formal licensure, and/or



**TABLE J-4** Emerging Suppliers of Registered Nurses to the U.S. Workforce

	China	Sub-Saharan Africa	Caribbean	Mexico
Education for Entry	Secondary school programs (mid-associate) Post secondary school programs (Diploma/AD Program) Baccalaureate	Diploma (3 years) Baccalaureate (4–5 years) Specialty programs in Midwifery and Psychiatric Nursing (3 years)	Diploma Associate Degree Baccalaureate	Diploma Baccalaureate Secondary School Program (selected states)
Educational Requirements for Entry into Nursing Programs	12 years primary and secondary school	11 years primary and secondary school	11 years primary and secondary school	12 years primary and secondary school
Licensure	Yes: Examination	Yes: Examination depending on country	Yes: Regional examination if members of CARICOM If not, individual country licensure	Yes: School exit examination or thesis and hospital clinical examination
Licensure Renewal	Yes, every 2 years	Country specific; if required, 1–2 years	Yes	No
Title	Professional Nurse	Registered Nurse	Registered Nurse General Nurse in Jamaica	Technico Enfermeria (2-year degree) Licentura en Enfermeria (4-year degree)
Types of Nursing Education in Country	Secondary school Associate Degree (diploma) Baccalaureate Masters Doctorate	Diploma Baccalaureate Specialty Masters	Diploma Baccalaureate	Secondary Diploma Baccalaureate Master’s Doctorate
Number of Nurses in the Workforce	1.4 million	Nigeria: 128,918 Kenya: 128,918	Jamaica: 4,374	88,678

*continued*

**TABLE J-4** *continued*

	China	Sub-Saharan Africa	Caribbean	Mexico
Number of Nurses and Midwives per 10,000 population: 2000–2007	10	South Africa: 41 Botswana: 27 Nigeria: 17 Zimbabwe: 7 Ethiopia: 2	Jamaica: 17	9
Nursing Shortage	Yes (due to underutilization of workforce)	Yes: Botswana, Zimbabwe, South Africa No: Nigeria	Yes	No
Source/Host Country for Migration	Source (beginning)	Source	Source/Host	Source (Limited)
In-Country Nursing Issues	Underinvestment in health workforce Underutilization of nursing workforce	Unemployment of nurses Poor working conditions AIDS Emigration	Lack of nursing schools in certain countries Inadequate funding of nursing programs Accreditation of schools AIDS	Physicians working as nurses and pursuing nursing education Maldistribution of nurses Nursing Autonomy
Official Language	Chinese (Mandarin)	African Languages Colonial languages of English, French, Portuguese and Spanish	Spanish English French	Spanish
Challenges and Issues	Lack of fluency in English	Brain drain	Low pass rates on licensure exam Shortage of tutors High migration rates	Lack of fluency in English

SOURCE: Kaiser Family Foundation, 2009.

registration systems are in place, and scopes of practice focus on health promotion and maintenance in the provision of care.

The overview of both historic and emerging countries supplying nurses to the U.S. workforce provides a kaleidoscope of compelling issues that must be addressed to successfully integrate foreign-educated nurses into the U.S. nursing workforce. The capacity of the United States to deal with issues associated with this migration will have significant impact on nursing education, nursing practice, service delivery, and health policy. In particular, the need to recognize the positive contribution of the migrating nurse to patients who share with the nurse a country, language, or culture of origin is relevant. The rapid emergence of trade and mutual recognition agreements must be taken into account, as they directly affect nurse migration patterns, possibilities, and challenges.

## **TRADE AND MUTUAL RECOGNITION AGREEMENTS**

The migration of nurses in many parts of the world has been influenced by the development of regional and international trade and mutual recognition agreements. The Office of the U.S. Trade Representative (OTR) reports that the international mobility of business professionals providing services has become an important aspect of competitive markets for both suppliers and consumers. Trade agreements that provide for the movement of goods and services across country boundaries have facilitated the migration of nurses for decades. The Agreement that has most affected the nursing profession in the United States is NAFTA.

### **North American Free Trade Agreement (Trade NAFTA)**

Trade NAFTA provides for the movement of goods and services across the borders of Canada, Mexico and the United States. The health professions listed under NAFTA include nurses, clinical laboratory scientists, physical therapists and occupational therapists.

In 1994, Trade NAFTA eased immigration requirements for nurses educated in Canada and Mexico, allowing them to more easily cross the borders of the United States for purposes of employment. There was no restriction on the number of Canadian nurses who could enter. The number of Mexican nurses, however, was capped at 5,500 per year for 10 years. Trade NAFTA was renewed in 2004 and the cap lifted.

To enter the country under Trade NAFTA status the nurse must be a citizen of either Canada or Mexico, have a written job offer from a U.S. employer, and hold a nursing license in Canada or Mexico as well as in the U.S. state of intended practice. Nurses who migrated to either Canada or Mexico from such countries as India, Jamaica, the Philippines, and the United Kingdom and became citizens of either country are eligible for TN status if they meet the qualifications (Richardson and Davis, 2009).

### *Canadian Nurses*

The majority of nurses holding TN status are from Canada and are not required to have a visa to enter the United States. Many TN nurses commute between Canada and the states of Michigan, Maine, and Minnesota on a daily basis. The Canadian nurse only needs to show proof of citizenship, a letter of intended employment, the required licenses, and the CGFNS VisaScreen Certificate at the Canadian port of entry, which can be at a border crossing or an airport.

### *Mexican Nurses*

The TN process for Mexican nurses is more complex. It requires a visa, consular processing, a labor certification filed by the employer, and an I-129 petition for nonimmigrant workers. Mexican nurses also must present a CGFNS VisaScreen Certificate as part of the visa process. The educational comparability requirement of the VisaScreen Program has been difficult to meet for Mexican-educated nurses because nurse educators in the United States and Canada consider the majority of nursing education programs in Mexico to be at the vocational level (Richardson and Davis, 2009).

Since 2005, CGFNS and the International Bilingual Nurses Alliance have worked with the Mexican nursing community, the Mexican consulate, the Mexican Overseas Program, and the Secretaría de Educación Pública (SEP—Public Education Secretariat) to develop consistent nursing education standards and ensure licensure validation processes in an effort to minimize the challenges for Mexican nurses who wish to migrate. Mexican nurses also have the challenge of English language proficiency, which is generally not an issue for Canadians entering under TN status (Richardson and Davis, 2009).

### *Duration of Trade NAFTA Status*

Initially, TN status duration was for a 1-year period and nurses were required to renew it annually. In October 2008, the Department of Homeland Security extended the duration for up to 3 years. The number of renewals that a nurse may apply for is currently unlimited; however, opponents to Trade NAFTA believe that renewal of TN status should be limited and not be used as a permanent form of temporary status. A benefit of TN status is that it is not affected by external factors such as immigration retrogression, which limits the number of visas issued when the number of applicants exceeds the number of available visas (Richardson and Davis, 2009).

### **Trilateral Initiative for North American Nursing**

The 1995–1996 Trilateral Initiative for North American Nursing, funded by a grant from the Kellogg Foundation, was the first effort by the nursing profession to systematically compare and contrast nursing standards across North America. It came as a response to Trade NAFTA, which specifically urged the professions—including nursing—to develop mutually acceptable standards for licensing and certification that would permit greater mobility of professionals across the borders of Canada, Mexico and the United States.

NAFTA offered tremendous opportunity for nurses from the three countries to collaborate on education, research and practice across borders. The hope was that by strengthening the nursing profession through cross border collaboration and exchange, nursing and health care also would be strengthened. The goals of the Trilateral were:

- To encourage the development of mutually acceptable standards for education, program approval and accreditation, licensure/registration and specialty certification among Canada, Mexico, and the United States in order to advance the nursing profession across North America.
- To establish a lasting, viable network of key nursing organizations and professionals across North America.
- To create a methodology that would demonstrate how other professional groups in the three countries could consult, develop goals and programs, and institute policies to increase cross-border cooperation (CGFNS, 1996).

An in-depth analysis was considered crucial by the 40 key nursing organizations participating in the project because not only did the educational standards vary among the three countries but also the level of autonomy in standards development. For example, in Canada, nursing has autonomy in the development of education standards and the approval of nursing education programs. In the United States this is a government function that is delegated to the profession. In Mexico, the standards that govern nursing education are general standards, that is, they are not specific to nursing, but rather govern education as a whole. They are developed by the government and the schools.

There also were differences in accreditation systems and pathways into practice among the countries. The accreditation systems in Canada and the United States were considered comparable while nursing in Mexico was in the process of developing an accreditation system. In each of the three countries there were various pathways to entry into nursing practice and different competencies associated with each pathway. Regulatory systems and nursing specialty certification were more comparable in the United States and Canada (CGFNS, 1996).

Because of the variance among the three countries, participants recognized

the need for more in-depth understanding of the programs and systems operating in the three countries. While Phase II of the Trilateral did not come to fruition due to lack of funding for the project, a number of nursing organizations and researchers since then have examined the effect of regulation and specialty certification on health outcomes and have attempted to coordinate trilateral research efforts. Mexican nursing organizations have used the preliminary work of the Trilateral to upgrade nursing and to increase participation in standard setting for the profession in Mexico (CGFNS, 1996).

### **General Agreement in Trade and Services (GATS)**

The General Agreement of Trade in Services (GATS), established in January 1995, addresses the areas of service delivery that are considered barriers to trade. GATS is a World Trade Organization (WTO) agreement among 140 countries, the goal of which is to remove restrictions and governmental regulations in agreements covering international trade in services. The GATS has two parts: (1) general rules and disciplines and (2) specific commitments on access to individual countries' domestic markets by foreign suppliers. Each country decides which services are to be included and the degree of operation. There are four methods of service trade:

- Services supplied as “cross-border supply” (international phone calls),
- Consumers use of services in another country (tourism/medical tourism),
- Company subsidiaries or brands, and
- Individuals traveling from their own country to supply services in another. This “movement of natural persons” would include professionals in specialty occupations, nurses and other health care workers.

Governments that make commitments to allow foreign suppliers to provide education or health services in their markets can enforce the same standards for the protection of the public on foreign suppliers as on nationals, and can indeed impose additional requirements if they so choose. GATS supports utilization of professional standards of licensure. There is no exemption from regulations that are required of a country's citizens. Licensing requirements are not considered burdensome in the provision of quality service or a restriction on the supply of service, if they are based on objective and transparent criteria such as competency and capability (WTO, 2010).

### **Singapore/Chile Agreement**

The Free Trade Accords of the Americas (FTAA), initiated between 2002 and 2005, involve 34 Western Hemisphere countries. The United States has signed

agreements with Singapore and Chile with the goal of lowering perceived trade barriers, such as visas, licensing, testing and intellectual property rights—even though the general philosophy of GATS regarding professional standards and licensure does not support the perceived contention that they are barriers to trade (Bruno et al., 2004).

### Mutual Recognition Agreements

Mutual recognition agreements exist within the larger context of globalization to address barriers to mobility, such as the differences between the standards and procedures imposed by national regulatory authorities in different countries. The process of mutual recognition is complex and requires a comparison of frameworks developed in different cultural, social, and economic contexts. The greater the degree of differences between the parties to a mutual recognition agreement (e.g., educational systems, standards, approaches to regulation, level of development, etc.), the more challenging it is to achieve success in the process (ICN, 2009b).

Mutual recognition requires that the countries in question have in place a system for regulating professionals. It is based on the notion of equivalence or comparability, through which it is understood that the host country's regulatory goals also are addressed by home country regulation. When aspects of the host country's regulation are not met (e.g., differences in nursing knowledge, differences in scope of practice), the host country is permitted to set additional requirements for recognition (ICN, 2009b). There are several mutual recognition agreements in nursing:

- **The European Union (EU):** There has been a reciprocal recognition of nursing qualifications designed to facilitate the mobility of nurses in the European Community for over 30 years. Through the 2007 *Directive on Mutual Recognition of Professional Qualifications (2005/36/EC)*, the EU reformed its system for recognition of professional qualifications in order to make labor markets more flexible, further liberalize the provision of services, encourage more automatic recognition of qualifications, and simplify administrative procedures (European Commission, 2009a).

Seven professions were covered by a series of “sectoral” directives: physician, general nurse, midwife, veterinary surgeon, dental surgeon, pharmacist and architect. The resulting directives provide for the harmonization of minimum training requirements and the automatic recognition of professional qualifications for these professions (European Commission, 2009b). The directive for general nurses sets out the minimal competency requirements that nurses must meet before they can practice across the borders of Europe's member states. It also stipulates

that programs leading to registration as a nurse should be at least 3 years in length or of 4,600 hours duration (Hakesley-Brown, 2009).

These directives on nursing education reflect the ongoing work of the Bologna Process in Europe. The education of nurses in Europe varies by country, ranging from vocational education and training, which is not part of higher education, to baccalaureate education for nurses. Most nurses in Europe are educated at the diploma level (Hakesley-Brown, 2009).

To carry out the policies of the Bologna Process, Europe launched the Tuning Project in 2000. The Nursing Project Group was one of the first health care related groups to be set up, with the task of facilitating the design/redesign, development, implementation and evaluation of nursing education programs for each of the Bologna cycles: undergraduate, graduate, and doctoral-level work. In an attempt to preserve the uniqueness and diversity of European education, the group examined the comparability of coursework, expressed in terms of learning outcomes and competencies. Today, developing a European model of nursing education remains a work in progress (Hakesley-Brown, 2009).

- **Trans-Tasman Mutual Recognition Agreement (TTMRA):** MRA that applies to New Zealand and all Australian states and territories, except Western Australia. It recognizes equivalent nursing registration and provides a streamlined registration process for nurses migrating between the countries.
- **The Caribbean Community and Common Market (CARICOM):** Created Regional Examination Nurse Registration (RENr), which has enabled the movement of registered nurses among signatory countries of the region.
- **Internal Mutual Recognition Agreements:** In-country agreements between states, provinces and territories that provide for the mobility of the nursing workforce in that country. The Nurse Licensure Compact in the United States and the Mutual Recognition Agreement of the Registration Bodies for Registered Nurses in Canada are two examples (ICN, 2009b).
- **The Eastern, Central and Southern African College of Nursing (ECSACON):** Agreement on scopes of practice, standards for practice, competencies, and core content and standards for education among 14 countries in east, central, and southern Africa. The focus is on health policy, nursing and midwifery practices, and health care delivery (Ndlovu et al., 2003).

Trade and Mutual Recognition Agreements are designed to ensure public protection; increase public confidence; make care more accessible; and facilitate



the mobility of health professionals. However, the emergence of such agreements also raises such questions as:

- How will the scope of nursing practice in a global marketplace be defined and determined?
- Is global licensure for nurses inevitable?
- How will the cooperation and recognition needed to ensure competency of nurses across borders be gained? Who will bear the cost?
- How will disciplinary actions be addressed?

### **Educational Agreements**

In addition to trade and mutual recognition agreements, agreements also have been negotiated between foreign and U.S. nursing schools to provide clinical experience, internships and language proficiency programs. For example, the International University of Nursing in St. Kitts attracts international students for nursing. It uses U.S. faculty in its program and has signed agreements with universities in the United States and Canada to provide part of the student's theory and clinical education, thus giving the graduate a dual degree.

In 2005 more than 40,000 qualified students were turned away from U.S. nursing schools because of capacity limitations. At that time, through an agreement between agencies in the Ukraine and South Carolina, nursing schools in the Ukraine agreed to educate U.S. students in English. The education was to be subsidized by hospitals in South Carolina with the intent that the graduating nurses would return to South Carolina to enter practice. Implementation of the program has stalled.

Schools of nursing in Korea have negotiated internships with U.S. schools of nursing and U.S. hospitals are working with schools of nursing in Mexico to provide clinical and language orientation for nursing students. La Universidad Autonoma in Guadalajara, Mexico provides bilingual nursing programs—programs in Spanish for those staying in Mexico and in English for nurses intending to migrate.

### **Summary**

Nursing in the United States has been a leader in international nursing and thus any initiatives made by nursing leadership to shape the future of nursing in the United States has a disproportionate impact on the global nursing community. This paper has documented several current challenges that globalization has created for nursing internationally. It also has documented the complexity of those challenges. As the Committee moves towards its recommendations, accelerating globalization makes it clear that these recommendations must be framed within an understanding of their international implications and impact. The authors of

this paper have identified some key international issues that might influence domestic deliberations and planning.

## IMPLICATIONS FOR THE U.S. NURSE WORKFORCE

### The Global Nursing Shortage

“The issues surrounding nursing shortages and global nurse migration are inextricably linked. Global nurse migration has become a major phenomenon impacting health service delivery in both developed and developing countries. The phenomenon has created a global labor market for health professionals and has fueled international recruitment. International migration and recruitment have become dominant features of the international health policy debate” (Nichols, 2007).

The global nurse shortage is supported by the escalating demands from developed countries, such as the United States, to meet patient care needs. International nurse recruits are viewed as options to balance a country’s national nursing supply and demand. The dependence of hospitals and health systems in developed countries on nurses educated outside of their borders is substantive and enduring. With the aging of populations in developed countries, the need for health care services is increasing. Moreover, changing technology and rising consumer expectations place further demand on health care systems. Since the domestic source of nurses in many developed countries is not keeping up with the increased demand for nurses, the gap has been, and will continue to be, filled by foreign-educated nurses. In short, for myriad reasons, in both developed and developing countries there is increasing difficulty in attracting and retaining nurses.

The Immigration Policy Center of the American Immigration Council notes that immigrants comprise more than one-quarter of all physicians and surgeons in the United States, and roughly one-fifth of all nursing, psychiatric and home-health aides. In the case of doctors and nurses, recent projections indicate that even if medical school and nursing school rates rise among the native populations, this will not be sufficient to prevent shortages, at least in the near term (Immigration Policy Center of the American Immigration Council, 2009).

The flow of foreign-educated nurses has remained constant, affected only by immigration policies, which are being reconsidered in the United States, Canada, the United Kingdom, France, and Italy because of high rates of unemployment, political opposition and the economy. The number of migrating nurses generally increases in response to the demands from health care employers. Other external factors appear to have little or no influence.

Experience has shown that even when natural disasters have occurred, such as in India, Indonesia, and Haiti, nurses from those countries continue to pursue migration. After the events of September 11, 2001, some assumed and worried that the fear of terrorism and conflict in the United States would reduce the inter-

est of foreign-educated nurses in coming to this country. Quite the contrary—CGFNS, which screens foreign-educated nurses for immigration purposes, saw only a handful of nurses cancel their plans. Indeed, what the nurses shared was that they were not strangers to such instances of violence and upheaval. Although the size and impact of 9/11 was horrific, the nurses saw it as a rarity compared to the more frequent conflicts they were exposed to in their home countries. Nursing in the United States remains attractive to foreign-educated nurses personally, professionally, and economically because of the opportunities and quality of life it provides.

The United States has the largest professional nurse workforce in the world; yet, according to a study by Buerhaus et al. (2009) there will be a projected shortfall of nurses developing around 2018. As a result of these projections, it is likely that the demand for registered nurses educated in other countries will increase. In other words, foreign-educated nurses will be a permanent feature of the U.S. nursing workforce for the foreseeable future.

It should be noted that the downturn in the world economy in 2009 has affected the health care workforce internationally. Hospitals have revised plans to expand their facilities, have closed beds and units that were not producing revenue, and have restructured their workforce. Those that have collective bargaining agreements are seeking to revise salaries and benefits. These changes, for example, meant that in 2009 large urban hospitals in Philadelphia reported having no vacancies for new graduate nurses; however, hospitals in smaller cities in the northeastern part of the state did have vacancies and were actively seeking nurses. The demand for experienced, specialty nurses continues to increase. Critical care, emergency care and the operating room are areas for which hospitals are recruiting.

Despite the downturn in the economy, the migration of nurses across international borders is expected to be ongoing. Therefore, the successful adjustment of foreign-educated nurses to U.S. practice is critical. The 2004 National Sample Survey of Registered Nurses estimated that, in terms of workforce diversity, 82 percent of U.S. nurses are white (non-Hispanic), and African Americans and Hispanics are under-represented in relation to their proportion to the U.S. population. Foreign-educated nurses, however, are more likely to be Asian. Hence, the international migration of nurses to the United States, historically, has not mirrored the under-represented minority populations of black and Hispanic. The cultural lack of fit between patient and provider has been adequately documented and is germane to this issue.

### **Health Policy Workforce Planning Issues**

Good workforce planning should focus on increasing investment in the supply of nurses and other health professionals to meet the demands of all countries. A major challenge for all countries is to establish workforce planning

mechanisms that effectively address the demands for health care and provide workforce stability.

In 2004, when examining the policy implications of nurse migration, Aiken and colleagues highlighted that, “The most promising strategy for achieving international balance and health workforce resources is for each country to have an adequate and sustainable source of health professionals,” which includes the need for developed countries to be more diligent in exploring actions to stabilize and increase the domestic supply of nurses (Aiken et al., 2004, p. 75). They go on to add that, “Developed countries growing independence on foreign-trained nurses is largely a system of failed policies and underinvestment in nursing.”

Similar arguments were noted in the conclusions from a research and policy retreat entitled, *Human Resources for Health: National Needs and Global Concerns*, which identified national self-sufficiency as a goal (Penn Consortium for Human Resources in Health, 2006). Attaining self-sufficiency also was noted in two key international policy documents: *The Joint Learning Initiative Report* and the ICN report: *The Global Nursing Shortage: Priority Areas for Intervention*. The ICN Report (2006, p. 12) notes that building national self sufficiency to manage domestic issues of supply and demand, in rich and poor countries alike, is critical.

Planning efforts should require that the United States establish a national system that monitors the inflow of foreign nurses, their countries of origin, the states and settings in which they work, and their impact on the nursing shortage. In order to ensure that the nursing care needs of the public are met, a broader workforce policy is needed that balances foreign nurse recruitment and domestic needs.

Much of the work done on workforce planning has yet to be fully integrated with emergent technologies, in particular, telehealth and tele-education. While countries work to establish, maintain and improve regulatory practices and policies, upgrade educational programs and improve patient care, health care and health care education are systematically transcending national and international boundaries, creating global communities. These technologies have the potential to create new approaches to harmonizing curricula, coordinating international policy, and tracking migrating nurses throughout the world. Experts in these technologies will be essential resources for the future of nursing in the United States.

### **Ethical and Moral Challenges**

Perhaps the most daunting aspect of creating a plan for the future of nursing in the United States, shaped by a deep understanding of globalization, involves the ethics of choice. Many issues surrounding the global nursing shortage, the impact of globalization, the goal of international standards, and the establishment of diverse trade and related agreements have ethical and moral dilemmas imbedded within them. It requires that the Committee examine human rights issues and issues of equity.

Because globalization and migration have dramatically increased the multicultural characteristics of the health workforce, in general, and the nursing workforce, in particular, this country will, more and more, consist of people from different ethnic backgrounds who need to be fully integrated into the workplace in a way that respects diversity.

As has been noted by current studies on immigration, our present patterns of immigration in the United States are different from the past. The United States, built largely on immigrants from European countries, now attracts immigrants from the African, Arab and Asian nations—a much more diverse array of cultures and countries. As the United States increasingly becomes a more multiethnic, pluralistic and linguistically diverse society, the possibilities for misunderstandings, mixed messages, and errors in communication are inevitable.

To address and/or prevent the disruptiveness of these factors while delivering care, cultural competence and cultural sensitivity must be added to the knowledge and skills needed for nursing practice in the future. Continuing health policy should be developed that proactively manages a well-prepared, multicultural, multilingual, multiethnic, and multireligious workforce and fosters the development of intercultural workplaces. Such policies will need to address not only the challenges associated with integrating the foreign-educated nurse into the U.S. workforce, but also the challenges faced by co-workers experiencing the introduction of new cultures.

As the population ages, a greater demand for nurses with the skills necessary to provide safe, effective care to the elderly, as well as the ability to apply new technologies, also will be needed. In short, changing U.S. demographics will require that nurses have knowledge and skill in cultural competence, care of the elderly, and use of technology.

As competition and demand for skilled nurses increase, ethical recruitment practices must balance the rights of individuals to migrate and at the same time prevent adverse effects on source countries' health systems. The United Nations Declaration of Human Rights (1948) underscores that point. There has been considerable critique of the migration of nurses from less developed to developed countries as irresponsible brain drain. However, numerous factors relate to the migration of health workers from developing countries resulting in insufficient numbers in the source country's workforce. These include in-country weakness in policies and restrictions related to wages, recruitment, deployment, transfer, and promotion (Vujcic et al., 2009). Kingma (2006) notes that since most nurses work in the public sector, failure of governments to fill vacant positions may cause in-country unemployment and encourage migration. Governmental policies on remittances and return migration also are factors that encourage nurses to seek employment in other countries. As this paper demonstrates, the brain drain assumption can be an oversimplification of a profoundly complex issue. While developed countries continuing to recruit professional workers from developing countries is a serious ethical issue, the rights of professionals to find a better life in another country is equally compelling as an ethical issue.

Efforts have emerged to address the dilemma of balancing the rights of individuals to migrate with the potential loss of essential health care services in source countries. In 2004 WHO issued a resolution urging member states to develop strategies to mitigate the adverse effects of international migration and develop an international code of practice. The International Council of Nurses, Sigma Theta Tau International, and the Commonwealth Secretariat have issued codes that provide guidelines and methods to improve the ethical recruitment and treatment of health care workers.

The United States, in 2009, issued *The Ethical Code for Recruitment of Foreign-Educated Nurses*, a voluntary code for ethical recruitment practices developed by an Advisory Council of stakeholders that was convened by AcademyHealth, a private-sector health policy organization. The stakeholders were composed of representatives of unions, hospitals, nursing organizations, regulatory bodies, credentials evaluators, recruiters, staffing agencies and immigration attorneys. The goal was to reduce the harm and increase the benefits of international nurse recruitment for source countries, host countries, U.S. patients, and migrant nurses.

The task force has evolved into the Alliance for Ethical International Recruitment Practices. Subscribers to the Code will agree to abide by it. Nurses will be able to refer possible violations of the Code to the Alliance, which will then assist in resolution of the infractions or refer to advocacy or government bodies. This work is essential as it focuses on the actual practices of greatest concern—aggressive, predatory recruitment practices that are abusive to nurses seeking a better life for themselves and their families. U.S. nursing leaders will need to proactively implement these guidelines and continue to monitor abuses that may emerge.

The WHO Code of Practice on the International Recruitment of Health Personnel was adopted at the 63rd World Health Assembly in Geneva, Switzerland in May, 2010. The Code is voluntary, global in scope, and directed at health workers, recruiters, employers, health professional organizations and relevant regional and/or global entities. The Code provides principles applicable to the international recruitment of health personnel in a manner that promotes an equitable balance of interests among health workers in source and destination (host) countries (WHO, 2010).

In conclusion, it is the hope of the authors that this paper provides helpful information to guide the Committee's deliberations and decisions. Our effort to synthesize a massive amount of information demonstrates an honest endeavor to place the future of nursing in the United States within an international context, sensitive to the impact of escalating globalization. U.S. nurse leaders will continue to play a central role in the future of nursing internationally. It is our hope that the work of this Committee will encourage their collaborative endeavors with international governments, communities, nursing organizations and nurses to enhance the profession of nursing worldwide.

## REFERENCES

- Adeniran, R. K., C. R. Davis, and B. L. Nichols. 2005. *Empowering foreign educated nurses through collaboration*. Paper presented at the International Council of Nurses 23rd Quadrennial Congress, Taipei, Taiwan.
- Aiken, L., J. Buchan, J. Sochalski, B. Nichols, and M. Powell. 2004. Trends in international nurse migration. *Health Affairs*, 23 (3), 69-77.
- ANA (American Nurses Association). 1965. Position Paper. New York: Author.
- ANMC (Australian Nursing and Midwifery Council). 2009. *People's Republic of China Scope of Nursing Practice*. <http://www.anmc.org.au/china> (accessed December 15, 2009).
- BHP (Bureau of Health Professions). 2004. *The registered nurse population: Findings from the 2004 national sample survey of registered nurses*. <http://bhpr.hrsa.gov/healthworkforce/rnsurvey04/> (accessed January 8, 2010).
- Blythe, J., and A. Baumann. 2008. *Supply of internationally educated nurses in Ontario: Recent developments and future scenarios*. Health Human Resources Services Series 9. Hamilton, Ontario: Nursing Health Services Research Unit, McMaster University.
- Bruno, A., R. E. Wasem, A. Siskin, K. Ester, M. M. Lee, and S. R. Vina. 2004. *CRS report for Congress: Immigration legislation and issues in the 108th Congress*. <http://fpc.state.gov/documents/organization/35429.pdf> (accessed January 15, 2010). United States–Chile Free Trade Agreement Implementation Act HR2738, 108th Congress—Report 108-224.
- Buchan, J., and J. Sochalski. 2004. *Bulletin of the World Health Association*, August 2004, 82 (8), 587-594.
- Buerhaus, P., D. Starger, and D. Auerbach. 2009. *The future of the nursing workforce in the United States: Data, trends and implications*: Boston: Jones and Bartlett.
- Canadian Institute for Health Information. 2008. *Regulated nurses: Trends, 2003-2007*. Table 13—Registered Nursing Workforce, by Highest Education in Nursing, by Jurisdiction and Canada, 2003-2007. [http://secure.cihi.ca/cihiweb/dispPage.jsp?cw\\_page=PG\\_1710\\_E&cw\\_topic=1710&cw\\_rel=AR\\_2529\\_E](http://secure.cihi.ca/cihiweb/dispPage.jsp?cw_page=PG_1710_E&cw_topic=1710&cw_rel=AR_2529_E) (accessed December 15, 2009).
- CARNA (College and Association of Registered Nurses of Alberta) 2009. *Continued competency*. <http://www.nurses.ab.ca/Carna/index.aspx?WebStructureID=1197> (accessed January 8, 2010).
- CASN (Canadian Association of Schools of Nursing). 2009. *CASN Accreditation: recognition of excellence*. <http://www.casn.ca/en/21> (accessed November 4, 2009).
- CASN and CNA (Canadian Association of Schools of Nursing and Canadian Nurses Association). 2004. *Joint position statement on educational preparation for entry to practice*. [http://www.cna-aicc.ca/CNA/documents/pdf/publications/PS76\\_educational\\_prep\\_e.pdf](http://www.cna-aicc.ca/CNA/documents/pdf/publications/PS76_educational_prep_e.pdf) (accessed January 6, 2010).
- CGFNS International, Inc. (ed.). 1996. *Trilateral initiative for North American nursing: An assessment of North American nursing*. Philadelphia: CGFNS.
- CGFNS International, Inc. 2002. *Characteristics of foreign nurse graduates in the United States workforce 2000-2001*. Philadelphia: Author.
- CGFNS International, Inc. 2007 (unpublished). *Trends in international nurse migration*. Philadelphia: Author.
- CGFNS International, Inc. 2009 (unpublished). CGFNS country files: Philippines. Philadelphia: Author.
- CGFNS International, Inc. 2010a. *VisaScreen country of education: 2005-2009*. <http://www.cgfns.org/sections/tools/stats/vs.shtml> (accessed January 11, 2010).
- CGFNS International, Inc. 2010b (unpublished). *VisaScreen application data: 2005-2009*. Philadelphia: Author.
- CNA (Canadian Nurses Association). 2000. *A National Framework for Continuing Competence Programs for Registered Nurses*. [http://www.cna-aicc.ca/CNA/documents/pdf/publications/National\\_Framework\\_Continuing\\_Competence\\_e.pdf](http://www.cna-aicc.ca/CNA/documents/pdf/publications/National_Framework_Continuing_Competence_e.pdf) (accessed January 15, 2010).

- CNA. 2009a. *RN education*. [http://www.cna-aaic.ca/CNA/nursing/education/baccalaureate/default\\_e.aspx](http://www.cna-aaic.ca/CNA/nursing/education/baccalaureate/default_e.aspx) (accessed January 6, 2010).
- CNA. 2009b. *Canadian registered nurse examination*. [http://www.cna-aaic.ca/CNA/nursing/rnexam/default\\_e.aspx](http://www.cna-aaic.ca/CNA/nursing/rnexam/default_e.aspx) (accessed January 15, 2010).
- CNA. 2009c. *Tested solutions for eliminating Canada's registered nurses shortage*. Ottawa: Author.
- CNA. 2010. *Nursing regulation*. [http://www.cna-aaic.ca/CNA/nursing/regulation/default\\_e.aspx](http://www.cna-aaic.ca/CNA/nursing/regulation/default_e.aspx) (accessed January 12, 2010).
- CNO (College of Nurses of Ontario). 2009. *Professional standards*. <http://www.cno.org/prac/prof-standards.html> (accessed January 8, 2010).
- Congress of the Philippines. 2002. *Republic Act 9173: Philippine nursing act of 2002*. 12th Congress, Second Regular Session, July 22, 2002.
- CRNNS (College of Registered Nurses of Nova Scotia), 2009. *Standards for nursing practice*. <http://www.crnns.ca/documents/standards2004.pdf> (accessed January 15, 2010).
- Current Nursing. 2010. *Nursing education in India*. [http://currentnursing.com/reviews/nursing\\_education\\_India.htm](http://currentnursing.com/reviews/nursing_education_India.htm) (accessed December 11, 2010).
- Davis, C. R., and P. B. Kritek. 2005. Foreign nurses in the U.S. workforce. *Healthy work environments: Foreign nurse recruitment best practices*. Washington, DC: American Organization of Nurse Executives, Pp. 2-11. <http://www.aone.org/aone/pdf/ForeignNurseRecruitmentBestPracticesOctober2005.pdf> (accessed December 3, 2009).
- Davis, C. R., and D. R. Richardson. 2009. Preparing to leave your home country. In *The official guide for foreign-educated nurses: What you need to know about nursing and health care in the United States*, edited by B. L. Nichols and C. R. Davis. New York: Springer. Pp. 20-42.
- Edwards, P., and C. R. Davis. 2006. International nurses perceptions of their clinical practice. *Journal of Continuing Education in Nursing*, November/December, 37(6): 265-269.
- European Commission. 2009a. *The EU single market: specific sectors*. [http://ec.europa.eu/internal\\_market/qualifications/specific-sectors\\_en.htm](http://ec.europa.eu/internal_market/qualifications/specific-sectors_en.htm) (January 19, 2010).
- European Commission. 2009b. *Professional qualifications*. [http://ec.europa.eu/internal\\_market/qualifications/index\\_en.htm](http://ec.europa.eu/internal_market/qualifications/index_en.htm) (accessed January 19, 2010).
- European Foundation for the Improvement of Living and Working Conditions. 2007. *Employment initiatives for an ageing workforce*. <http://www.eurofound.europa.eu/publications/htmlfiles/ef0639.htm> (accessed December 15, 2009).
- Fang, Z. 2007. *Potential of China in global nurse migration*. *Health Services Research*. 2007 June, 42(3 Pt 2), 1419-1428. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1955377/> (accessed November 2, 2009).
- Focus Migration. (2006). *Remittances: A bridge between migration and development*. [http://www.focus-migration.de/Remittances\\_A\\_Brid.1200.0.html?&L=1](http://www.focus-migration.de/Remittances_A_Brid.1200.0.html?&L=1) (accessed February 16, 2010).
- Gorman, A. 2007. Unbalanced care: Nurse migration in the Philippines. *The Heinz Journal* (44). <http://journal.heinz.cmu.edu> (accessed October 16, 2009).
- Hakesley-Brown, R. 2009. Ease on down the road: Exploring pathways to excellence in clinical education. Paper presented at the 2009 National League for Nursing Summit, Philadelphia, PA.
- Hawkes, M., M. Kolenko, M. Shockness, and K. Diwaker. 2009. Nursing brain drain from India. *Human Resources for Health*. <http://www.human-resources-health.com/content/7/1/5> (accessed December 18, 2009).
- Healy, M. 2006. *Outsourcing care: Ethics and consequences of global trade in Indian nurses*. <http://www.sueztsuva.org.au/SouthAsia/2006/Health.paf> (accessed January 7, 2010).
- Hendrickson, B. and P. Nordstrom. 2007. *Reducing the learning recognition gap for internationally educated nurses (IENs): Leading change through prior learning assessment and recognition (PLAR)*. Paper presented at the Training for Organizational Leaders Meeting, Jacksonville, Florida.
- ICN (International Council of Nurses). 2003. *ICN framework of competencies for the generalist nurse*. Geneva, Switzerland: Author.



- ICN. 2006. *The Global nursing shortage: Priority areas for intervention*: Geneva, Switzerland: Author.
- ICN. 2008. *An aging nursing workforce*. [http://www.icn.ch/matters\\_ageing\\_Workforce.htm](http://www.icn.ch/matters_ageing_Workforce.htm) (accessed January 15, 2009).
- ICN. 2009a. *The role and identity of the regulator: An international comparative study*: Geneva, Switzerland: Author.
- ICN. 2009b. *Mutual recognition agreements*. [http://www.icn.ch/matters\\_mra.htm](http://www.icn.ch/matters_mra.htm) (accessed January 15, 2010).
- Immigration Policy Center of the American Immigration Council. 2009. *Critical care: The role of immigrant workers in U.S. health care*. Washington, DC: Author.
- Indian Nursing Council. 2009a. *Types of nursing programs: Admission terms & Conditions for School/College of Nursing*. <http://www.indiannursingcouncil.org/types-nursing-programs.asp> (accessed December 3, 2009).
- Indian Nursing Council. 2009b. *About Indian Nursing Council*. <http://www.indiannursingcouncil.org/functions-structure-constitution-community.asp> (accessed December 3, 2009).
- Indian Nursing Council. 2009c. *Guidelines to start nursing programs*. <http://www.indiannursingcouncil.org/functions-structure-constitution-community.asp> (accessed December 3, 2009).
- Khadria, B. 2007. International nurses recruitment in India. *Health Services Research*. June, 42(3 Pt 2), 1429-1436.
- Kaiser Family Foundation. 2009. *Nurses and Midwives per 10,000 Population: 2000–2007*. <http://www.globalhealthfacts.org/topic.jsp?i=75&dsp=c#table> (accessed February 2, 2010).
- Kingma, M. 2006. *Nurses on the move: Migration and the global health care economy*. Ithaca, NY: Cornell University Press.
- Little, L., and J. Buchan. 2007. *Nursing self sufficiency in the global context*. Philadelphia, Pennsylvania: International Centre on Nurse Migration.
- Malvarez, S. M., and M. C. C. Agudelo. (2005). *Overview of the nursing workforce in Latin America*. <http://www.hrhresourcecenter.org/node/629> (accessed January 15, 2010).
- Mateo, I. C. 2008. *With dreams dying, Filipino nurses ponder options, set new directions*. Philippine Star, November 13, 2008. [www.philstar.com/Article.aspx?articleId=414991](http://www.philstar.com/Article.aspx?articleId=414991) (accessed December 10, 2009).
- Munjana, O., S. Kibuka, and D. Dovlo. 2005. *The nursing workforce in sub-Saharan Africa*. Geneva: International Council of Nurses.
- NCSBN (National Council of State Boards of Nursing). 2009a. *Nurse licensure compact*. <https://www.ncsbn.org/nlc.htm> (accessed February 2, 2010).
- NCSBN. 2009b. *Quarterly examination statistics: Volume, pass rates & first-time internationally educated candidates' countries*. [https://www.ncsbn.org/NCLEX\\_Stats\\_2009\\_Q3.pdf](https://www.ncsbn.org/NCLEX_Stats_2009_Q3.pdf) (accessed December 16, 2009).
- NCSBN. 2009c. *Volume and NCLEX® Examination Statistics*. [https://www.ncsbn.org/WEB\\_08\\_2007LicExamRB\\_Vol35\\_CS3.pdf](https://www.ncsbn.org/WEB_08_2007LicExamRB_Vol35_CS3.pdf) (accessed February 19, 2010).
- Ndlovu, R., M. Phiri, O. Munjanja, S. Kibuka, and J. Fitzpatrick. 2003. *The East, Central and Southern African College of Nursing: A collaborative endeavor for health policy and nursing practice. Policy, Politics and Nursing Practice* (4)3, 221-226.
- Nichols, B. 2007. *The impact of global nurse migration on health services delivery* (a white paper). Philadelphia, Pennsylvania: CGFNS International, Inc.
- Nichols, B. L., C. R. Davis, and D. R. Richardson. 2009. *Foreign educated nurses in the U.S. health care system*. In *The official guide for foreign-educated nurses: What you need to know about nursing and health care in the United States*, edited by B. L. Nichols and C. R. Davis. New York: Springer. Pp. 1-19.
- NMC (Nursing and Midwifery Council). 2009a. *Statistical analysis of the register 1 April 2007 to 31 March 2008*, p. 6-9. <http://www.nmcuk.org/aDisplayDocument.aspx?DocumentID=5730> (accessed January 14, 2009).

- NMC. 2009b. *Standards of proficiency for pre-registration nursing education*. <http://www.nmc-uk.org/aDisplayDocument.aspx?documentID=328> (accessed January 8, 2010).
- NMC. 2009c. *New U.K. registration*. <http://www.nmc-uk.org/aArticle.aspx?ArticleID=171> (accessed January 8, 2010).
- NMC. 2009d. *What does an SCPHN do?* <http://www.nmc-uk.org/aArticle.aspx?ArticleID=2737> (accessed January 15, 2010).
- NMC. 2009e. *PREP standards and qualifications*. <http://www.nmc-uk.org/aArticle.aspx?ArticleID=2793> (accessed January 8, 2010).
- NNMC (Nigerian Nursing and Midwifery Council). 2009. *Code of professional conduct*. <http://www.nmncigeria.org/standards.php> (accessed January 8, 2010).
- Nowhere to train. 2008. *The Philippine Star*. September 8, 2008. <http://www.bizlinksphilippines.net/090808.htm> (accessed November 10, 2009).
- OIIQ (Ordre des Infermières et Infirmiers du Québec). 2009. *Professional examination for admission to the profession*. <http://www.oiiq.org/infirmieres/examen.asp> (accessed December 18, 2009).
- Penn Consortium for Human Resources in Health. 2006. *Conclusions of human resources for health: National needs and global concerns*. Research and Policy Retreat. Philadelphia: Author.
- RCN (Royal College of Nursing). 2003. *Defining nursing*. [http://www.rcn.org.uk/\\_data/assets/pdf\\_file/0008/78569/001998.pdf](http://www.rcn.org.uk/_data/assets/pdf_file/0008/78569/001998.pdf) (accessed January 8, 2010).
- RCN (Royal College of Nursing). 2006. *Majority of new nurses unable to find jobs in the NHS, says RCN*. <http://www.rcn.org.uk/news/mediadisplay.php?ID=2199&area=Press> (accessed January 8, 2010).
- Reid, U. V. 2000. Regional examination for nurse registration, commonwealth Caribbean. *International Nursing Review* September, 47(3), 174-183.
- Richardson, D. R., and C. R. Davis. 2009. Entry into the United States. In *The official guide for foreign-educated nurses: What you need to know about nursing and health care in the United States*, edited by B. L. Nichols and C. R. Davis. New York: Springer. Pp. 1-19.
- Salmon, M. E., J. Yan, H. Hewitt, and V. Guisinger. 2007. Managed migration: The Caribbean approach to addressing nursing services capacity. *Health Services Research* June, 42(3 Pt 2), 1354-1372.
- Seago, J. 2008. *The global nursing shortage and nurse migration*. [http://cpath.org/sitebuildercontent/sitebuilderfiles/seago\\_nurse\\_migration\\_slides.ppt](http://cpath.org/sitebuildercontent/sitebuilderfiles/seago_nurse_migration_slides.ppt) (accessed, November 30, 2009).
- Siantz, L. 2008. Migration of nurses: A Latin American perspective. *Online Journal of Issues in Nursing* 13(3).
- Smith, D. R., and S. Tang. 2004. *Nursing in China: Historical development, current issues and future challenges*. (5)2: 16-20. [http://www.oita-nhs.ac.jp/journal/PDF/5\\_2/5\\_2\\_1.pdf](http://www.oita-nhs.ac.jp/journal/PDF/5_2/5_2_1.pdf) (accessed January 29, 2010).
- South African Nursing Council. 2004. *Draft charter of nursing practice*. <http://www.sanc.co.za/pdf/Charter%20Presentation.pdf> (accessed January 13, 2010).
- Statutory Instruments. 2002. No. 253. Nurses and Midwives. The Nursing and Midwifery Order 2001. *Establishment and maintenance of register*. <http://www.opsi.gov.uk/si/si2002/20020253.htm#4> (accessed January 18, 2005).
- Taylor, K. 2007. *Practical nurses respond to call to work in Canada*. [http://www.jis.gov.jm/labour/html/20071106T120000-0500\\_13417\\_JIS\\_PRACTICAL\\_NURSES\\_RESPOND\\_TO\\_CALL\\_TO\\_WORK\\_IN\\_CANADA.asp](http://www.jis.gov.jm/labour/html/20071106T120000-0500_13417_JIS_PRACTICAL_NURSES_RESPOND_TO_CALL_TO_WORK_IN_CANADA.asp) (accessed December 15, 2009).
- Thomas, P. 2006. The international migration of Indian nurses. *International Nursing Review* (53), 277-283.
- UKBA (United Kingdom Border Agency). 2009. *Working in the United Kingdom*. <http://www.ukba.homeoffice.gov.uk/workingintheuk/> (accessed January 8, 2010).
- United Nations. 1948. *Universal declaration of human rights*. Office of the High Commissioner for Human Rights. <http://www.un.org/en/documents/udhr/> (accessed December 18, 2009).

- Vujcic, M., K. Ohiri, and S. Sparkes. 2009. *Working in health: Financing and managing the public sector health workforce*. Washington, DC: World Bank.
- WHO (World Health Organization). 2006. *World health report 2006: Working together for health*. Geneva, Switzerland: Author.
- WHO. 2009. *Nursing and midwifery human resources for health: Global standards for the initial education of professional nurses and midwives*. Geneva, Switzerland: Author.
- WHO. 2010. *Public hearings on a WHO code of practice on the international recruitment of health personnel*. [http://who.int/hrh/public\\_hearing/draftcode/en/print.html](http://who.int/hrh/public_hearing/draftcode/en/print.html) (accessed February 24, 2010).
- World Bank. 2009. The nurse labor and education markets in the English speaking CARICOM: Issues and options for reform. [http://www-wds.worldbank.org/external/default/main?pagePK=64193027&piPK=64187937&theSitePK=523679&menuPK=64187510&searchMenuPK=64886411&theSitePK=6313037&entityID=000333038\\_20100119233822&searchMenuPK=64886411&theSitePK=6313037](http://www-wds.worldbank.org/external/default/main?pagePK=64193027&piPK=64187937&theSitePK=523679&menuPK=64187510&searchMenuPK=64886411&theSitePK=6313037&entityID=000333038_20100119233822&searchMenuPK=64886411&theSitePK=6313037) (accessed January 12, 2010).
- WTO (World Trade Organization). 2010. *The general agreement on trade in services (GATS): Objectives, coverage and disciplines*. [http://www.wto.org/english/tratop\\_e/serv\\_e/gatsqa\\_e.htm](http://www.wto.org/english/tratop_e/serv_e/gatsqa_e.htm) (accessed January 15, 2010).
- Zalalequi, A., M. Marquez, R. Nunin, and I. Mariscae. 2006. Changes in nursing education in the European Union. *Journal of Nursing Scholarship* 38(2), 114-118.

## ABOUT CGFNS INTERNATIONAL

CGFNS International is an immigration neutral, internationally recognized authority on credentials evaluation and verification pertaining to the education, registration and licensure of nurses and health care professionals worldwide. The mission of CGFNS International is to serve the global community through programs and services that verify and promote the knowledge-based practice competency of health care professionals. CGFNS International protects the public by ensuring that nurses and other health care professionals educated in countries other than the United States are eligible and qualified to meet licensure, immigration and other practice requirements in the United States.

CGFNS International and its divisions provide products and services that validate international professional credentials and support international regulatory and educational standards for health care professionals. The organization focuses on four key objectives:

1. To develop and administer a predictive testing and evaluation program for internationally educated nurses
2. To provide a credentials evaluation service for internationally educated and/or internationally born health care professionals
3. To serve as a clearinghouse for information on the international education and licensure of health care professionals
4. To conduct and publish studies relevant to internationally educated health care professionals

The major CGFNS programs used by internationally educated health care professionals are the VisaScreen Program<sup>®</sup>, which is the leading health care worker certification program for immigration and for obtaining occupational visas in the United States; the Credentials Evaluation Service, which provides a course-by-course comparison of international education to U.S. standards for licensure, education and employment; and the Credentials Verification Service for New York State, which is required of internationally educated registered and practical nurses, occupational therapists and assistants, and physical therapists and assistants seeking licensure in New York State.

CGFNS International celebrated its 30th anniversary in 2007. It has reviewed and/or certified the credentials of over 500,000 internationally educated nurses and other health care professionals for U.S. licensure and immigration.

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The paper is based on published international literature in the field; documents from CGFNS International files; research studies; trends in the nursing labor market, including globalization and demographic changes; increased use of complex technologies; and the authors' personal observations and participation in relevant national and international conferences and meetings on the subject.

The authors are responsible for the content of the paper.

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