

# An Overview of Education and Training Requirements for Global Healthcare Professionals

## ❖ *Nursing* ❖

GLOBAL KNOWLEDGE EXCHANGE NETWORK  
on Healthcare

### *Workforce and Training Task Force*



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## EXECUTIVE SUMMARY

In the majority of reviewed countries, nursing education and training programs begin instruction after successful completion of secondary school and meeting criteria of the admitting institution. However, in the United States (US), requirements depend on the nursing track and the institution. Two-year registered nurse (RN) associate programs (ADN) are often direct admission from high school. Four-year bachelor of nursing (BSN) programs can include two years of coursework followed by special admission to the university's nursing program and another two years of nursing specific coursework, or four years of a generic nursing program leading to a BSN. Length of education and training for RNs is three to four years in all reviewed countries except for the US and Singapore. In these two countries, an individual can attend a "2-year program" and become an RN, even though the actual length of time often takes longer due to described "stringent requirements."<sup>1</sup> Currently two-thirds of US nursing students graduate from an ADN program.

Of the countries reviewed in this report, a four-year BSN is currently required only in Canada, Australia and the US state of North Dakota as a standard for entry to practice. Germany and the United Kingdom (UK) are working towards reforming education standards,<sup>2</sup> and it is expected that England will require a four-year BSN in the next two to four years. (A BSN is also required in Scotland, Wales, and Northern Ireland, though these countries are not specifically addressed in this report.) Some US state organizations have adopted resolutions with regard to education standards – for example, New York and New Jersey are considering requiring that ADN new entry nurses earn a BSN within 10 years. However, there are some challenging issues in requiring a baccalaureate degree in the US, such as how to encourage advanced training without disenfranchising nurse colleagues who have only an ADN. Some research studies have examined the difficulty in transitioning to a mandated BSN, such as the case in New Brunswick, Canada, and cited a decrease in nurse direct care to patients, an increase in administrative roles, and strained working relationships between different nurse generations.<sup>3</sup> Further, while some individuals support one entry level into practice such as a BSN, they also advocate for a stipulation that an ADN graduate continue to be accepted in professional practice with a five-year framework for completing the BSN degree.<sup>4</sup> Amidst the debate, the National League for Nursing, the first professional association for nurses in the US, continues to stress the need for quality nursing education for all training levels of nurses in order to maintain a well-prepared workforce.

In response to concern about nursing program accessibility, the presence of online courses has increased. For example, in July 2009 the state of California started one of the first accredited online baccalaureate degree nursing programs for registered nurses.<sup>5</sup> In addition, the number of nursing education institutions has increased in some countries, such as Singapore developing and opening its first local undergraduate nursing degree program.<sup>6</sup> Licensure and certification are required following completion of educational programs for RNs in all reviewed countries, though the level at which it occurs differs (national, state, province, territory). Continuing education is most often encouraged but not mandated, though in the UK, RNs must have completed 450 working hours and 35 learning hours over three years in order to renew the nursing license. Other countries such as Singapore regulate continuing education at the advance practice nursing (APN) level by requiring 200 hours of clinical practice and 30 continuing professional development units for the annual renewal of practice certificate.

While the nursing profession and respective country associations continue to support prescription privileges for APN, and systematic reviews have favorably compared the quality of care APNs provide to that of physicians,<sup>7</sup> the US and Canada vary by state and province on these rights and in the UK an APN or RN can attend non-medical prescription courses at an accredited institution to gain privileges.

## SPOTLIGHT ON HEALTH OUTCOMES & NURSING EDUCATION

*“It is nurses—of every stripe—who will deliver, coordinate, and direct care in hospitals, clinics, and physicians’ offices, and it is these same most necessary nurses who are in short supply. Until the pipeline for advanced education in nursing is flowing freely, the nation’s nurse workforce will have difficulty achieving its potential.”<sup>8</sup>*

The nursing research literature highlights the relationship between education level and patient health outcomes, particularly the impact of having a baccalaureate degree. Higher education levels, specifically having a greater proportion of staff nurses with a minimum of a bachelor’s degree, was significantly associated with decreased in-hospital mortality, length of stay, medication errors and procedural violations. These trends were noted across multiple countries and nursing specialties.<sup>9</sup>

However, a nursing shortage has also been observed globally. The United States Health Resources and Service Administration estimates that the nursing shortage will reach between 500,000 and 1 million by the year 2020.<sup>10</sup> In spite of the shortage, potential nursing students are being turned away, not for lack of fulfilling the entry requirements, but due to insufficient institutional staff and resources. The American Association of Colleges of Nursing reports that over 40,000 qualified applicants were not accepted at American baccalaureate nursing schools in 2008, up from 3,600 in 2002. The most commonly cited reasons were lack of faculty (62.5%), insufficient clinical teaching sites (53.8%) and limited classroom space (42.3%).<sup>11</sup> The World Health Organization Core Indicators for Health maintains databases on the global nursing density by country and it ranges from 45 nurses per 10,000 people in Singapore to 80 in France and 128 in the United Kingdom. The Clinton HIV/AIDS initiative also cites “varied education requirements to become a licensed nurse” as a significant policy issue in nursing education.<sup>12</sup>

With the current workforce conditions and research findings in mind, healthcare professionals are considering many approaches to address the nursing shortage, improve nursing education, and potentially making the baccalaureate degree a required standard for entry to practice. While some countries such as Canada require a baccalaureate degree for nursing practice, in the United States the National Council of State Boards for Nursing reports that two-thirds of new nurse graduates attended associate degree programs. Increased collaboration between universities and funding bodies has been suggested as a necessary step to address the educational capacity issue. In a collaboration such as the Committee on Inter-Institutional Cooperation, the institutions share faculty, curriculum, simulation technology, clinical placement sites, and application portals.<sup>13</sup> Further, the private sector has responded with hospital based scholarships and faculty loan agreements as well as successful funding partnerships between foundations, state and federal government, and private hospitals.<sup>14</sup> Other notable innovations include cooperation between the United States Department of Education and the European Commission on Higher Education to develop a transatlantic curriculum and dual degree program in nursing.<sup>15</sup> In addition to creating nurses that can easily work in other countries, the Transatlantic Nursing Curriculum Project exists to share evidenced- based education practice standards.<sup>16</sup> For more information about the international endeavor, visit: [http://www.tcn-atlantis.org/home\\_m4gb.html](http://www.tcn-atlantis.org/home_m4gb.html).

## EDUCATION AND TRAINING REQUIREMENTS FOR NURSES



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The nursing profession has a great international legacy and has undergone reform and advances to the training and regulation processes in order to meet the changing health needs of the global population.

The Nursing Research Unit at King's College London recently conducted an assessment of the nursing education requirements and regulation systems in 18 OECD countries that facilitates cross-country comparisons.

The research document, "Nursing Education and Regulation: International Profiles and Perspectives" (2007), written by Sarah Robinson and Peter Griffith, and commissioned by the United Kingdom's Department of Health, can be accessed here:

<http://www.kcl.ac.uk/content/1/c6/03/07/33/NurseEduProfiles.pdf>

**TABLE 1: NURSE TRAINING AND EDUCATION – SELECT COUNTRIES** <sup>17</sup>

Requirement	US		UK		Australia		Germany	
<b>Previous Post-Secondary Coursework /# years</b>	CNA	No	AP	No	CA	No	AN	No
	LPN/LVN	No						
	RN	Varies by degree program, 2-4	RN	No, programs begin after completing secondary education	RN	No, programs begin after completing secondary education	1 <sup>st</sup> Level	2
	APRN	2-4	ANP	3 - 4	ANP	3 + 1 year working	2 <sup>nd</sup> Level	2
<b>Years of nursing school</b>	LPN/LVN	1	AP	1	CA	1		
	RN	2 - 4	RN	3 - 4	RN	3	First Level	3 - 4
	APRN	4 - 6	ANP	5 - 6	ANP	4 – 6	Second Level	1
							Level	
<b>Degree Title</b>	Associate Degree in Nursing or Applied Science in Nursing (ADN) Bachelor of Nursing (BSN) Master of Nursing (MSN) Doctorate in Nursing (DPN)		Diploma of Higher Education in Nursing (Dip HE Nursing) Bachelor of Science in Nursing or European Nursing (BSc) Master of Philosophy in Nursing (M.Phil) Doctor of Philosophy in Nursing (PhD)		Diploma in nursing (enrolled nurse) Bachelor of Nursing (RN) Master in Advanced Nursing Practice (ANP) Doctorate in Nursing		Nursing Diploma (Hospital – based) Bachelor’s Degree in Nursing	
<b>Position Title</b>	Certified Nurse’s Assistant (CNA) Licensed Practical/Vocation Nurse (LPN/LVN) Registered Nurse (RN) Advanced Practice Registered Nurse (APRN)		Assistant Practitioner (AP) Registered Nurse (RN) Advanced Nurse Practitioner (ANP)		Care Assistant (CA) Registered Nurse (RN) Enrolled Nurse Practice Nurse (employed by medical general practices)		Assistant Nurse (AN) First Level Nurse (General, Pediatric, Geriatric) Second Level Nurse	
<b>Specialty training</b>	Yes, optional for LPN and RN by certification exam, required for APRN		Yes, optional through short term post-registration clinical courses and post-graduate courses		Yes		Yes, optional 2 year hospital based programs	
<b>Licensing &amp; Certification</b>	LPN/LVN & RN: National Council of State Boards of Nursing (NCSBN) and States’ Nursing Board APRN: States’ Nursing Board		Nursing & Midwifery Council <a href="http://www.nmc-uk.org/">http://www.nmc-uk.org/</a>		Australian Nursing and Midwifery Council (ANMC) and Nursing and Midwifery Regulatory Authority (in respective state or territory)		No national registration system or regulatory nursing body (at regional level); federal states regulate Second Level education and specialization	
<b>Continuing Education &amp; License Re- newal</b>	Varies by State <a href="http://www.nursingcenter.com/pdf.asp?AID=636579">http://www.nursingcenter.com/pdf.asp?AID=636579</a>		Renewal every 3 years; requires 450 working hours and 35 learning hours		Annual re-licensure national regulation expected in 2010, ANMC developed Continuing Competence Framework in 2009		No	
<b>Prescriptive Privileges</b>	APRN privileges vary by state		Yes, attained through prescription courses at accredited institutions		No		No	



<b>Requirement</b>	<b>Canada</b>		<b>France</b>		<b>Singapore</b>	
<b>Previous Post-Secondary Coursework /# years</b>	RN ANP	No, programs begin after secondary education	RN	No, programs begin after secondary education	RN APN	No, programs begin after secondary education
<b>Years of nursing school</b>	RN Post Basic RN BSN	3 – 4 2 - 3	RN	3 0 – 2 years professional experience and 18 – 24 months additional training	RN Registered Midwife	2 – 4 Additional 1 year for RN
<b>Degree Title</b>	Diploma in Nursing (in 5 provinces) Baccalaureate in Nursing (BN required in all other provinces) Post Basic Registered Nurse Baccalaureate in Nursing (Diploma in Nursing to BN) Masters in Nursing Doctorate in Nursing		Vocational State Diploma (Hospital-based) Not currently available at master's level		Diploma in Nursing National ITE Certificate in Nursing Bachelor of Nursing (for RN)	
<b>Position Title</b>	Registered Nurse Advanced Nursing Practice: Clinical Nurse Specialist and Nurse Practitioner		Registered Nurse Nurse Clinician (not currently at master's level, French National Authority for Health considering adding Nurse Practitioner role)		Registered Nurse Enrolled Nurse Registered Midwife (for RN) Advance Practice Nurse (APN)	
<b>Specialty training</b>	Yes, optional specialty certification for RNs offered by Canadian Nursing Association in 19 nursing practice areas. Required for Advanced Nursing Practice.		Yes Child Care Nurse Nurse Anesthetist Operating Room Nurse		Yes	
<b>Licensing &amp; Certification</b>	Yes – mandatory licensing, registration to practice and regulation occurs at province and territory level.  For more information: <a href="http://www.cna-aiic.ca/CNA/about/members/provincial/default_e.aspx">http://www.cna-aiic.ca/CNA/about/members/provincial/default_e.aspx</a>		No State licensure, Ministry of Health approves certification		Yes, Singapore Nursing Board	
<b>Continuing Education &amp; License Renewal</b>	British Columbia and Ontario have formal nursing continuing competence programs. The province/territory regulatory bodies do not have specific CE requirements or assess CE programs to assess continuing education units. Nurses keep CE records to maintain specialty certification.		No state requirements		Nurse/Midwife: Annual renewal of practice certificate, continuing education strongly recommended but not required  APN: Annual renewal of practice certificate, 200 hours of clinical practice and 30 continuing professional development units	
<b>Prescriptive Privileges</b>	APN privileges vary by province and territory		No		No	



## PROFESSIONAL ORGANIZATIONS AND RESOURCES

### *United States*

- National Council of State Boards of Nursing, <https://www.ncsbn.org>
- States' Boards of Nursing, <http://www.medscape.com/viewarticle/482270>
- American Nurses Foundation, <http://www.anfonline.org/>
- American Nurses Association, <http://www.nursingworld.org/>
- National League for Nursing, <http://www.nln.org/>
- American Nursing Organizations, compiled by National Student Nurses Association, [http://www.nсна.org/pdf/Imprint\\_Jan08\\_NursingOrgList.pdf](http://www.nсна.org/pdf/Imprint_Jan08_NursingOrgList.pdf)

### *United Kingdom*

- Nursing & Midwifery Council, <http://www.nmc-uk.org/>
- British Nursing Association, <http://www.bna.co.uk/>
- Community and District Nursing Association, <http://www.cdna-online.org.uk/>
- Commonwealth Nurses Federation, <http://www.commonwealthnurses.org>

### *Australia*

- Australian Nursing Federation, <http://www.anf.org.au/>
- Australian Nursing and Midwifery Council (ANMC), <http://www.anmc.org.au/>
- Nursing and Midwifery Regulatory Authority, <http://www.midwives.org.au/UsefulLinks/NursingandMidwiferyRegulatoryAuthorities/tabid/319/Default.aspx>

### *France*

- Ministry of Health, <http://www.sante-jeunesse-sports.gouv.fr/>
- Association de Recherche en Soins Infirmiers (French Nursing Research Association), <http://www.arsi.asso.fr/>

### *Germany*

- Der Deutsche Berufsverband für Pflegeberufe (German Nursing Association), <http://www.dbfk.de/>
- International Federation of Nurse Anesthetists, <http://www.ifna-int.org>

### ***Canada***

- Canadian Nurses Association, <http://www.cna-nurses.ca/cna/>
- Canadian Nurses Foundation, <http://www.cnf-fiic.ca/>
- Provincial and Territorial Regulatory Bodies, [http://www.cna-aiic.ca/CNA/nursing/regulation/regbodies/default\\_e.aspx](http://www.cna-aiic.ca/CNA/nursing/regulation/regbodies/default_e.aspx)
- The Canadian Nursing Index, <http://www.nursingindex.com/>
- Sigma Theta Tau International Honor Society of Nursing – North American Nursing Organizations, <http://www.nursingsociety.org/GlobalConnect/organizations/Pages/NursingOrganizationsCanada.aspx>

### ***Singapore***

- Singapore Nurses Association, <http://www.sna.org.sg/site/>
- Singapore Nursing Board, [http://www.snb.gov.sg/html/SNB\\_Home.html](http://www.snb.gov.sg/html/SNB_Home.html)
- Health Professional Portal, <http://www.hpp.moh.gov.sg>
- Ministry of Health, Singapore – Careers in Nursing, <http://www.moh.gov.sg/mohcorp/careers.aspx?id=256>

### **Other Resources:**

- The Transatlantic Nursing Curriculum Project, <http://www.tcn-atlantis.org/>
- International Council of Nurses, <http://www.icn.ch/>
- International Center for Nursing Scholarship, <http://www.nursingsociety.org/aboutus/Pages/AboutUs.aspx>
- Nursing Knowledge International, <http://www.nursingknowledge.org>
- Foundation for Nursing Education, <http://www.nlnfoundation.org/index.cfm>
- National League for Nursing - Nursing Education Research, <http://www.nln.org/research/index.htm>

## LITERATURE CITED

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- <sup>1</sup> Taylor, D.L., “Should the Entry Into Nursing Practice be the Baccalaureate Degree?” *AORN Journal*, 2008, 87(3): 612 – 620.
- <sup>2</sup> Spear, H.J., “The baccalaureate degree for entry to practice: it’s time for nursing to take a stand,” 2003, *Nurse Education Today*, 23: 243 – 245.
- <sup>3</sup> Rheume, A., Dykeman, M., Davidson, P., Ericson, P., “The Impact of health care restructuring and baccalaureate entry to practice on nurses in New Brunswick,” *Policy, Politics & Nursing Practice*, 2007, 8(2): 130 – 9. Rheume, A., “Establishing consensus about the baccalaureate entry-to-practice policy,” *The Journal of Nursing Education*, 2003, 42(12): 546-552.
- <sup>4</sup> Letters to the Editor – “Differing views on the BSN as the entry level into nursing practice,” *AORN Journal*, 2008, 88(2): 181 – 183.
- <sup>5</sup> Nurse.com, “Classes to start for the first online pre-licensure nursing education program,” July 13, 2009, <http://news.nurse.com/article/20090713/CA02/107130040>.
- <sup>6</sup> O’Brien, P., Arthur, D.G., “Singapore nursing in transition: perspectives from the Alice Lee Centre for Nursing Studies, National University of Singapore,” *Singapore Medical Journal*, 2007, 48(10): 875 – 879.
- <sup>7</sup> Horrocks, S., Anderson, E., Salisbury, C., “Systematic review of whether nurse practitioners working in primary care can provide equivalent care to doctors,” *British Medical Journal*, 2002, 324: 819 – 823.
- <sup>8</sup> Cleary, B.L., Barron McBride, A., McClure, M.L., Reinhard, S.C., “Expanding the Capacity of Nursing Education,” *Health Affairs*, 2009, 28(4): w634-w645.
- <sup>9</sup> Estabrooks, C.A., Midodzi, W.K., Cummings, G.G., Ricker, K.L., Giovannetti, P., “The impact of hospital nursing characteristics on 30-day mortality,” *Nursing Research*, 2005, 54(2): 74 – 84. Aiken, L.H., Clarke, S.P., Cheung, R.B., et. al., “Educational Levels of Hospital Nurse and Surgical Patient Mortality,” *Journal of the American Medical Association*, 2003, 290(12): 1617-1623. Friese, C.R., Lake, E.T., Aiken, L.H., Silber, J.H., Sochalski, J., “Hospital Nurse Practice Environments and Outcomes for Surgical Oncology Patients,” *Health Services Research*, 2008, 43(4): 1145 – 1163. Tourangeau, A.E., Doran, D.M., McGillis Hall, L., O’Brien Pallas, L., Pringle, D., Tu, J.V., “Impact of hospital nursing care on 30-day mortality for acute medical patients,” *Journal of Advanced Nursing*, 2006, 57(1): 32-44. Fagin, C.M., *When*

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*Care Become a Burden: Diminishing Access to Adequate Nursing*, 2001, Milbank Memorial Fund, <http://www.milbank.org/reports/010216fagin.html>.

<sup>10</sup> Rother, J., Lavizzo-Mourey, R., “Addressing the Nursing Workforce: A Critical Element for Health Reform,” *Health Affairs*, 2009, 28(4): w620-w624.

<sup>11</sup> Robert Wood Johnson Foundation, *Qualified Applications Turned Away from Entry-Level Baccalaureate Nursing Programs: 2002 – 2008*, <http://www.rwjf.org/pr/product.jsp?id=45732>.

<sup>12</sup> Sliney, A., “Global Nursing Faculty Shortage: Innovative Approaches,” July 1, 2009, Clinton HIV/AIDS Initiative, [http://www.icn.ch/congress2009/presentations/M16\\_SLINEY\\_4B/index.html](http://www.icn.ch/congress2009/presentations/M16_SLINEY_4B/index.html).

<sup>13</sup> Cleary, B.L., et. al., 2009.

<sup>14</sup> Henderson, T.M., Hassmiller, S.B., “Hospitals and Philanthropy as Partners in Funding Nursing Education,” *Nursing Economics*, 2007, 25(2): 95 – 100.

<sup>15</sup> Hollos, S., Ikonen, T., O’Toole, M.T., Pop, M., Pordan, A., “Globalization of Nursing Education for Cultural Competence,” World Federation of Public Health Associations, 12th Congress on Public Health, April 27th - May 1, 2009, Istanbul, Turkey, PowerPoint Presentation, [www.wfpha.org/2009\\_Turkey/Website%20postings/.../O'Toole.ppt](http://www.wfpha.org/2009_Turkey/Website%20postings/.../O'Toole.ppt).

<sup>16</sup> Transatlantic Curriculum in Nursing, EU-US Project Portal, <http://www.tcn-atlantis.org/>.

<sup>17</sup> Cameron, L., “Nursing and Midwifery,” 2005, British Council, <http://www.britishcouncil.org/learning-infosheets-nursing.pdf>. National League for Nursing Accrediting Commission, Inc., NLNAC Accreditation, 2009, <http://www.nlnac.org/>. VanHouden A., Bonnel W., “Encouraging Associate Degree Nursing Students to Pursue a Bachelor of Science in Nursing: The Faculty Role,” *Teaching and Learning in Nursing*, 2007, 2(4):122-125. Nurse Licensure Compact Administrators, “Participating States in the NLC,” July 2008, <https://www.ncsbn.org/158.htm>. U.S. Bureau of Labor Statistics, “Registered Nurses,” *Occupational Outlook Handbook, 2008-09*, Washington, D.C.: United States Department of Labor, 2009, <http://www.bls.gov/oco/pdf/ocos083.pdf>. APRN Consensus Work Group, National Council of States Boards of Nursing APRN Advisory Committee, *Consensus Model of APRN Regulation: Licensure, Accreditation, Certification & Education*, 2008, <http://www.nursingworld.org/ConsensusModelforAPRN>. National Health Service, “Training to Be a Nurse,” 2009, <http://www.nhs.gov/nhs.uk/details/Default.aspx?Id=1941>. Royal College of Nursing, Nurse Practitioner Association, “Advanced Nurse Practitioner Forum,” 2009, [http://www.rcn.org.uk/development/communities/rcn\\_forum\\_communities/nurse\\_practitioner](http://www.rcn.org.uk/development/communities/rcn_forum_communities/nurse_practitioner). Nursing & Midwifery Council, “The Prep Handbook,” April 1, 2008, <http://www.nmc-uk.org/aDisplayDocument.aspx?documentID=4340>.