

PART III

Immigrant Health Workers in OECD Countries in the Broader Context of Highly Skilled Migration*

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Introduction

In recent years, concerns about growing shortages of health professionals, in particular doctors and nurses, have emerged in OECD countries. These shortages are projected to increase over the next 20 years, unless countermeasures are taken, because population ageing and changing technologies are likely to contribute to an increase in the demand for health workers, while workforce ageing will decrease the supply as the “baby-boom” generation of health workers reaches retirement age. One route to partially meeting such shortages is via international migration of health workers, a route which is already being utilised in OECD countries.

In this context, there is increasing competition between OECD countries to attract and retain highly skilled workers in general, and health professionals in particular. This raises concerns in both sending and receiving countries. In the case of developing countries, these concerns were set out in the 2006 World Health Report (WHO, 2006a). Several international initiatives have been set up recently¹ with the aim of formulating policy recommendations to overcome the global health workforce crisis, including through the elaboration of codes of conduct governing the international recruitment of health workers.

Despite this, evidence on the international mobility of health professionals remains scarce and limited, if not anecdotal. This lack of evidence has given rise to much misunderstanding of a complex phenomenon and has hindered the development of effective policy responses. Hence, it is vital to develop reliable and comparable data to identify the role played by international mobility of health workers in shaping the health workforce in OECD countries and its impact on origin countries.

The key objective of this chapter is to present a comprehensive and relevant picture of immigrants in the health sector in OECD countries, in order to better inform the policy dialogue at national and international levels. Section one refers to different sources of data to qualify the nature and the scope of international migration of doctors and nurses in OECD countries and deals with the main issues at stake for origin countries. Section two provides an evaluation of the most recent trends and section three reviews migration policies of OECD member countries related to health professionals. The conclusion summarises the main findings and identifies the opportunities and challenges for origin and receiving countries.²

Main findings

- Circa 2000, on average in the OECD 11% of employed nurses and 18% of employed doctors were foreign-born. There are, however, important variations across countries, which partly reflect differences in the characteristics of the health workforce and in the general patterns of migration, notably highly skilled.
- There are significant differences, both in absolute numbers and percentages, between foreign-born and foreign-trained health professionals. These differences are not, however, specific to the health sector and there are uncertainties in terms of the

international comparability of the data on the foreign-trained which are based on professional registers.

- About half of foreign-born doctors or nurses working in OECD countries are located in the United States, almost 40% in Europe and the remainder in Australia and Canada. The distribution by country of origin, however, varies significantly across the OECD and intra-OECD movements tend to be important.
- The United States is the only net receiver of doctors and nurses *vis-à-vis* all other countries in the world.
- Filipino-born nurses and Indian-born doctors each represent about 15% of all immigrant nurses and doctors in the OECD. The United Kingdom and Germany are the second and third most important origin countries.
- Caribbean countries and a number of African countries, notably Portuguese and French-speaking, but also Sierra Leone, Tanzania, Liberia and to a lesser extent Malawi, have particularly high emigration rates of doctors. For some of them this is combined with very low density of doctors in the home country, highlighting a very worrying situation for the health sector in these countries. On the other hand, for large origin countries such as India or China, the important number of health professionals working overseas, do not seem to have particularly affected domestic density, at least at an aggregated level.
- Comparison of regional staff shortages estimated by the WHO with total numbers of health professionals emigrated to OECD countries by region of birth reveals that the global health workforce crisis goes far beyond the migration issue. In particular, the needs for health workers in developing countries, as estimated by the WHO, largely outstrip the numbers of immigrant health workers in the OECD. Thus international migration is neither the main cause nor would its reduction be the solution to the worldwide health human resources crisis, although it exacerbates the acuteness of the problems in some countries.
- Long-term trends over the past 25 years or so show that the number and the percentage of foreign-trained doctors has increased significantly in most OECD countries, Canada being a notable exception. This increase has been particularly marked in European countries.
- Over the past 5 years radical upward shifts in the immigration trends have occurred. This is confirmed by both registration and permit data. Nonetheless, this increase has been less marked for nurses than for doctors.
- Recent migration inflows show a trend towards a diversification of origin countries. Main countries of origin, such as India or the Philippines, continue to play the most important role, but this is now accompanied by increased flows originating from small countries, notably African countries and central and eastern European countries.
- In OECD countries, there are very few specific migration programmes to date targeting health professionals. Bilateral agreements do not play an important role so far. Nevertheless, most OECD countries do have special provisions to facilitate the migration of the highly skilled in general, including health professionals.
- Recognition of foreign qualifications remains an important tool to insure high standards and quality in healthcare delivery, but also serves sometimes to control inflows of foreign-trained workers. Despite common features, which include theoretical and practical exams and language tests, OECD countries have different approaches to the recognition of foreign qualifications. Several countries have specific programmes to

attract foreign-trained health professionals who do not work in the health sector into the health workforce.

- Immigrants make an important contribution, not only if one considers the sheer numbers involved but also if one takes into account their role in insuring the continuity of service at night or during the week-end, notably in Europe.

1. Foreign-born and foreign-trained health professionals in OECD countries

Discussions on the international mobility of health professionals are severely hampered by data limitations, including ambiguity in data sources and definitions of health worker migrants, or excessive reliance on indirect quotations. These limitations are particularly acute when one seeks to make international comparisons. To a certain extent, this has contributed to confuse the debate on international mobility of health workers. Some recent contributions have acknowledged these difficulties and have made some progress in international comparability of data (e.g. Mullan, 2005; Bourassa et al., 2004; Stilwell et al., 2004; Diallo, 2004; Buchan et al., 2003), although they usually rely on a limited number of receiving countries.

This chapter aims to make a significant step forward on the data comparability front on this politically sensitive topic. This section begins by describing the main characteristics of the immigrant health workforce in OECD countries by using different harmonised data sources to produce the most accurate and relevant snapshot of the situation.

1.A. The size of the immigrant health workforce in OECD countries

Using population censuses and population registers Circa 2000, we assembled information on people employed in health occupations by detailed place of birth for 24 OECD countries.^{3, 4} Although these data have some limitations,⁵ they provide comparable estimates of the share of foreign-born health professionals in the total health workforce across OECD countries and of the distribution of health workers by country of origin.

This information is synthesized in Table III.1, which shows the total workforce and the percentage of foreign-born by main health occupations. These data are complemented by new statistics on foreign-trained health professionals (see Table III.2) compiled from professional registers and/or certification bodies.

Foreign-born health professionals in OECD: An internationally comparative approach

In 2000, on average in the OECD, 10.7% of employed nurses and 18.2% of employed doctors were foreign-born. However, for both nurses, doctors, and more generally for health professionals, we find large variations in the proportion of foreign-born across countries. For doctors, the percentage of foreign-born ranges from a low of 1.5 to 5% in Mexico, Poland and Finland, to a high of 30 to almost 47% in Luxembourg, the United Kingdom, Canada, Ireland, Australia and New Zealand. In absolute terms the United States has the most important number of foreign-born doctors (almost 200 000), followed by the United Kingdom (50 000) and France (34 000). In the latter case, this includes persons born abroad with French nationality, notably in Algeria before 1962.⁶


In general, the share of foreign-born nurses tends to be lower than for other health professionals. Greece, Switzerland and to a lesser extent Germany are exceptions. Part of the differences in the relative importance of immigrants by health occupation might be explained by the composition of the health workforce in general. According to OECD Health

Table III.1. **Practising health professionals by occupation and place of birth in OECD countries, Circa 2000**

Country of residence		Nurses (ISCO 223 + 323)			Health professionals (except nurses) (ISCO 222)			Doctors (ISCO 2221)			Source	Year
		Total	Foreign-born	% Total (excl. unknown places of birth)	Total	Foreign-born	% Total (excl. unknown places of birth)	Total	Foreign-born	% Total (excl. unknown places of birth)		
AUS	Australia	191 105	46 750	24.8	114 184	38 333	33.9	48 211	20 452	42.9	Census	2001
AUT	Austria	56 797	8 217	14.5	40 353	5 794	14.4	30 068	4 400	14.6	Census	2001
BEL	Belgium	127 384	8 409	6.6	62 101	6 350	10.2	39 133	4 629	11.8	LFS	1998-02
CAN	Canada	284 945	48 880	17.2	116 370	37 220	32.0	65 110	22 860	35.1	Census	2001
CHE	Switzerland	62 194	17 636	28.6	32 154	8 595	26.7	23 039	6 431	28.1	Census	2000
DEU	Germany	781 300	74 990	10.4	445 550	39 097	9.5	282 124	28 494	11.1	LFS	1998-02
DNK	Denmark	57 047	2 320	4.1	22 665	2 112	9.3	14 977	1 629	10.9	Register	2002
ESP	Spain	167 498	5 638	3.4	201 685	12 937	6.4	126 248	9 433	7.5	Census	2001
FIN	Finland	56 365	470	0.8	22 220	755	3.4	14 560	575	4.0	Census	2000
FRA	France	421 602	23 308	5.5	331 438	48 823	14.7	200 358	33 879	16.9	Census	1999
GBR	United Kingdom	538 647	81 623	15.2	218 369	63 786	29.2	147 677	49 780	33.7	Census	2001
GRC	Greece	39 952	3 883	9.7	21 920	1 621	7.4	13 744	1 181	8.6	Census	2001
HUN	Hungary	49 738	1 538	3.1	45 411	4 215	9.3	24 671	2 724	11.0	Census	2001
IRL	Ireland	43 320	6 204	14.3	13 293	3 735	28.1	8 208	2 895	35.3	Census	2002
LUX	Luxembourg	2 551	658	25.8	1 436	438	30.5	882	266	30.2	Census	2001
MEX	Mexico	267 537	550	0.2	294 867	3 596	1.2	205 571	3 005	1.5	Census	2000
NLD	Netherlands	259 569	17 780	6.9	66 640	9 649	14.5	42 313	7 032	16.7	LFS	1998-02
NOR	Norway	70 698	4 281	6.1	20 104	2 906	14.5	12 761	2 117	16.6	LFS	1998-02
NZL	New Zealand	33 261	7 698	23.2	15 027	5 790	38.6	9 009	4 215	46.9	Census	2001
POL	Poland	243 225	1 074	0.4	163 791	4 389	2.7	99 687	3 144	3.2	Census	2002
PRT	Portugal	36 595	5 077	13.9	36 258	6 238	17.2	23 131	4 552	19.7	Census	2001
SWE	Sweden	98 505	8 710	8.9	42 065	8 420	20.1	26 983	6 148	22.9	Register	2003
TUR	Turkey	..	..	..	128 700	6 984	5.4	82 221	5 090	6.2	Census	2000
USA	United States	2 818 735	336 183	11.9	1 229 221	256 893	20.9	807 844	196 815	24.4	Census	2000
OECD		6 708 570	711 877	10.7	3 685 822	578 676	15.9	2 348 530	421 746	18.2		

Note: ISCO 222 includes dentists, pharmacists, veterinarians and other health professionals not elsewhere classified. For the United States, the category "nurses" includes registered nurses and licensed practical and licensed vocational nurses (respectively 313 and 350 in the Census 2000 occupation classification). In Belgium, Germany, Spain, Greece, the Netherlands, Portugal, Sweden and Norway, figures for doctors have been estimated based on health professionals (separately for native-born and foreign-born). For reasons of international comparison, people born in Puerto Rico are considered as foreign-born in the United States (i.e. 5 162 health professionals except nurses; including 3 850 doctors and 6 701 nurses).

LFS: Labour force survey.

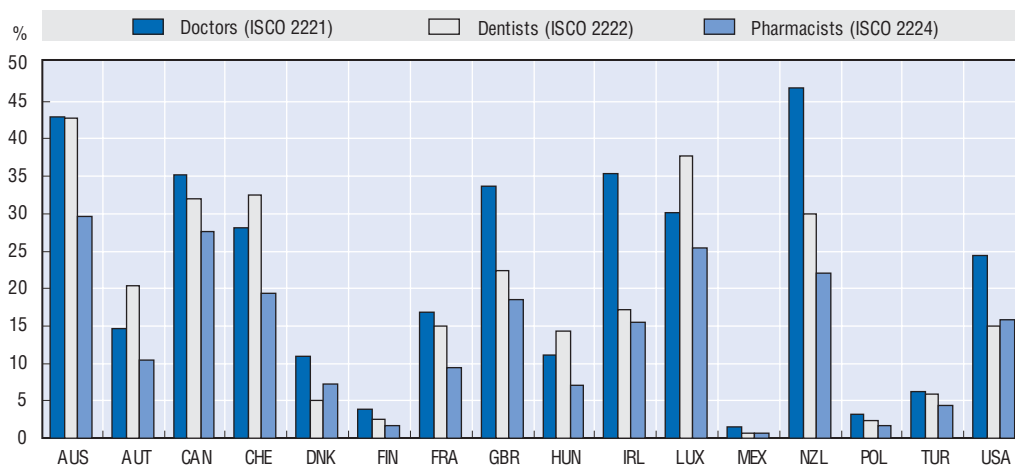
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Data, Greece has the highest ratio of physician per inhabitants (almost 4.5‰) amongst OECD countries but the lowest nurses-to-doctors ratio (less than 1). Conversely, Ireland, Canada and New Zealand have some of the highest nurses-to-doctor ratios in the OECD (above 4), and an higher share of foreign-born doctors (over 13 percentage points difference between foreign-born doctors and nurses).


For nurses, the United States is also the most important receiving country, with about 337 000 foreign-born nurses (although they represent only 12% of the nursing workforce), followed by the United Kingdom (82 000), Canada (49 000) and Australia (47 000).

When population census data are detailed enough to identify other specific health occupations, such as dentists or pharmacists, it appears that the share of foreign-born in these occupations varies widely between countries. Although the share of immigrants is generally higher for doctors than for other health professionals, the share for dentists is higher in Luxembourg, Switzerland or Austria (see Chart III.1). In Australia, about 42% of dentists are foreign-born, the highest figure recorded in the OECD.

Chart III.1. **Share of foreign-born among practicing doctors, dentists and pharmacists in selected OECD countries, Circa 2000**



Source: See Table III.1.

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In all OECD countries for which data are available, the share of foreign-born pharmacists tends to be much lower than for other health professionals. The fact that in addition to the other usual requirements for recognition of foreign qualifications, pharmacists usually need to pass a law exam appears as an additional impediment. This is due to the fact that pharmacists are usually the legal gatekeepers for drug supply. A number of additional explanations could be mentioned here, including: i) the fact that hospitals employ a small share of all pharmacists while it concentrates most of immigrant employment; and ii) application of quite stringent requirements for recognition of foreign qualification, including a quasi systematic period of supervised practice (Chan and Wuliji, 2006).

In total, there are about 50 000 foreign-born dentists and 57 000 foreign-born pharmacists working in the 16 OECD countries for which data are available, corresponding respectively to 10.4% and 12% of all health professionals (except nurses).

Foreign-trained doctors and nurses in OECD: Same issue with a different perspective

The information based on place of birth could give a distorted image of the role of international migration in shaping the health workforce in OECD countries if a significant share of these foreign-born were actually trained in the receiving country and not in their origin country. For that reason, we have also collected data on place of training from professional registers (see Table III.2). Because there is no centralised source, nor harmonized definitions or criteria for registration, the compilation of these data has required a significant amount of work including for analysing and referencing the meta-data. This makes Table III.2 fairly unique but not exempt from data caveats.⁷ In particular in some OECD countries, the place of training could not be identified, but the nationality. This is the case for 7 out of 24 countries for doctors and 5 out of 15 for nurses. Furthermore, international comparability of health professionals' registers is also affected by institutional differences in registration processes (see Box III.1). For all these reasons, international comparisons based on the data presented in Table III.2 should be considered with caution.

Box III.1. International comparability of health professional registration data

As in all OECD countries, most health professionals, and in particular doctors are supposed to register in order to practice. Therefore, professional registers are an important data source on health professionals. Most registers contain information on the doctor's reference number, name, gender, date of registration, registration status, specialisation. The register is also an important data source to study health worker migration, as it in principle includes information on place of education, therefore allowing one to identify foreign-educated health workers.

Although registers represent probably one of the best data sources on foreign-educated health workers, in particular for doctors, various issues arise when undertaking international comparisons of foreign-educated health workers using these sources. Registration varies across countries: The bodies involved in the registration might differ from one country to another; registration might be at national or regional level; different registration status exist at national level but also across countries; and the availability of data is also dependent on the type of information system.

In some countries registration is carried out by an independent body, such as the Medical Council, in other countries, registration is closely monitored by the Ministry of Health, covering a large range of health professions. For instance, in the Netherlands, the BIG-register is part of an executive agency of the Ministry of Health, Welfare and Sport and deals with the registration of physicians, pharmacists, physiotherapists, health care psychologists, psychotherapists, dentists, midwives and nurses.

In some countries like Finland, New Zealand and the United Kingdom, registration is at national level, whereas it is at regional level in countries like Australia, Switzerland and Spain. In such countries, detailed data are sometimes lacking at national level. For instance, Australia's national agency for health and welfare statistics and information publishes statistics on the country of education of medical doctors, but the figures do not include all States (e.g. detailed information for New South Wales which accounts for about 36% of the medical workforce in 2004 is not included). Collecting registration data for each State would have been very time-consuming and beyond the scope of this study.

The existence of different types of registration status is another source of concern when undertaking international comparisons, as there are variations in the rights and obligations associated with each type of registration. Full, temporary, limited, provisional, conditional, and internship are examples of potential registration status existing in countries. In Ireland, for instance, temporary registration allows non-EU doctors to be employed and to receive further training in the practice of medicine. Temporary registration can be granted for a total aggregate period of seven years. Temporary registrations are not included in our statistics due to lack of harmonised data. In Ireland, it represented about 1 300 doctors in 1999 as compared to 1 200 foreign-trained doctors fully registered (respectively about 1 000 and 4 000 in 2004). In general, the data collected for the purpose of this study refer to full registration only.

Comparisons are also affected by the quality and type of data available. Information systems vary across countries. For instance, although data on place of training are collected by the United Kingdom. Nursing and Midwifery Council, detailed and complete data on the current stock of foreign-educated nurses are not available due to information system constraints. In Canada and the United States, people trained in the United States and in Canada, respectively are not included in the foreign-trained figures (this is also the case for people trained in Puerto Rico with respect to US data).

Box III.1. International comparability of health professional registration data
(Cont.)

Finally, a more general concern with registers arises from discrepancies between the number of individuals on the register and those who actually work. While some countries, like New Zealand, issue annual practicing certificates, others do not. About 14 000 doctors were registered in 2005 in New Zealand, but only 11 000 were practicing. In the United Kingdom, there is also a large difference between the number of doctors registered by the General Medical Council (around 210 000 in 2005) and the number of doctors employed by the National Health Service (between 100 000 and 120 000 in 2005). This difference might be explained by the large number of UK-trained doctors who are working overseas but still registered in the United Kingdom, and by all foreign-trained doctors who are registered in the United Kingdom but who are not residing in the United Kingdom or not working in the health sector. It is estimated that more than 60% of foreign-trained doctors who passed the Professional and Linguistic Assessments Board test between June and October 2005 did not find a position as a doctor after one year (GMC, 2007). On the other hand, most of the foreign-trained doctors working in French hospitals were, until recently, not recorded in the professional register as they were considered as medical trainees. As with other registers, deregistration following temporary or permanent inactivity, emigration or death poses specific difficulties.

For all these reasons, international comparisons of foreign-trained health professionals are more difficult and less straightforward than for foreign-born health professionals. Nonetheless, they complement the foreign-born approach and are a key element when assessing the potential impact of the international mobility of doctors and nurses on source countries.

A comparison between foreign-born and foreign-trained health professionals in OECD countries indicates lower percentages for the latter than for the former. This difference is generally explained by the fact that some of the foreign-born were actually trained in the receiving country. Some of them have arrived at younger ages, most probably accompanying their family or in the context of family reunification, while others have entered the receiving country to pursue tertiary education and have stayed after completion of their study. As a result, countries with higher immigration rates, important family migration or significant inflows of international students would tend to have the largest gaps between the two sets of figures.

Despite the recent increase in international mobility of students over the past decade (OECD, 2006), it seems that in most countries, the difference between foreign-born and foreign-trained percentages cannot be explained entirely by international students in tertiary education as they tend to be under-represented in the field of "Health and Welfare" (about 6% for international students in tertiary education as compared to around 10% for all tertiary students). In some OECD European countries, however, the proportion of international students studying in the field of "Health and Welfare" is much higher, particularly in Belgium (about 40% in 2004) and to a lesser extent in Denmark (21%) and the Netherlands (14%).⁸


In Canada, 35% of all employed doctors in 2000 were foreign-born whereas only 23% are foreign-trained. Similar large gaps are recorded in New Zealand and in Australia. The difference between foreign-born and foreign-trained doctors is also

Table III.2. Immigrants registered in selected OECD countries, doctors and nurses, 2000 and 2005

Numbers and percentages

		Doctors				Nurses						
		2000		2005		2000		2005				
		Number	%	Number	%	Number	%	Number	%			
Foreign-trained	Australia	..	..	14 553	25.0	Foreign-trained	Australia ¹	..	..	31 472	12.1
	Austria	461	1.8	964	3.3		Canada	14 910	6.4	19 230	7.6	
	Canada	13 342	23.1	13 715	22.3		Denmark	4 618	6.0	5 109	6.2	
	Denmark	1 695	7.7	2 769	11.0		Finland	122	0.2	274	0.3	
	England	25 360	27.3	38 727	32.7		Ireland ¹	..	..	8 758	14.4
	Finland	687	3.6	1 816	7.2		Netherlands ²	..	..	3 479	1.4
	France ¹	7 644	3.9	12 124	5.8		New Zealand ¹	6 317	19.3	9 334	24.3	
	Ireland	1 359	11.1	3 990	27.2		Sweden ¹	2 517	2.5	2 878	2.7	
	Japan	95	–	146	–		United Kingdom ³	50 564	8.0	..	..
	Netherlands ²	..	..	3 907	6.2		United States ¹	..	..	101 791	3.5
	New Zealand	2 970	34.5	3 203	35.6		Foreigners	Belgium	1 009	0.7	1 448	1.0
	Poland	734	0.6			France ¹	7 058	1.6
	Sweden ¹	3 633	13.1	5 061	16.1			Germany	27 427	4.2	25 462	3.8
	Switzerland	2 982	11.8	5 302	18.8			Italy	6 730	2.0
	Turkey	33	–	27	–			Turkey	25	–	45	–
United Kingdom ³	..	..	69 813	33.1	Nurses: Australia: AIHW, Medical labour force survey 2004; Canada: CIHI, The Canadian Institute for Health Information; Denmark: Danish National Board of Health; Finland: National Authority for Medicolegal Affairs; Ireland: An Bord Altranais; the Netherlands: Big Register; New Zealand: New Zealand Health Information Service; New Zealand Health Workforce Statistics 2004; Sweden: National Board of Health and Welfare; the United Kingdom: Aiken and al. (2004); the United States: National Sample Survey of Registered Nurses; Belgium: FODSociale Zekerheid, Dienst Internationale relaties; Germany: Federal Medical Association; France: DREES, ADELI; Italy: IPASVI; Turkey: Ministry of Health, General Directorate of Health Education, Branch Office of Residency.						
United States ¹	207 678	25.5	208 733	25.0	“–” indicate that percentages are below 0.1%.							
Foreigners	Belgium	1 341	3.1	1 633	3.4	1. 2004 instead of 2005.						
	Germany	14 603	4.0	18 582	4.6	2. 2007 instead of 2005.						
	Greece	..	..	897	2.5	3. 2001 instead of 2000.					
	Italy	..	..	12 527	3.4	4. 2003 instead of 2005.					
	Norway	2 327	15.1	2 833	15.6							
	Portugal ⁴	..	..	1 830	5.3						
	Slovak Rep. ¹	130	0.7	139	0.8							

Doctors: Australia: Productivity Commission, Australia's Health Workforce 2005; Austria: Austrian Medical Chamber; Canada: CIHI, The Canadian Institute for Health Information; Denmark: Danish National Board of Health; Finland: National Authority for Medicolegal Affairs; France: Ordre des Médecins; England: NHS, National Health Service; the United Kingdom: General Medical Council; Ireland: Irish Medical Council; Japan: Ministry of Justice; the Netherlands: Big Register; New Zealand: Ministry of Health of New Zealand; Poland: Polish Chamber of Physicians and Dentists; Turkey: the Ministry of Health, General Directorate of Health Education, Branch Office of Residency; Sweden: National Board of Health and Welfare; Switzerland: Swiss Medical Association FMH; the United States: AMA, American Medical Association; Belgium: FODSociale Zekerheid, Dienst Internationale relaties; Germany: Federal Medical Association; Greece: Medical Associations; Italy: Italian Medical Association; Norway: Den Norske Laegeforening; Portugal: Foreign health professionals working at the Portuguese National Health System Direcção-Geral da Saúde; Slovak Republic: Ministry of Health of Slovak Republic.

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particularly marked in the cases of France and Portugal, although part of this observation may be explained by the importance of the repatriate community. In the case of the United States, the situation is somewhat different because, while immigrants constitute only a small share of undergraduates, they account for about

26% of postgraduate places.⁹ This is due to the fact there are caps on both residency and undergraduate places in the United States, the latter being systematically lower than the former, which induce a quasi-automatic inflow of International Medical Graduates, including US citizens.¹⁰ Because of this situation, the percentages of foreign-born and foreign-trained doctors are very close in the United States.

The distribution of nurses by place of birth and of training is usually closer. Several origin countries, in particular the Philippines, have indeed developed an important nursing education sector for the international market, which is well recognized worldwide. That being said, in Australia, Canada, the United States and to a lesser extent Sweden, the percentage of foreign-born nurses is significantly higher than that for foreign-trained nurses.

One advantage of using professional registers' data as opposed to census data is that they can provide a more up-to-date picture of the relative importance of foreign or foreign-trained health professionals in selected OECD countries. Between 2000 and 2005, in the main receiving OECD countries, mainly located outside Europe, while the share of foreign-trained has remained almost stable for doctors, it has increased slightly for nurses. In Europe there is a rising trend, especially in the Nordic countries and Ireland. It is therefore possible that in the latter countries, recent inflows have contributed to reshape the immigrant health workforce. This issue is addressed in more detail below.

To which extent international migration focuses on health professionals?

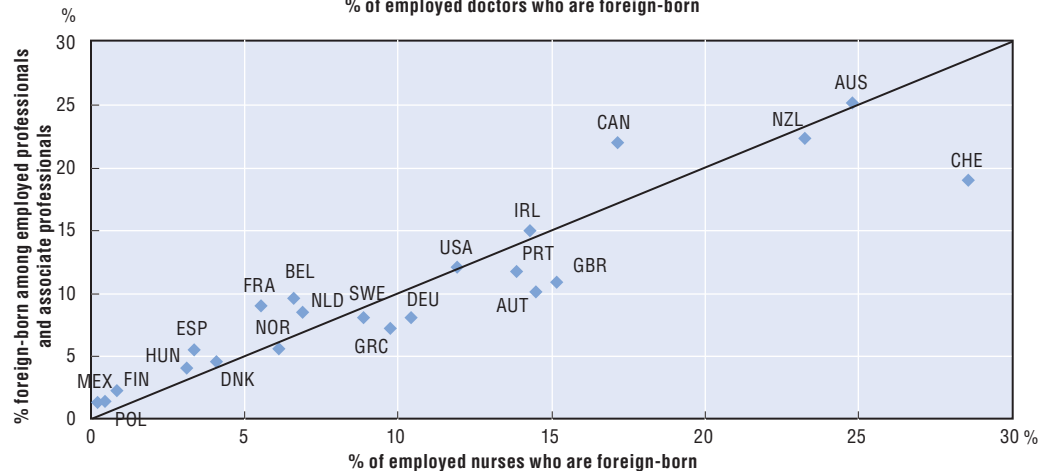
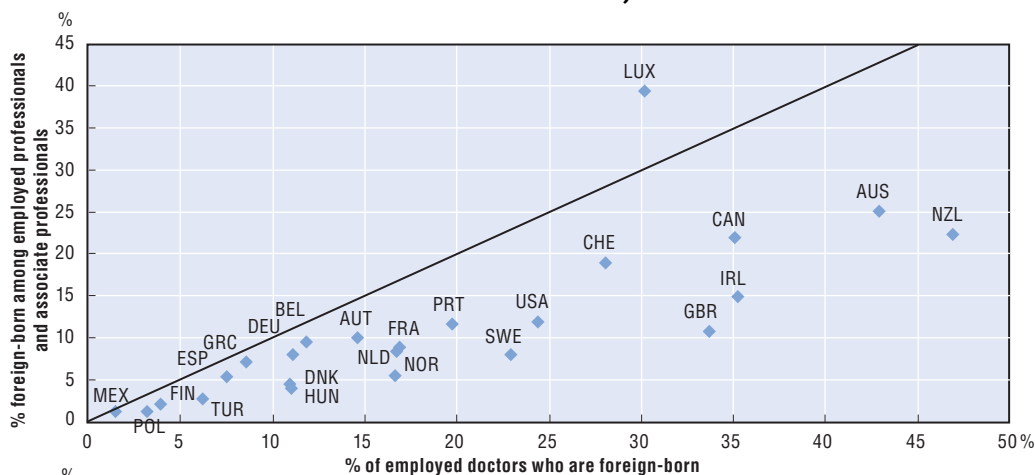
The data presented in Table III.1 provide a first glance at the relative importance of immigrants in the health sector. However, these results should be compared to the share of immigrants amongst highly skilled workers in general, to identify potential specificities of international migration of health professionals. Data by place of birth, based on population censuses or population registers, allow one to make such a comparison. Chart III.2a thus compares the share of foreign-born doctors on the one hand and of foreign-born nurses on the other hand, to the share of foreign-born in professional or associate professional occupations (defined as ISCO 1, 2 or 3).

The two sets of estimates are highly clustered along the 45°-line for nurses in most countries, with Switzerland the sole outlier with a relatively higher percentage of foreign-born nurses. The results for doctors are quite different, in that there is a systematic tendency for the share of foreign-born doctors to be higher than the share of foreign-born in professional occupations; Luxembourg is the sole outlier with a relatively low percentage of foreign-born doctors.

The difference observed for doctors could be due to the fact that they have higher degrees than professionals and associate professionals in general. Indeed, if we compare the percentage of foreign-born doctors to that of persons employed and holding a PhD (see Chart III.2b), we find, as for nurses, a much greater clustering around the 45°-line. This is not so surprising taking into account that the average time required to become a medical doctor is generally close to that required to obtain a Ph.D. In this latter chart, Canada, despite the fact that more than a third of its medical workforce is foreign-born, appears to have a relatively low percentage of foreign-born doctors.

These results show that foreign-born health professionals are generally not overrepresented among immigrants when compared to similar professional groups. While international migration tends to be selective towards the highly skilled in general (Dumont

Chart III.2a. Percentage of foreign-born doctors and nurses compared to the percentage of foreign-born in highly skilled occupations in selected OECD countries, Circa 2000



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Chart III.2b. Percentage of foreign-born doctors compared to the percentage of foreign-born among people employed and holding a PhD in selected OECD countries, Circa 2000



Source: See Table III.1.

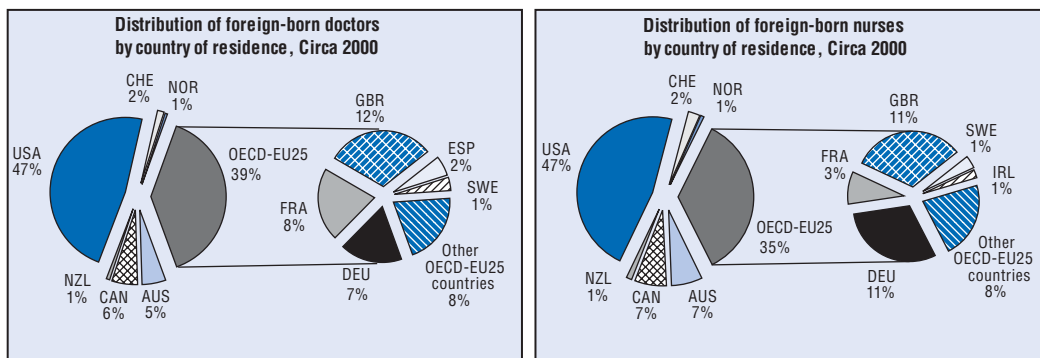
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and Lemaitre, 2005), it is not specifically oriented towards health professionals. This was true in 2000, although, as we will see below, the situation may have changed in more recent years.


Origin-destination matrix for foreign-born health professionals in OECD countries

Overall, the United States received 47% of foreign-born doctors working in the OECD area in 2000 and the OECD-EU25 countries approximately 39% (see Chart III.3). Australia and Canada received each close to 5% of the total. Surprisingly, this distribution is identical for foreign-born nurses. What differs, however, is the distribution between European countries, Germany receiving proportionally more nurses (7%) and France more doctors (8%). The figures for the United Kingdom are similar at around 11%.

Chart III.3. Distribution of foreign-born doctors and nurses by country of residence in the OECD area, Circa 2000



Sources: See Table III.1 OECD-EU25 includes all relevant countries except Italy, the Czech Republic and the Slovak Republic.

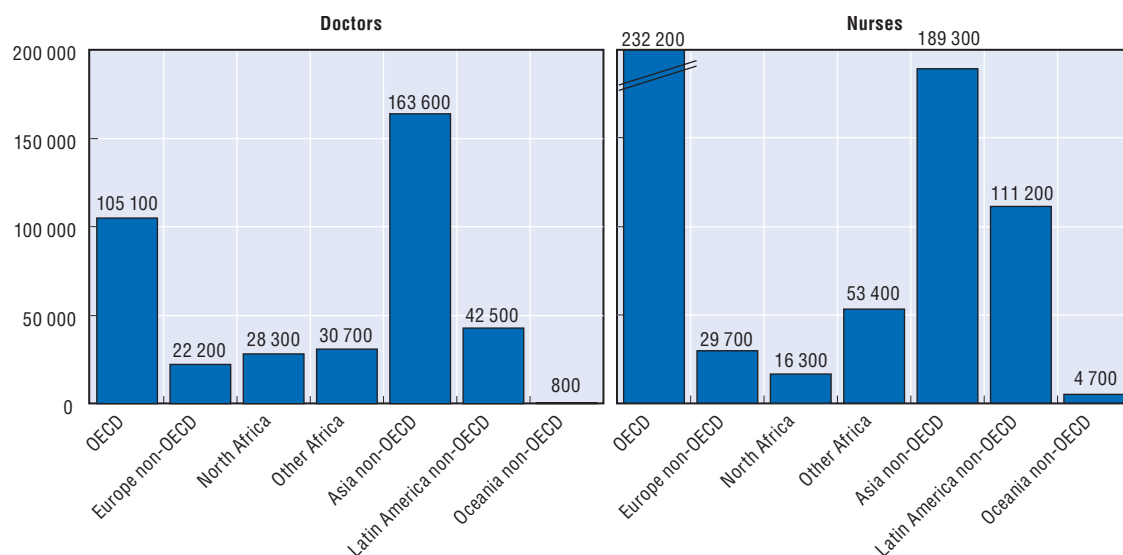
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The data on the share of health professionals received by OECD-EU25 countries should be considered with caution as a significant proportion of the foreign-born originates from within the European Union (about 38% for nurses and 24% for doctors), and notably from the new accession states.


Chart III.4 presents foreign-born health professionals working in the OECD by main regions of origin. Tables III.A1.1 and III.A1.2 in Annex III.A1 show for each receiving country the main regions of origin of immigrant doctors and nurses. Asia is the main source region for health professionals in many OECD countries.¹¹ In the United States for instance, more than half of the foreign-born doctors (40% of the nurses) originate from Asia. Important percentages are also recorded for Australia (43%), Ireland (48%) and the United Kingdom (55%). The corresponding figures for Asian nurses are much lower (respectively 24%, 29% and 24%).

Latin America is also an important provider of health professionals to the United States as well as to some European countries, especially Spain (55% of foreign-born doctors and 41% of foreign-born nurses). North Africa is a significant source region only for France (about half of foreign-born doctors and nurses).

Chart III.4. **Distribution of foreign-born doctors and nurses by main regions of origin in OECD countries, Circa 2000**



Source: Includes data for all OECD countries identified in Table III.1, except Germany (see Annex III.A1).

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In some OECD countries, intra-OECD movements are predominant. This is the case, for instance, in the Nordic countries, Switzerland and New Zealand for nurses. On average, the share of foreign-born health professionals originating from within the OECD area is lower than for the highly skilled in general (40% of all tertiary-educated immigrants as compared to 27% for doctors and 36% for nurses).

In general, the distribution by region of origin reflects general migration patterns and is determined by language and geographic proximity, cultural and historical ties and bilateral migration policies. All these findings hold for migration flows, in general, and are not specific to the international mobility of health professionals.

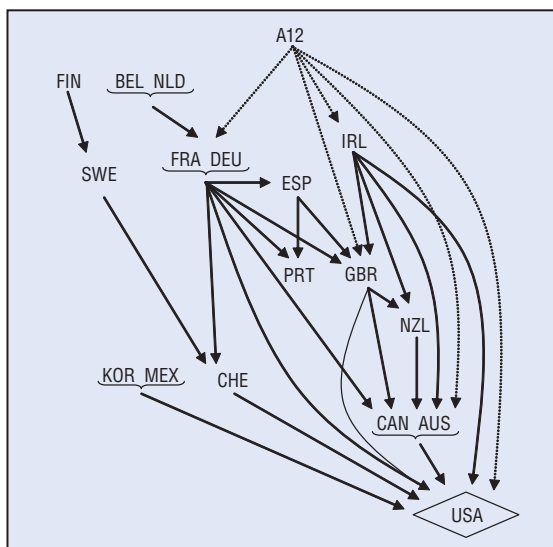
Tables III.A1.3 and III.A1.4 in Annex III.A1 present detailed origin-destination matrices for the OECD area. The United Kingdom and Germany are the most important source countries within the OECD area for both doctors and nurses. UK-born immigrants represent about 75% of the immigrant doctors from the OECD in Ireland and New Zealand and more than 50% in Australia. The distribution of German-born doctors is more widespread and represents more than 20% of the immigrant doctors in half of the countries for which data are available. They are predominant for instance in Austria, Switzerland, Poland and Turkey, but more generally represent significant groups in all non-English-speaking OECD countries. Similarly, French-born doctors in Spain, Spanish-born doctors in Portugal, or Canadian-born doctors in the United States represent the main source country from within the OECD area in the three countries.

In an EU context, in 2000, the health professionals originating from the 12 new EU member states (A12) already represented a significant percentage of the immigrant workforce. This was the case for instance in the new accession countries themselves (e.g. Poland and Hungary), but also in Austria for both doctors and nurses (respectively 28% and 33%), as well as in Greece and Sweden for doctors (about 20%) or to a lesser extent in Denmark and Finland (about 14% of foreign-born doctors).

The international migration of health workers is characterized by multiple interactions between OECD countries. Within the OECD international flows of both doctors and nurses can be depicted as a cascade-type model of migration in which the United States appears to be at the bottom of the “fall” (see Chart III.5): it is the only net receiving country *vis-à-vis* all other OECD countries, with a net gain of 79 000 nurses (the difference between OECD nurses in the United States and US-born nurses in other OECD countries), and a net gain of 44 000 for doctors. However, although the United States is the main receiving country in absolute terms for foreign-born doctors and nurses, the share of foreign-born health workers in the total health workforce in the United States is lower than in many other OECD countries.

Canada, Australia and Switzerland are also positioned at the lower end of the cascade as they are net receivers of health professionals from most OECD countries. In the case of Canada, however, the intra-OECD net migration is negative for nurses (-6 000), because of the large emigration of Canadian nurses to the United States.¹²

Chart III.5. **Intra-OECD migration of nurses: A cascade-type pattern, net stocks, Circa 2000**



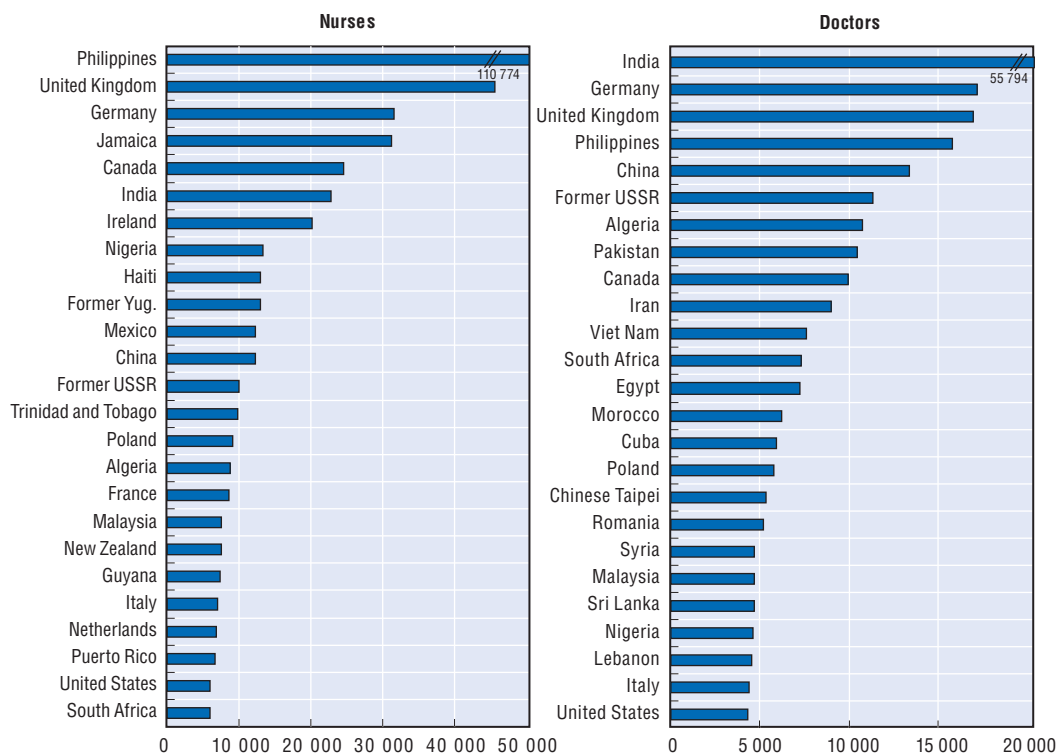
Reading note: Arrows represent a positive difference between the stocks of nurses in origin and receiving countries. Not all possible downward arrows are represented (for instance Finland has a net deficit with Sweden but also with Switzerland and the United States), but there would be no ascending arrows (for instance at the time of the population census, Ireland had only a net gain with regards to new EU member states (A12) and the United States was the only country to have a net gain *vis-à-vis* all other OECD countries).

Sources: See Table III.1. OECD* refers only to origin countries identified in Tables III.A1.4 in Annex III.A1.


1.B. Impact of international mobility of health professionals on origin countries: Main issues at stake

One of the key issues in terms of the international mobility of health professionals, on which much of the political attention has been focused in the recent years, relates to its impact on origin countries. Despite important efforts to gather information at the regional level or national level,¹³ statistical evidence by origin country remains scarce or difficult to compare. The data presented in Chart III.6 and Annex III.A2 address this shortcoming by presenting data for foreign-born doctors and nurses in OECD countries disaggregated by detailed country of birth.

Chart III.6. Foreign-born doctors and nurses in the OECD by main countries of origin (top 25), Circa 2000



Source: See Table III.1.

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What is the size of the “brain drain”?

Nurses born in the Philippines (110 000) and doctors born in India (56 000) account for the bulk of the immigrant health workforce in the OECD. Each represents about 15% of the total stock. More surprisingly, the second and third most important origin countries for doctors or nurses are the United Kingdom and Germany.

For nurses, several other OECD countries, *e.g.* Canada, Ireland and, to a lesser extent, Mexico, rank quite high in the list. Even some Caribbean countries with small populations, notably Jamaica and Haiti, send quite a lot of nurses abroad.

The chart for doctors is dominated by non-OECD countries. China and the former USSR¹⁴ play a striking role with more than 10 000 doctors working in OECD countries. A surprisingly high number of doctors born in the Philippines are working in OECD countries (about 16 000), which contrasts with the general emphasis on emigration of Filipino nurses.¹⁵ South Africa and Cuba are also in the top 25 origin countries for doctors.

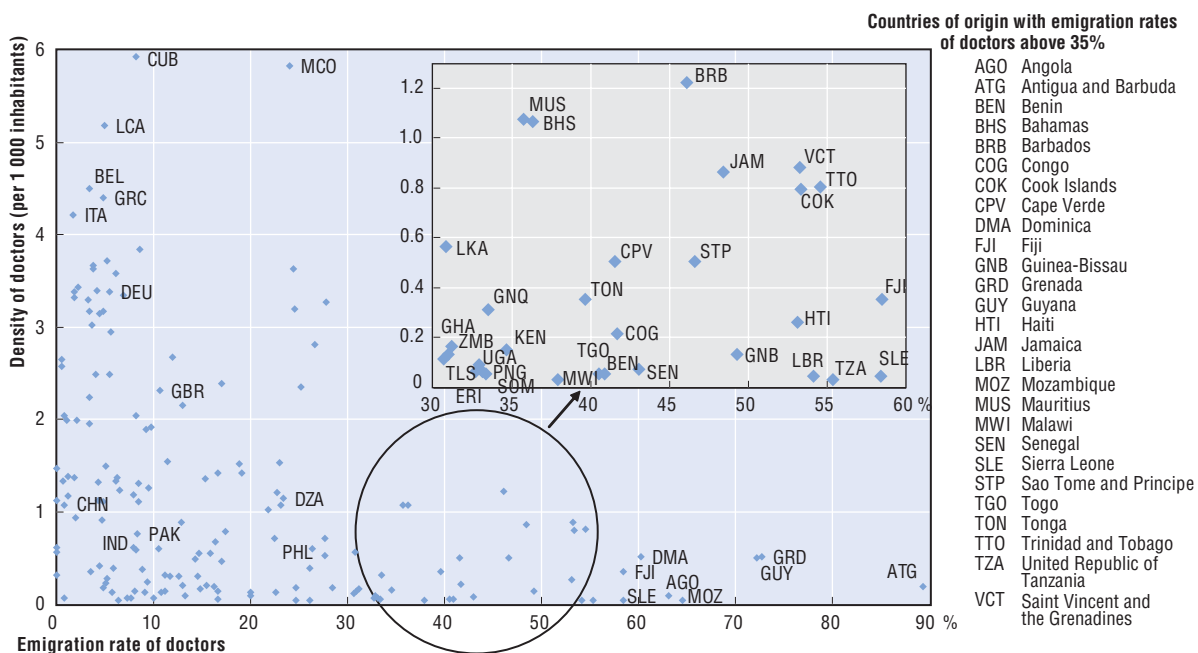
The absence of all but two (*i.e.* Nigeria and South Africa) sub-Saharan African countries might be surprising but can be explained by the fact that most African countries have a small population and a small health workforce.¹⁶ In this case, the best way to evaluate the scope of migration is to estimate the percentage of health professionals who have left the country. By taking data on doctors and nurses in countries of origin from the WHO Global Health Atlas, an emigration rate was computed for 160 countries for doctors and 153 countries for nurses (see Annex III.A2).¹⁷

When comparing the number of expatriated doctors to the number of doctors in the origin country, a quite different picture emerges (see Chart III.7). African and Caribbean countries now stand out as being disproportionately affected by out-migration of health professionals. Most of the countries with expatriation rates above 50% (which means that there are as many doctors born in these countries working in the OECD as there are working in their home country) are from the Caribbean, except Fiji¹⁸ and five African countries: Mozambique, Angola, Sierra Leone, United Republic of Tanzania and Liberia. The latter countries all had major conflicts over the past decades (except Tanzania) and are amongst the poorest countries in the world.¹⁹

French and Portuguese-speaking African countries also have some of the highest expatriation rates to OECD countries for doctors. Guinea Bissau, Sao Tome and Principe, Senegal, Cape Verde, Congo, Benin and Togo rank between the 17th and the 23rd places just after the Caribbean countries, with expatriation rates above 40%, while English-speaking countries such as Malawi, Kenya or Ghana which are focusing much of the attention in international fora have lower expatriation rates (Malawi ranks 25th, Kenya 28th and Ghana 35th). The cases of Cape Verde and Sao Tome and Principe are easily understood because these countries do not have medical schools but instead have an agreement with Portugal to train doctors. The case of Guinea Bissau may be of a different nature.

Not only do French-speaking countries have high emigration rates but they also tend to have low densities. There are about 2 times less doctors per inhabitant in Senegal than in Kenya, 8 times less than in Cape Verde and 20 times less than in Barbados. Therefore, a greater attention should be paid to the urgency of the situation in these French-speaking

Chart III.7. Emigration rate and density of doctors by origin country, Circa 2000



Sources: WHO database for figures by origin countries on density (number of doctors per thousand population). See Annex III.A2 for emigration rates of doctors.

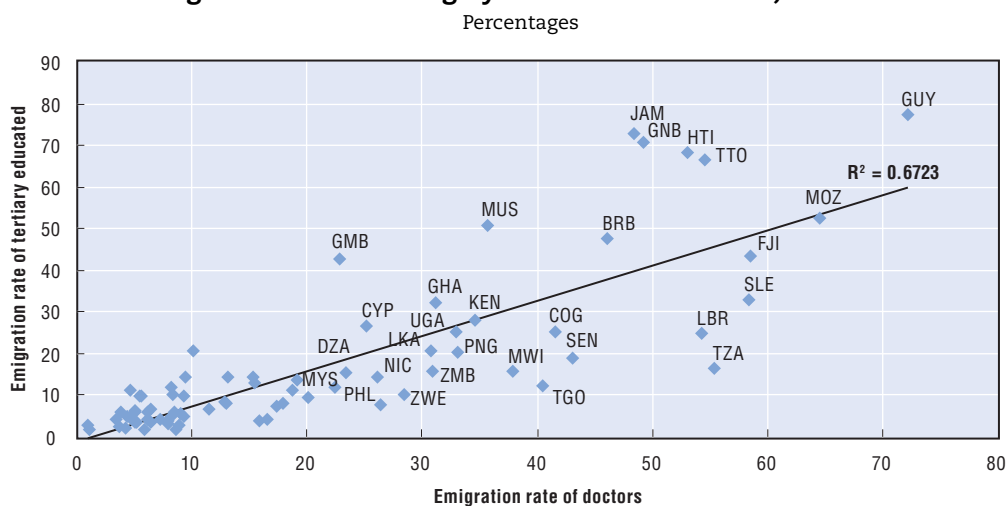
African countries. Malawi is another country where, despite a slightly smaller emigration rate, the density of medical doctors is very low.

Some of the countries for which the highest emigration, in absolute or relative terms, has been recorded are in fact less impacted as they still have “not-too-low” density ratios for doctors. Cuba is an obvious example but several Caribbean countries could also be mentioned in this regard (Barbados, Bahamas and to a lesser extent Trinidad and Tobago or Saint Vincent and the Grenadines). The latter countries host a number of medical schools oriented towards supply graduates for the US market, which ultimately may also benefit their population. Furthermore, large countries such as China or Brazil have very low emigration rates (about 1%), and even countries such as India, Pakistan or Indonesia have only about 8% of “their medical workforce” abroad.

In most cases the expatriation rate for nurses is lower than for doctors. This is not the case, however, for a number of countries, notably in the Caribbean (about 90% of the nurses born in Haiti or in Jamaica are working in the OECD), but also for El Salvador or Mexico, for Samoa, Tonga or New Zealand, for Mauritius, Madagascar and the Philippines. In the latter case, by focusing on OECD countries, the impact of migration might have been underestimated. Indeed, according to Philippine Overseas Employment Administration statistics, about 74% of all Filipino nurses deployed between 1992 and 2002 went to non-OECD countries, mainly to Saudi Arabia (ILO, 2005). The same may be true for some other source countries, notably for doctors from Sudan (Badr, 2005). Even if these movements are mainly short term, they should be taken into account when estimating the overall emigration rate and the impact on the origin country.

Emigration rates of doctors can also be compared to that of the highly skilled in general. Chart III.8 shows that both figures are highly correlated. In other words, countries which are most affected by emigration of their professionals in general also face high emigration rates of their health workforce (and inversely). Emigration rates for doctors seem to be above those for the highly skilled in general, and this is mainly due to the fact that doctors hold higher degree than other professionals (see *supra* Chart III.3).

Chart III.8. **Emigration rate of the highly skilled and of doctors, non-OECD countries**



Source: See Dumont and Lemaitre (2005), for emigration rates for the highly skilled (data can be downloaded from www.oecd.org/els/migration/censusdata) and Annex III.A2 for the emigration rates of doctors.

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However, because of the key role played by health workers in improving the health status of the population, as well as their contribution to economic and social development (e.g. Gyimah-Brempong and Wilson, 2004; WHO, 2001), the impact on origin countries of doctors' and nurses' emigration might be more problematic and challenging than for other categories of skilled professionals. In addition, even limited emigration of certain specialists (e.g. anaesthesiologists, radiologists), associate professionals (e.g. laboratory technicians) or support staff (e.g. hospital managers) may create serious bottlenecks in the health systems with potentially dramatic consequences. Also, over the long-term, migration can have negative effects, as it weakens national capacity to train future cohorts of health professionals.

At the same time, employment opportunities in the home country,²⁰ as well as the geographic location of migrants in origin countries (most international migrants come from urban areas although the most acute shortages tend to be in rural areas), should be taken into account when evaluating the impact of migration on origin countries. An internal "brain drain" indeed exists in most developing countries (Skeldon, 2005).

Finally, a key question is who pays for the training: The receiving country, the origin country or the migrant herself or himself. While the role of receiving countries was already acknowledged when we discussed the data by place of training, in some countries migrants and/or their families are financing directly or indirectly (if they are required to pay back their training cost if they depart) the training costs. For example, nursing education in the Philippines is mostly provided by private institutions and in India, private medical schools now account for more than 40% of the total number of medical students (Mullan, 2006). The situation is, however, quite different in many other lower income countries, notably in Africa, where the private education sector does not play any role, notably because of severe financial constraints.

International migration and the worldwide health workforce crisis

In the World Health Report (2006a), the WHO estimated a shortage of more than 4 million health workers across the world. In particular, 57 countries were identified as having a critical shortage, including 36 sub-Saharan African countries.²¹ To reach the target levels of health worker to close these gaps, about 2.4 million supplementary doctors, nurses and midwives would be required (see Table III.3). It is in the African region and in south East Asia region that the largest increases in the health workforce would be required to meet shortages.

To give a general sense of the contribution of international migration to this global shortage, we estimated the number of foreign-born doctors and nurses by region²² of birth and compared these figures with the number of health workers shortages estimated by the WHO. This is obviously a purely mechanical exercise but it serves to reveal that the global health workforce crisis goes far beyond the migration issue.

All African-born doctors and nurses working in the OECD represent no more than 12% of the total estimated shortage for the region. The corresponding percentage is even lower (9%) for the region with the greatest need in absolute terms: South East Asia. In the cases of the Americas and the Western Pacific region, the situation is quite different. This is due to the fact that i) a number of immigrants are originating from OECD countries (about a third for the Americas); and ii) some source countries such as the Philippines in the

Table III.3. **Estimated critical shortages of doctors and nurses and midwives, by WHO region**

WHO region	Number of countries		In countries with shortages			Foreign-born doctors and nurses in OECD countries by region of origin	
	Total	With shortages	Total stock	Estimated shortage	Percentage increase required	Number	Percentage of the estimated shortage
Africa	46	36	590 198	817 992	139%	98 329	12%
Americas	35	5	93 603	37 886	40%	199 314	526%
South-East Asia	11	6	2 332 054	1 164 001	50%	101 460	9%
Europe	52	0	–	–	–	..	..
Eastern Mediterranean	21	7	312 613	306 031	98%	71 551	23%
Western Pacific	27	3	27 260	32 560	119%	212 280	652%
World	192	57	3 355 728	2 358 470	70%	682 934	

Source: World Health Report -WHO 2006 (see endnote 22 for details on how “critical shortages” are estimated) and authors’ calculations for emigration data.

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Western Pacific region or Caribbean countries in the Americas, are important providers of health workers to the OECD.

When considering individual countries of origin rather than regions of origin, the findings do not change fundamentally. In the case of African countries for instance, with the exception of Cape Verde, immigrant health workers to the OECD represent a maximum of 25% of the estimated shortages.

These calculations show that the needs in human resources in developing countries, as estimated by the WHO, largely outstrip the numbers of immigrant health workers in the OECD, implying that international migration is neither the main cause nor would its reduction be the solution to the worldwide health human resources crisis, even though it exacerbates the acuteness of the problems in some countries. However, even in these latter cases, migration may be more a symptom than a determinant. In this context, global guidelines for the recruitment of foreign health workers could make, to a certain extent, a difference (see Box III.2).

2. Recent trends in migration movements of health professionals

Thanks to the pioneer work of Meija *et al.* in the late 1970s, and based on the new data on foreign-trained that we have collected (see Table III.2), we are able to draw a picture of the evolution of the number and the share of foreign-trained doctors in selected OECD countries over the past 25 years (see Table III.4).

Between 1970 and 2005, the number of foreign-trained doctors has increased at a rapid rate in most OECD countries considered (except Canada), partly because of the very low starting levels in the 1970s. The average annual growth rate is close to 10% in Finland, the Netherlands, Portugal and France. In Denmark and Sweden, the corresponding figures are 6 and 7% a year, respectively. In the United States, Australia and New Zealand, which are amongst the most important receiving countries, the increase has been more moderate although quite sustained (3-4% a year).

As a result, the share of foreign-trained in the medical workforce has increased dramatically. In France and the Netherlands, for instance, it has augmented six-fold, while it has more than tripled in Denmark and Portugal. In Germany, the United States and

Box III.2. Code of conduct for the recruitment of international health workers

Growing awareness of the adverse effects of health worker migration on health systems in countries which experience severe shortages of staff has gone hand-in-hand with calls for ethical recruitment strategies. Subsequently, instruments have been developed to guide different health sector stakeholders in the process of international recruitment. This development is quite recent with most of the instruments published from 1999 onwards. All instruments are voluntary, and none is legally binding. However, even a voluntary code of practice carries some moral and political force in those countries that sign up to it.

The United Kingdom has taken the lead in this field. For example, the Department of Health's code of practice for NHS employers involved in the international recruitment of healthcare professionals was first published in October 2001 and subsequently revised in December 2004. The Code identifies the guiding principles to promote high standards in the recruitment and employment of healthcare professionals from overseas. It is also concerned with the provision of health services in developing countries and seeks to prevent targeted recruitment from developing countries who are experiencing shortages of healthcare staff. Some of the principle changes to the 2004 version aimed at including in the Code of Practice the recruitment through agencies of temporary healthcare professionals, as well as permanent staff and at widening the scope of the Code to enable all healthcare organisations, including the independent sector, to sign up to the principles contained within the Code. The NHS also recommended only to use recruitment agencies that comply with the Code of Practice for both domestic and international recruitment.

At international level, the Commonwealth Code of practice for the international recruitment of health workers, adopted in 2003, provides governments with a framework within which international recruitment of health workers should take place. The Code is intended to discourage targeted recruitment of health workers from countries which are experiencing shortages and to safeguard the rights of recruits and the conditions relating to their profession in recruiting countries. The Commonwealth Code is the only policy document with a clause on compensation that was adopted at government level, mainly by developing countries but also by New Zealand.

Martineau and Willets (2004, 2006) review all the existing instruments for ethical international recruitment. This encompasses 8 documents, including 4 codes of practice, 3 guides and one statement from national or international bodies. The authors are relatively sceptical about the efficiency of these instruments due to the lack of support systems, incentives and sanctions as well as monitoring systems. More recently, McIntosh, Togerson and Klasen (2007) explore the lessons for Canada of the implementation of ethical recruitment of internationally educated health professionals. While they show that there is a consensus on the fact that the ethical issue needs to be confronted, they underline the many practical difficulties, notably in terms of balancing individual rights to migrate and international equity concerns and also as regards the definition of the key concept of active recruitment. The authors strongly emphasise the need to put in place "a mix of policies to address the broader problem of Canada's supply of health professionals".

Nonetheless, calls for a more global approach have been made, which have led the 57th World Health Assembly in 2004 to adopt a resolution on migration, urging member states to take actions to address health workers migration issues, and in particular to consider the development of an international Code of Practice on migration.

Table III.4. **Foreign-trained doctors in selected OECD countries, 1970s and 2005**

Country of residence	Number	% of the total workforce	Number	% of the total workforce
Australia	4 385	24%	14 553	25%
Canada	11 244	31%	13 715	22%
Germany*	5 605	5%	18 582	5%
Denmark	235	3%	2 769	11%
Finland	68	1%	1 816	7%
France	600	1%	12 124	6%
United Kingdom	20 923	26%	69 813	33%
Netherlands	102	1%	3 907	6%
New Zealand	934	27%	3 203	36%
Portugal*	79	1%	1 830	5.3%
Sweden	561	5%	5 061	16.1%
United States	70 646	22%	208 733	25%

* Foreign nationals.

Sources: Mejia et al. (1979), for the 70s and Table III.2 for 2005.

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Australia, however, the increase in immigrant doctors has matched the upward trend for health workforce in general. Canada is the exception: The share of the foreign-trained doctors has declined sharply over the period.

2.A. Recent flows: Rising figures – rising concerns

To some extent these long-term trends are attributable to the recent increase in migration flows. Chart III.9 presents the recent evolutions for the immigration of doctors and nurses in 12 OECD countries over the past 10 or 5 years.

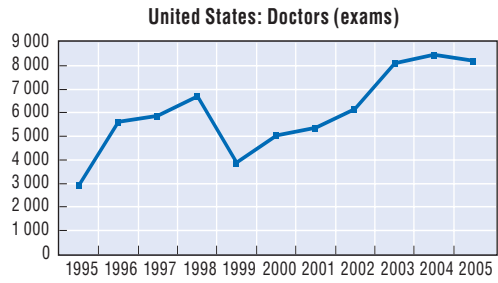
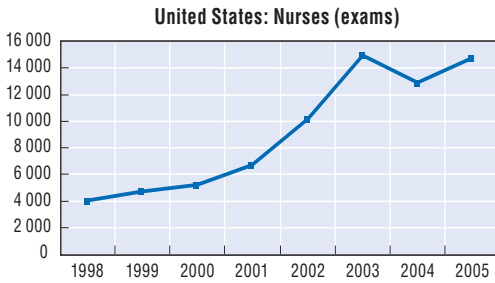
In general, we observe increasing trends, which responded *inter alia* to i) labour market shortages in OECD countries resulting from increasing demand due to rising spending on health relative to GDP after a period of cost-containment in late 1980s and early 1990s combined with supply constraints (*numerus clausus*); ii) changes in migration policies for the highly skilled in general in receiving countries; and iii) a combination of factors related to easier access to information, decreasing travel cost and deterioration of living and working conditions in the origin countries (Vujicic et al., 2004). In parallel, we also observe emerging trends, alternative to international mobility of health workers, such as patient mobility or e-health (see Box III.3).

The trend for nurses shows a sustained increase in the inflows which started during the 90s and stabilized in 2001/2002. This pattern is particularly clear in the case of temporary migrants in Canada but also in the United States, in the United Kingdom or in Ireland. Only Australia and Finland show a sustained upward trend in inflows of nurses in the most recent years.

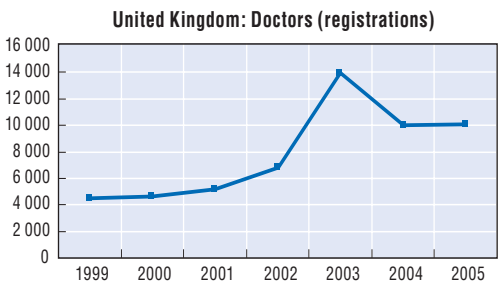
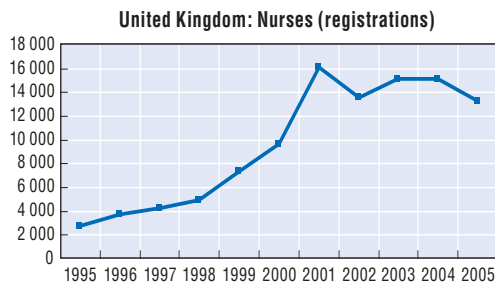
The recent reversal of the trend in the United Kingdom is usually explained by indirect effects of an increasing number of UK graduates and policy changes in the NHS which have induced a reduction in the demand for foreign nurses. The introduction of the Overseas Nurses Programme (ONP) in September 2005 also seems to have delayed in the recruitment pipeline many immigrant nurses who are awaiting a place on an ONP course (Buchan and Seccombe, 2006).

For doctors, the most recent data show little or no evidence of moderation in the increasing trend. The evolution for permanent residence permits in Australia is particularly striking, although the number remains quite small, and can be attributed to changes in

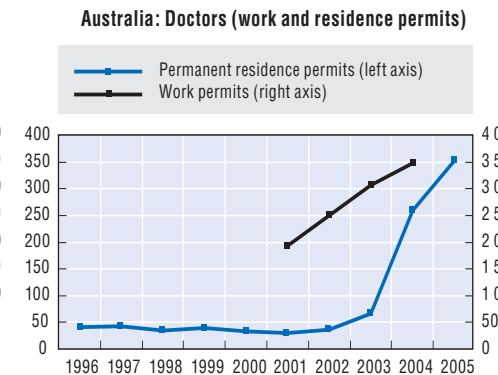
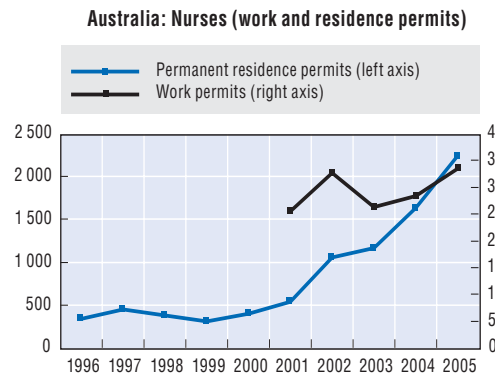
Chart III.9. **Inflow of immigrant doctors and nurses in selected OECD countries, 1995-2005**



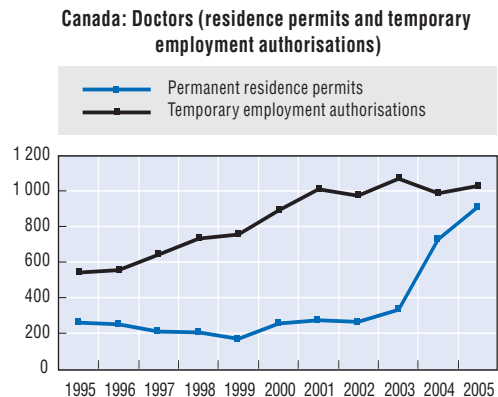
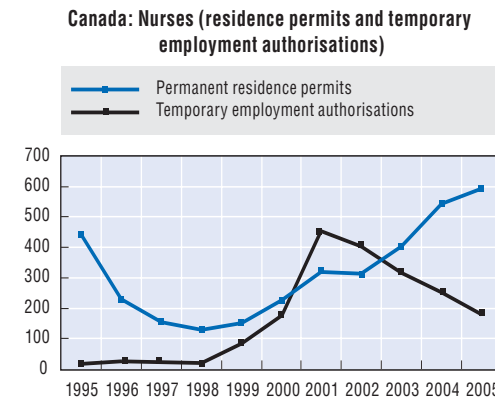
Source: National Council of State Boards of Nursing passed NCLEX-RN exams. Source: MD Physicians completing USMLE step 3.



Source: Nursing and Midwifery Council – new registrations. Source: General Medical Council – new full registrations.



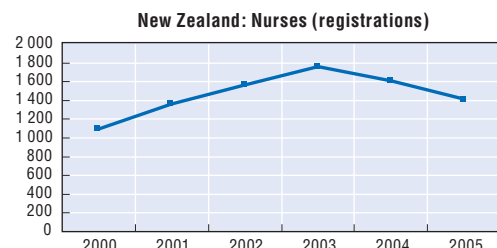
Source: Permanent residence permits: Skill Stream – Principal Applicants Only; Work Permits: Visa subclass 422 and 457, DIMA.



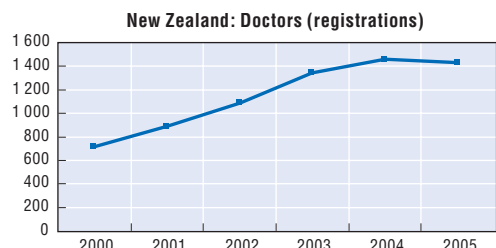
Source: Citizenship and Immigration Canada, Facts & Figures 2005. Permanent residence permits: Permanent Residents in (Intended) Health Care Occupations (Principal Applicants); Temporary employment authorisations: Annual Flow of Foreign Workers.

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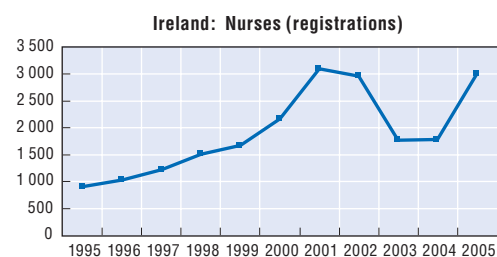
Chart III.9. **Inflow of immigrant doctors and nurses in selected OECD countries, 1995-2005 (Cont.)**



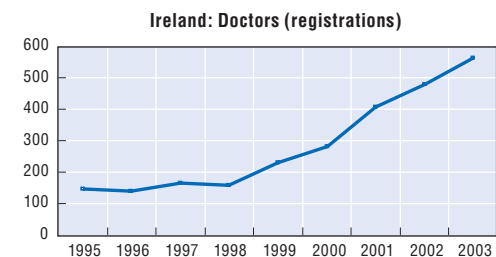
Source: Nursing Council New Zealand.



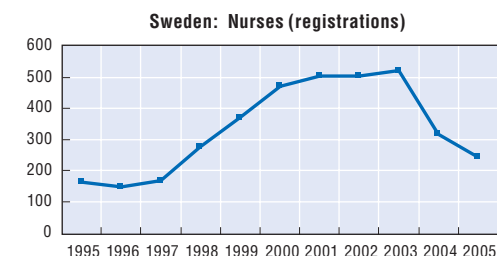
Source: Medical Council New Zealand.



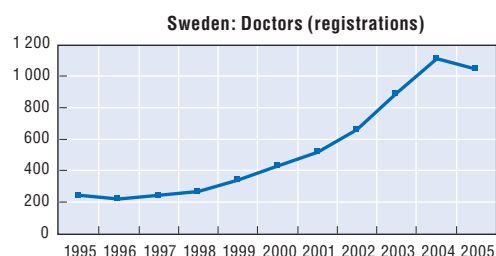
Source: An bord altranaís.



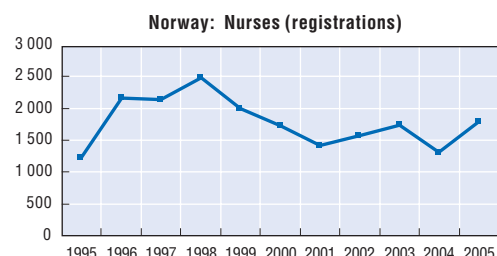
Source: Full registration Medical Council.



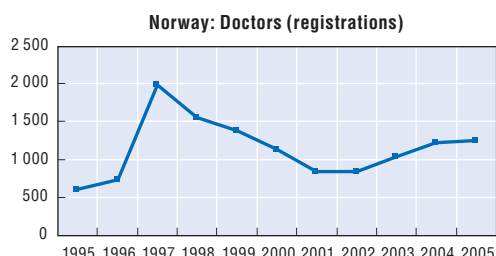
Source: National Board of Health and Welfare.



Source: National Board of Health and Welfare.



Source: Statens autorisasjonskontor for helsepersonell.



Source: Statens autorisasjonskontor for helsepersonell.

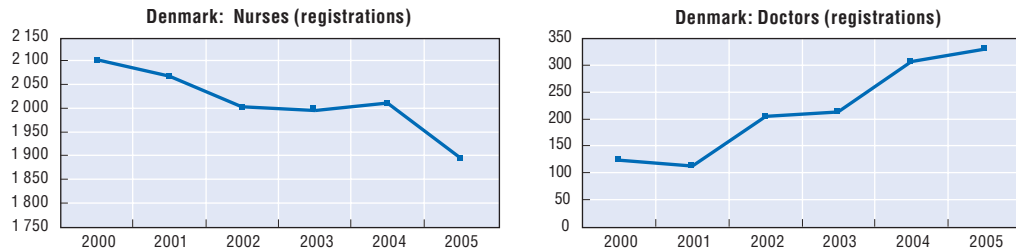


Source: National Authority for Medicolegal Affairs.

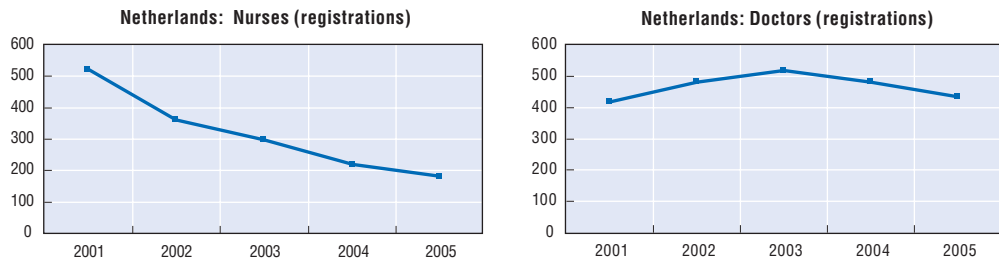


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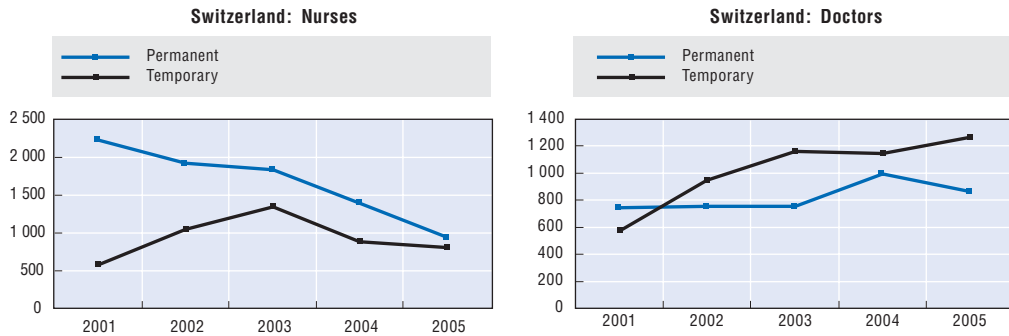
Chart III.9. **Inflow of immigrant doctors and nurses in selected OECD countries, 1995-2005 (Cont.)**



Source: The authorization registry of the National Board of Health.



Source: Big register.



Source: Office fédéral des migrations ODM, Registre central des étrangers RCE.

Permanent: Holders of a permit valid for 12 months or more (settlement and residence permits plus short duration permit longer than 12 months).

Temporary: Holders of a short duration permit (valid for less than 12 months).

Sources:

Nurses: US: National council of state boards of nursing passed NCLEX-RN exams; UK: Nursing and Midwifery Council – new registrations; Australia: Permanent residence permits: Skill Stream – Principal Applicants Only; Work Permits: Visa subclass 422 and 457, DIMA; Canada: Citizenship and Immigration Canada, Facts and Figures 2005. Permanent residence permits: Permanent Residents in (Intended) Health Care Occupations (Principal Applicants); Temporary employment authorisations: Annual Flow of Foreign Workers; New Zealand: Nursing Council New Zealand; Ireland: An bord altranais; Sweden: National Board of Health and Welfare; Norway: Statens autorisasjonskontor for helsepersonell; Finland: National Authority for Medicolegal Affairs; Denmark: The authorization registry of the National Board of Health; the Netherlands: Big register; Switzerland: Office fédéral des migrations ODM, Registre central des étrangers RCE.

Doctors: US: MD Physicians completing USMLE step 3; UK: General Medical Council – new full registrations; Australia: Permanent residence permits: Skill Stream – Principal Applicants Only; Work Permits: Visa subclass 422 and 457, DIMA; Canada: Citizenship and Immigration Canada, Facts and Figures 2005. Permanent residence permits: Permanent Residents in (Intended) Health Care Occupations (Principal Applicants); Temporary employment authorisations: Annual Flow of Foreign Workers; New Zealand: Medical Council New Zealand; Ireland: Full Registration Medical Council; Sweden: National Board of Health and Welfare; Norway: Statens autorisasjonskontor for helsepersonell; Finland: National Authority for Medicolegal Affairs; Denmark: The authorization registry of the National Board of Health; the Netherlands: Big register; Switzerland: Office fédéral des migrations ODM, Registre central des étrangers RCE.

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Box III.3. **Could patient mobility and telemedicine help to alleviate health worker shortage concerns?**

Although patient mobility still remains very modest, as it represents only 1% of overall public health expenditure on health care in the EU, more people are travelling to seek health care, including medically necessary procedures. A combination of factors has led to this recent increase. These include waiting lists and the high cost of healthcare in the home country, the ease and affordability of international travel, and the improvement of technology and standards of care in many countries of the world. Popular medical travel destinations include India, Cuba, Singapore, Mexico, Costa Rica and Thailand. For instance, more than 150 000 Americans travelled abroad for healthcare in 2005, and that number is projected to increase significantly in the future (Woodman, 2007).

Patient mobility is also attracting an increasing interest in the EU. For example, Hungary has become a popular destination for dental care, and English patients travel to France to undergo surgery. Currently, the EU health services are the responsibility of member states. However, in several of its judgments, the European Court of Justice has ruled that EU citizens can seek healthcare in other member states and be reimbursed by their national system if the same service cannot be provided in their country of origin. Given the potential for growth of patient mobility, its complexity and its potential consequences on health systems and financing, the Commission has decided to hold a public consultation with the aim of putting forward a framework proposal in 2007. The issue at stake in this new consultation is the development of a Community framework for safe, high-quality and efficient health services in Europe – with a special emphasis on patient mobility across borders.

Telemedicine is another avenue which some observers argue could help alleviate, to a certain extent, health workforce shortages. It relies on the use of information communication technology (ICT) to improve the delivery of health care at distance. Modern communications technology is particularly appropriate and useful in rural communities, helping to overcome the barriers of distance and isolation. For instance, Australia has developed innovative solutions like telephone call centres operated by health professionals such as registered nurses; tele-health to the home involving internet applications and local monitoring equipment; and teleradiologists using live videoconferencing and stored, digital radiology images. But there are still few evidence on the use of tele-medicine across frontiers, and there remain large barriers, notably in terms of quality concerns.

migration policies. Comparable increases have been recorded in Finland or Sweden. In the United States²³ or the United Kingdom,²⁴ the rise in the annual inflow is less rapid but not less important in absolute terms. In relative terms, new registrations of foreign-trained doctors represented 68% of all new registrations in the United Kingdom (2005), 82% in New Zealand (2005), 50% in Ireland (2002) or about 35% in the United States (2005).

The registration figures should, however, be considered with caution as they cannot be necessarily equated to the number of doctors or nurses entering the country at a point in time. This is due to the fact that people need to pass the exams and, notably for doctors, to go through a supervision period before being fully registered. It can also happen that people have been out of the health sector during a certain period of time in the host country before they register.

As a result, work permits may provide a more relevant picture of the recent trends. In Chart III.9 work and residence permit data are both presented for Canada, Australia and Switzerland. In most other cases exam or registration figures are presented.

In the United Kingdom, about 3 280 work permits were granted to health professionals (mainly doctors) and 11 110 to associate health professionals (mainly nurses) in 2005. In total, this corresponds to a third of all work permits. These figures more than doubled for doctors since 2000, but actually decreased by about 10% for other health professionals after peaking at 13 700 in 2003. These figures are somewhat lower than those on new registrations presented in Chart III.9 but show similar trends.²⁵ In Ireland, about 2 700 work permits were issued to medical and nursing occupations in 2005, slightly down compared to previous years but significantly more than in 2000 (1 360). This corresponded to about 10% of all work permits.

In the United States, the H1-B visas are available for most health professionals.^{26, 27} In 2005, about 7 200 initial petitions were approved for medicine and health occupations including 2 960 for physicians and surgeons. This corresponded to an increase of about 55% since 2000, although a slight decrease has been observed for non-physicians since 2003. What may be more remarkable in the case of the United States is the increase in the number of petitions approved for continuing employment. For health occupations in general the figures more than doubled between 2001 and 2005, from 4 700 to 10 100. This could suggest that immigrant doctors and other health professionals with H1-B visas tend to have longer duration of stay than they used to have.

As a matter of fact the impact of international migration should be evaluated by also taking into account the duration of stay, as permanent settlement and temporary movements have different types of impacts on both sending and receiving countries. Unfortunately this information is generally not available. In the case of New Zealand, however, we have information on the percentage of overseas-trained doctors retained in the New Zealand workforce by duration since registration. The retention of overseas-trained doctors who registered in New Zealand during the previous three years was close to 80% in 2000. For those who registered in the previous 4 to 6 years, it drops to 36% and it is about 20% for those who registered ten years ago (MCNZ, 2000). This would suggest quite high mobility of doctors as such even in a country which is particularly open to settlement migration.

2.B. Diversification of origin countries

Increasing flows and diversification of origin countries are two debated issues regarding the recent immigration trends of health professionals to the OECD. Diversification of origin countries is questioned by the fact that the most significant evolution over the past decade, relates to the increasing inflows from the Philippines and India: Two countries which were already leading in the stock data on the foreign-born which were presented previously. This phenomenon is observed notably in Canada, Ireland, the United Kingdom and in the United States. For the latter two countries, where the most important inflows of health professionals have been recorded recently, Chart III.10 presents the changes in the distribution of region of origin between 1995 and 2005.

In the case of foreign doctors emigrating to the United States, the changes in immigration flows have been quite modest, but the evolution for nurses in the United States and in general for the United Kingdom are much more characteristic of the overall trends. In the United Kingdom for instance, between 1997 and 2004, the share of work permits granted in the health sector to Indians almost tripled to reach 28% at the end of the period. The corresponding trend for the Philippines is even more marked as Filipino health workers received less than 1% of the work permits in 1997, but 33% in 2000 and 24% in 2004. No other

origin countries has recorded such a large increase. For the United Kingdom, this is indirectly due to the fact that bilateral agreements were signed with India and the Philippines and that commitments were made not to recruit actively in most other developing countries (the share for South Africa, for instance, decreased from 19% in 1999 to 10% in 2004).

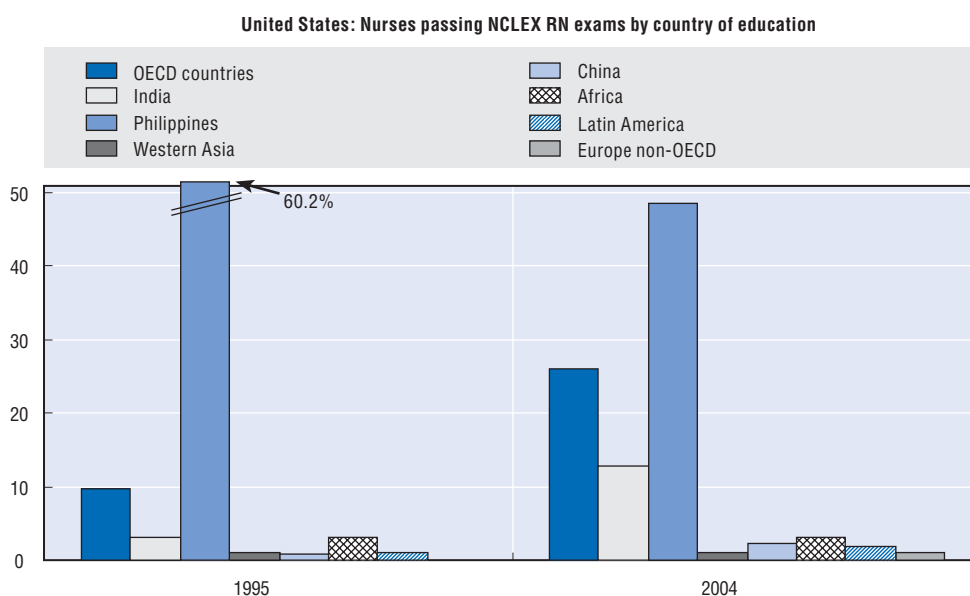
But these trends go far beyond the UK example and are the result of a combination of pull and push factors: The quality of training in the Philippines and India, network effects, the size of the pool of health workers in these origin countries, access to information and to financial resources (including through the diaspora networks). Given these factors there are few reasons to expect a reversal in these trends over the near term, at least in term of share.

China is another country of origin which is playing an increasing role, although flows are still quite small. The number of Chinese nurses registering annually increased, for instance, four-fold in the United States between 1995 and 2005, and Chinese nurses appear for the first time among the top 20 source countries for new registrations in the United Kingdom in 2005/06. It is very likely that this trend will be confirmed, if not amplified, in the coming years.

The situation for African countries is less clear. In particular, there is evidence that the inflows from this region decreased in percentage terms, although the absolute numbers have been increasing. This is what has been observed at least in the United Kingdom for nurses: African nurses accounted for 18% of the new registrations in 1998/99 as compared

Chart III.10. Distribution by region of origin of immigration inflows of health professionals in the United Kingdom and the United States, 1995-97 and 2002-04

Percentages



1. South-Asia almost represented totally by India.
2. East-Asia almost represented totally by Philippines.
3. African countries includes the following countries: Botswana, Cameroon, The Democratic Republic of Congo, Eritrea, Ethiopia, Gambia, Ghana, Lesotho, Liberia, Malawi, Mauritius, Nigeria, Sierra Leone, South Africa, Tanzania, Zambia, Zimbabwe.

Source: First-time internationally educated candidates taking the NCLEX RN examination, NCSBN.


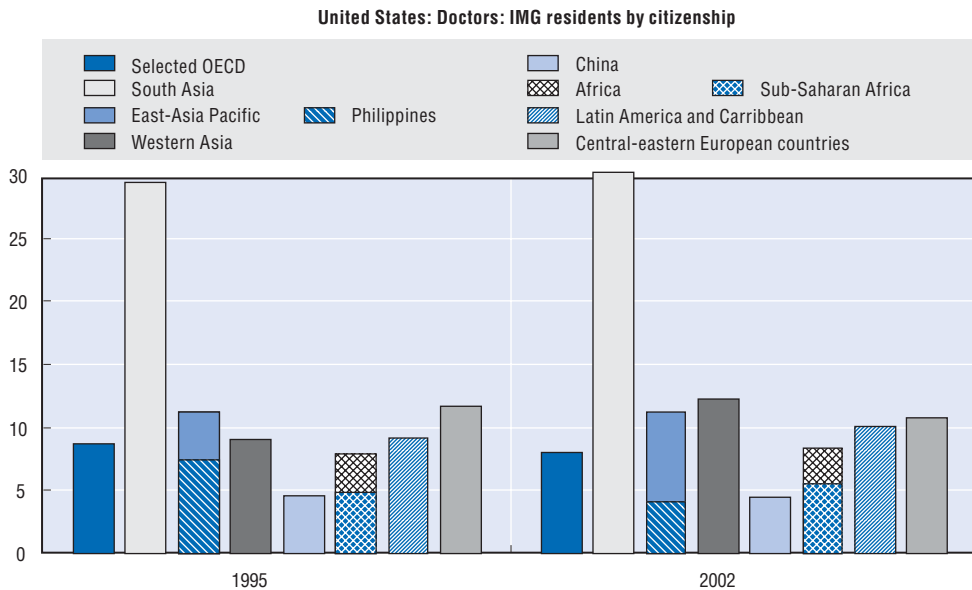
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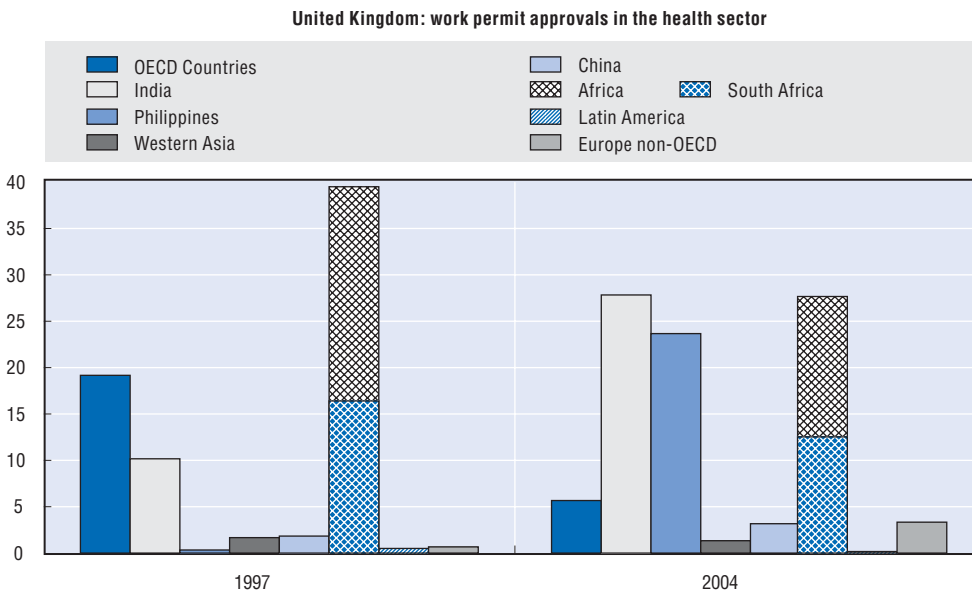
Chart III.10. **Distribution by region of origin of immigration inflows of health professionals in the United Kingdom and the United States, 1995-97 and 2002-04**
(Cont.)
Percentages



1. Africa includes North Africa and sub-Saharan Africa.
2. Selected OECD countries include the following countries: Australia, New Zealand, Western Europe, Canada, Japan.
3. South-Asia includes India and Pakistan.

Source: PGY-1 IMG Residents by citizenship at the time of medical school.

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Note: Figures of work permits in the health sector may include other non-health workers working in a medical environment.

1. South-Asia is almost represented totally by India.
2. East-Asia is almost represented totally by Philippines.
3. Figures for China include Hong Kong, China.

Source: Work permits UK.

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to 15% in 2005/06, but at the same time the number went from 900 to about 1 600. From a receiving or a sending country perspective, these trends might be interpreted differently. In this context, it should be emphasised, however, that migration of African health workers to the OECD is not driven by a particular country (in fact, flows from South Africa and Nigeria tend to decrease) but is due to a diversification of origin countries within the continent.

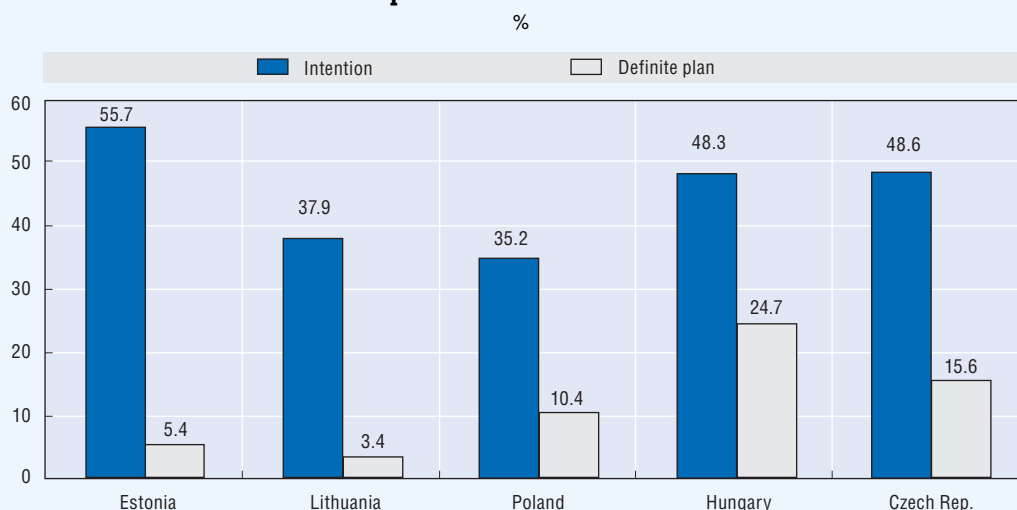
Finally, in the European context, the recent enlargement waves have undoubtedly affected the inflows of foreign doctors and nurses from new accession states (see Box III.4), although these changes may be difficult to identify in migration statistics. Poland in absolute numbers and Lithuania in relative terms have been at the forefront of these developments. More recently, immigration from Romania has been showing increasing trends. In Italy, for instance, about half of the recognition of foreign nursing qualification in 2005 were for Romanian nurses (2 400).

Box III.4. The consequence of recent EU enlargement on health worker migration flows

As indicated in section I, Circa 2000 and thus prior to the EU enlargements in May 2004 and January 2007, a significant number of doctors and nurses born in the new EU member states were already working abroad. Despite the fact that most EU15 countries applied a transition period for the first two years (except the United Kingdom, Ireland and Sweden), concerns were raised about the potential impact of enlargement on out-migration of health workers, in particular in Poland and the Baltic States.

These concerns were partly motivated by surveys of health professionals' intentions to migrate which were held previously to enlargement (see Chart below). Statistics on intentions generally overstate the expected migration flows but in these surveys the percentages of people with a "definite plan to migrate" were unusually high. A number of factors can explain this situation, including the scope of the needs in some EU15 countries and the large salary disparities (World Bank, 2006).

Share of health care professionals who wants to work abroad



Source: Vörk, Kallaste and Pritinits (2004).

Box III.4. **The consequence of recent EU enlargement on health worker migration flows** (Cont.)

To which extent did these flows materialise? Only partial evidences are available so far, but it allows one to draw a first picture of the situation, which both nuances the scope of the outflows and confirms their significance. In the United Kingdom, between May 2004 and December 2006, 530 doctors (hospital), 340 dental practitioners, 950 nurses (including 300 dental nurses) and 410 nursing auxiliaries and assistants were registered in the Worker Registration Scheme (Home Office 2007) as coming from the new member states. In Ireland, the employment of EU8 nationals in the health sector doubled between September 2004 and 2005, from 700 to about 1 300 persons in total (Doyle et al., 2006). In Finland, 432 authorisations were issued to physicians and dentists from EU8 until December 2005 (Dolvik and Fafo, 2006), and in Sweden the number of authorisations granted to EU doctors jumped from 230 in 2003 to 740 in 2004.

Data from the origin countries confirm these trends. In Estonia, by April 2006, 4.4% of all health care professionals had applied for a certificate to leave (61% were physicians). In Latvia, in 2005 more than 200 doctors expressed their intention to leave. In Poland, between May 2004 and June 2006 more than 5000 certificates were issued to doctors (4.3% of the active workforce) and 2 800 to nurses (1.2%) (Kaczmarczyk, 2006). Furthermore, some specialities seem to be more directly affected such as anaesthetists in Poland (about 16% were issued a certificate) or for instance plastic and reconstructive surgeons in Estonia (30% were issued a certificate).

Significant migration flows from new EU members to EU15 have been recorded. Their potential impact on origin countries should, however, be evaluated according to the duration of stay abroad. In this regard, available evidence for Poland suggests that most of the increase in the outflows to EU countries was short-term. That being said, the consequence of temporary outflows of small numbers of highly specialised doctors, such as surgeons or anaesthetists, or more generally dentists, can have in some countries major impacts on health care delivery. A more systematic analysis of the trends and their consequences would be welcome, including for the two countries which have joined recently the EU (Romania and Bulgaria) which face even greater salary disparities with EU25 (Wiskow, 2006).

3. International recruitment of health professionals and migration policies in OECD countries

Since the mid 90s, the international mobility of the highly skilled in general has increased in most OECD countries. This trend has responded to increasing labour market needs along with changes in labour migration policies aimed at facilitating the international recruitment of professionals. In this context, it is interesting to understand better under which conditions migration of health professionals is now possible in OECD countries. Are there any specific programmes aimed at recruiting foreign doctors or nurses? What role do bilateral agreements play in the international mobility of health workers? What are the key conditions for recognition of foreign qualifications?

Table III.5 synthesises the main characteristics of migration policies and qualification recognitions systems for 26 OECD countries (see Annex III.A3 for full details). Table III.5 does not explicitly distinguish between nurses, doctors or other types of health professionals, although specific conditions would generally apply to each of these professions (see Annex III.A3).

Table III.5. **Migration programmes and conditions for recognition of qualifications of foreign health professionals (HP)**

Specific migration programmes for HP or specific conditions may apply	HP are included in labour shortage lists	Specific migration programmes for HP in underserved areas or specific conditions in regional migration programmes	Bilateral agreements specific for HP at a national or regional level	Foreign medical students can remain to look for a job or special regulations may apply for status change	Recognition of foreign qualifications for registration*
AUS					AUS
AUT					AUT
BEL					BEL
CAN					CAN
CHE					CHE
CZE					CZE
DEU					DEU
DNK					DNK
ESP					ESP
FIN					FIN
FRA			Ended		FRA
GBR					GBR
GRC					GRC
IRL					IRL
ITA					ITA
JPN					JPN
LUX					LUX
NLD					NLD
NOR					NOR
NZL					NZL
POL					POL
PRT					PRT
SVK					SVK
SWE					SWE
TUR					TUR
USA					USA

Note: Programmes may concern only nurses or doctors.

(*) Specific conditions generally apply to nurses, doctors and other types of health professionals, specific conditions may also apply for certain countries of training or nationalities.

For detailed information, see Annex III.A3.

	1. Yes.
	2. Conditional/limited registration may be possible under simplified procedures.
	3. Exams and if necessary a supervision period or additional training are required.
	4. Condition on nationality, national qualifications required or other types of stringent conditions apply.

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3.A. Special permits and entry conditions

Very few OECD countries have specific migration policies for health professionals. Australia is one major exception. The medical practitioner visa (subclass 422) allows foreign nationals, who are medical practitioners, to work in Australia for a sponsoring employer for a maximum of four years. Since April 2005, however, medical practitioners can also apply to the general program for *Temporary Business Long Stay* (subclass 457).

Australia and New Zealand grant special points for health professionals in most cases in their permanent skilled categories. This facilitates the immigration of health workers but only to a limited extent. In the United Kingdom, since April 2006 all doctors and

dentists from outside the European Union require a work permit, but a new category was introduced in September 2006 to the existing Training and Work Experience Scheme called the Medical Training Initiatives (MTI), under which foreign-trained doctors can undertake continuing training in the United Kingdom, normally within the NHS. The individuals are expected to return overseas to put into practice the training they have received in the United Kingdom.^{28, 29}

International medical graduates (IMG) completing their graduate medical education in the United States under a J-1 visa are required to return to their home country or country of last residence for at least two years before re-entering the United States. This foreign residence requirement can, however, be waived for instance at the request of a State or Federal agency if the physician agrees to practice in an underserved area for at least 3 years. From 70 doctors in 1990 to more than 1 300 in 1995 and about 1 000 a year since 2002, this programme has become a major channel for placing physicians in underserved areas (GAO, 2006; Hagopian *et al.*, 2003). Initially, states were authorized to request waivers for up to 20 physicians each fiscal year; but in 2002, the limit was increased to 30 waivers per state per year.³⁰ About 90% of the waivers are requested by the States and about half of them concern physicians working exclusively in primary care. GAO (2006) estimates that “*at the end of fiscal year 2005, there were roughly one and a half times as many waiver physicians practicing in underserved areas (3 128) as US physicians practicing in underserved areas through NHSC programs (2 054)*”.

Australia also has specific programmes for attracting foreign health professionals to specific areas (see also Box III.5). The Federal government identifies “Districts of Workforce Shortage” and states define “Areas of need” in which foreign-trained doctors may be recruited, temporarily or permanently, sometimes under conditional registration. Between June 2000 and December 2002, about 5 300 temporary overseas trained doctors were allocated to “Areas of need” visa, including about 2 000 in Queensland (Hawthorne *et al.*, 2006). More generally, there are specific programmes for designated areas (visa 496 or 883) when occupation is included in the relevant shortage list, which will be generally the case for health professionals. In these designated areas overseas students who have completed their studies in Australia but are unable to meet the passmark as an independent migrant may be granted a permanent visa (visa 882). Retention in the rural or remote areas is, however, a matter of concern. Hawthorne *et al.* (2003) note that “*in terms of the Rural Locum Relief Scheme of 276 permanent resident doctors recruited to work in Victorian rural general practice from 1998/99 to 2001/02, just 88 remained in place by 2002 (68% attrition rate)*”.

Under the Canadian Constitution, immigration is an area of shared jurisdiction between the federal and the provincial/territorial governments. The latter have progressively developed immigration programmes to serve their specific needs or requirements. In the context of Provincial Nominee Class, health occupations are identified explicitly for instance in British Columbia and Saskatchewan. Furthermore, for occupations included in Regional Lists of Occupations Under Pressure, temporary permits may be granted under simplified procedures. Most health occupations are listed thus in Alberta, Ontario and British Columbia.

In European OECD countries, work permits are generally initially granted for a limited period. These permits may be conditioned on a labour market test (*i.e.*, checks that there are no EU residents available to fill the position). Nonetheless, in most countries there are conditions under which the labour market test may be waived. This is the case, for

Box III.5. Initiatives to recruit foreign medical practitioners in rural areas

In addition to general programmes, non-governmental organisations sometimes play a key role in trying to address geographical inequalities in terms of availability of healthcare workers through migration. In France, for instance, a non-governmental association organises recruitment campaigns for local authorities or healthcare institutions in Romania to bring in doctors, based on the general incentives offered to recruits who commit to settle for at least five years in underserved areas.

In New Zealand, the Rural General Practice Network is a non-profit organisation which offers recruitment services, mainly targeting foreign doctors, for rural practitioners needing to recruit a locum, or secure a long-term or permanent appointment. This helps medical practitioners to pursue professional training or to take a break and improves retention in rural areas. It also provides a first New Zealand experience to foreign doctors who may choose later on to apply for a permanent residence permit.

In Australia, a Rural Workforce Agency in the State of Victoria (RWAV) was established in 1998 to overcome the shortage of rural doctors and improve access to medical services for rural Victorians. The RWAV is a not-for-profit company funded primarily by the Australian and the State Government and is governed by a Board which includes representatives from key medical and rural stakeholders. The RWAV helps provide individual assistance and expert advice on general practice opportunities in rural and regional Victoria, including to overseas trained doctors.

Outside the OECD, the Rural Doctors' Association and the Academy of Family Practice in South Africa have been developing a recruitment process for doctors, both overseas trained and returnees. To this end, the Rural Health Initiative (RHI) has recently launched a recruitment project to help doctors gain at least a year's experience in South Africa.

instance, in the United Kingdom, Belgium, Ireland, Denmark, the Netherlands or Spain for occupations on the shortage list. In all these countries, all or part of health professionals are included in the shortage lists. In some countries, *e.g.* Belgium, Denmark, France, Germany or the Netherlands, there will be no labour market test if the wage is above a certain threshold. If the level is generally too high for nurses, this does not hold for doctors in many cases (generally the threshold annual earnings is about EUR 33 000).

Few OECD countries have bilateral agreements for the international recruitment of health professionals. Switzerland and Canada, for instance, have a small agreement protocol which explicitly mentions health care workers and aims at facilitating the mobility between the two countries. Spain, which is supposed to have a surplus of nurses, has signed bilateral agreements, notably with France and the United Kingdom. Germany has bilateral agreements with several central and eastern European countries for the recruitment of foreign nursing aids. Bilateral agreements are also sometimes organised at the regional level. This is the case for instance in Italy, where several provinces have signed protocols with provinces in Romania to train and recruit nurses.

In Europe, the United Kingdom is the only country which has made intensive use of bilateral agreements and memoranda of understanding with non-OECD countries in the context of the international recruitment of doctors and nurses. It has signed an agreement with South Africa on reciprocal educational exchange of health care concepts and personnel (2003), a memorandum of understanding with India (2002) and a Protocol on Cooperation in Recruiting Health Professionals with China (2005). The Department of

Health committed not to recruit in rural areas in China and in four Indian states that receive DFID aid (Andhra Pradesh, Madhya Pradesh, Orissa and West Bengal). Furthermore, a list of 151 countries from which the NHS should not recruit actively has been established. This is the case for South Africa where the agreement includes international recruitments but with a strong emphasis on training and information exchanges. It also aims at facilitating twining of hospitals to share best practices and strengthen management. This agreement is often quoted as a best-practice example.

Outside Europe, the only relevant example refers to Japan which has signed recently an agreement to recruit Filipino nurses, with at least 3 years experience, to be trained in Japan. This agreement which concerns 450 nurses over a two-year period still needs to be ratified by the Philippines parliament.

In sum, it appears that in most OECD countries, migration programmes do not target specifically health professionals but they can provide simplified procedures to facilitate their recruitment, notably at the local or regional level. Perhaps surprisingly, bilateral agreements, with very few exceptions, do not play an important role so far and usually concern small numbers of professionals. Because much of the migration of health professionals is a part of a wider stream of international migrations of highly skilled people, it cannot be curbed in isolation. Any attempt to do so could simply result in emigrants ceasing to describe themselves as health professionals.

At the same time, the absence of proper migration programmes for health professionals did not prevent some international recruitment agencies, national health services or private healthcare institutions from holding active recruitment campaigns overseas (Dobson and Salt, 2005), which certainly contribute to explain the sharp increase in the inflows that were recorded over the past 5 years or so. In addition, the spread of the Internet has certainly contributed to ease the access to information on vacancies and possibilities for migration worldwide. In the future, policy changes in the context of the on-going GATS negotiations, notably within Mode 4, could also affect in different ways the conditions for the international recruitment of health workers (see Box III.6).

3.B. Recognition of foreign qualifications

As a prerequisite to employment in the receiving country, foreign (and domestic) health professionals have to meet registration or licensing requirements. This process aims at insuring that educational standards and criteria for fitness to practice (*e.g.* certificate of morality) are met to guarantee patient safety and high quality in healthcare delivery. In this perspective, education curricula are systematically reviewed and it is common for foreign-trained doctors and nurses to be required to pass exams as a condition to registration.

Recognition of foreign qualifications most often requires passing both theoretical and practical exam, as well as a language test. The level required for language proficiency can have a direct impact on inflows of foreign-trained doctors and nurses. The recent tendency, for instance in New Zealand or the United Kingdom, has been to increase the minimum language requirements for nurses.³¹ Based on the evaluation of competencies, participation in bridging programmes, retraining in specific area or adaptation periods may be imposed, although in some countries a working period under supervision is systematically required. In the United Kingdom, for instance, foreign-trained doctors need to pass the PLAB test to get a limited registration. After one year of supervised

Box III.6. Trade and international mobility of health professionals

The General Agreement on Trade in Services (GATS) came into force in 1995 and constitutes the legal framework through which World Trade Organization (WTO) Members progressively liberalize trade in services, including health-related services. GATS allows WTO Members to choose which service sectors to open up to trade and foreign competition. To date, only 50 WTO Members have made some type of commitment on health services under GATS, much less than in financial services (100 Members). The agreement covers four different modes (Modes 1-4 trade in services) all of which affect health:

Mode 1: Cross-border supply. Health services provided from the territory of one member state in the territory of another member state. This is usually via interactive audio, visual and data communication. Typical examples include Internet consultation, diagnosis, treatment and medical education.

Mode 2: Consumption abroad. This usually covers incidents when patients seek treatment abroad or are abroad when they need treatment. This can generate foreign exchange, but equally can crowd out local patients and act as a drain on resources when their treatment is subsidized by the sending government.

Mode 3: Foreign commercial presence. Health services supplied in one member state through commercial presence in the territory of another member state. This covers the opening up of the health sector to foreign companies, allowing them to invest in hospitals and clinics, health management and health insurance. It is argued that, on the one hand, FDI can make new services available, contribute to driving up quality and create employment opportunities. On the downside, it can create a two-tier health system and an internal “brain drain” – and thus exacerbate inequity of health provision.

Mode 4: Movement of natural persons (individuals rather than companies). The temporary movement of a commercial provider of services (for example, a doctor) from their own country to another country to provide his or her service under contract or as a member of staff transferred to a different country. This is one of the most contentious areas for health, as there is concern that it will increase the “brain drain” of health personnel from poor to rich countries. However, GATS is concerned only with health professionals working in other countries on a temporary basis.

The extent to which GATS will have an impact on public services such as health and education is controversial. GATS comes into the equation when countries decide to allow foreign private suppliers to provide services. Opponents of GATS are concerned that the capacity of states to regulate health-related services will be eroded. The counter-argument stresses that GATS allows WTO Members to decide for themselves which sectors will be liberalized and to define country-specific conditions on the form that liberalization will take. Some WTO Members have already indicated they will not be requesting or offering commitments on health services in the current negotiations. Those states that do proceed are not obliged to respond positively to any particular request. Nor is there any requirement for reciprocity. Moreover, the Doha Declaration specifically reaffirmed the right of Members to regulate or introduce new regulations on the supply of services.

GATS is a complex treaty and it does not lay down minimum standards. Rather, it takes shape through the process of negotiation. Overall, there is a lack of empirical data on the level of international trade in health-related services, as well as on the effects of liberalization in specific countries.

Source: WHO, General Agreement on Trade in Services www.who.int/trade/glossary/story033/en/index.html.

training, they can get fully registered. In Ireland, the limited registration can last up to 7 years. In Finland, the licence is granted stepwise: First to work in hospital under supervision, then in health centres and finally in private institutions.

In some countries, the requirements are more restrictive. This is the case, for instance, when people are asked to obtain national qualification. To practice in the United States, all foreign-trained doctors should do or re-do their internship. In Canada, in most cases, graduates of foreign medical schools, who have already completed some or all of their postgraduate training abroad, are required to have two to six years of postgraduate medical training at a Canadian university (Canadian Information Centre of International Medical Graduates). In Italy, Finland, Greece, Turkey and Luxembourg, citizenship of the host country can be required to practice as a medical doctor or as a specialist. In France, despite the fact that the Public Health Code mentions a criteria of nationality (Art. L-4111-1), in practice many foreign doctors are working in public hospitals. Most of them used to be working under precarious contract arrangements as trainees. An important effort has been made recently to regularise their professional status (about 9 500 authorisations have been delivered by the Health Ministry since 1999), and a new procedure has been implemented for recognition of qualifications of foreign-trained doctors (Ordre des Médecins, 2006).

In some OECD countries, conditional or limited registration may be granted under simplified procedures on a temporary basis if qualifications are recognised as being relatively close to the requirements. In the Netherlands, if skills are considered as almost equivalent, registration is made with special stipulations which should be addressed within 2 years. In Australia, people entering through permanent schemes need to have their qualifications recognised prior to arrival. This is not necessarily the case for temporary migrants, in particular those entering through sponsoring schemes. In this context, doctors are granted conditional registration, they can work under supervision and need to take the required exams. It seems that a number of doctors who entered through this route face difficulties in passing the clinical exam, even after several years.³²

Recognition of qualifications for nurses is usually less problematic, although exams and language tests are often required. Nurses nevertheless may face difficulties in having their specialties recognised or may be downgraded in lower occupational positions (e.g. registered nurses working as license nurses or in care homes as nursing aids...). Allan and Larsen (2003) report that in the United Kingdom many international registered nurses were working in the independent sector as care assistants and felt isolated.³³

Within free mobility areas, including the Nordic Passport Union, the Trans-Tasman Area or the European Union, specific regulations are in place to facilitate the mutual recognition of qualifications and ease international mobility (see Box III.7). For third-country nationals, even within the OECD, more or less stringent procedures exist for the recognition of foreign qualifications, which are sometimes considered as impediments to practice.

In many OECD countries, the media have sometimes publicised the case of doctors employed as taxi drivers or in other low-skilled occupations. There is, however, little evidence available on the scope of the *brain waste* in the medical field, but even so, there is no doubt that foreign doctors and nurses face sometimes difficulties in getting their qualifications fully recognised. The case of refugees who are usually entitled to work but

Box III.7. Recognition of diplomas within the European Union and in Europe more generally

The European Union has developed a legal framework in order to encourage more automatic recognition of qualifications, and simplify administrative procedures between its member states. Recently, a new Directive 2005/36/EC has been produced which encompasses twelve sectoral directives – covering the seven professions of doctor, nurse, dental practitioner, veterinary surgeon, midwife, pharmacist and architect – and three directives which have set up a general system for the recognition of professional qualifications and cover most other regulated professions (see <http://europa.eu/scadplus/leg/en/cha/c11065.htm>). This directive should be implemented by October 2007 by member states.

In this new framework, member states automatically recognize certificates of training giving access to professional activities as a doctor, nurse responsible for general care, dental practitioner, veterinary surgeon, midwife, pharmacist and architect, covered by Annex V to the Directive (no adaptation period, no aptitude test). The Directive also adopts the principle of automatic recognition for medical and dental specialisations common to at least two member states under existing law, but restricts future additions to Directive 2005/36/EC of new medical specialisations – eligible for automatic recognition – to those that are common to at least two fifths of the member states.

For the purposes of equivalence in qualifications, it sets minimum training conditions for **Doctors** (at least six years of study or 5 500 hours of theoretical and practical training and an additional minimum duration of two years for general practitioners and, for instance, 5 years for the specialisation in general surgery); **Nurses responsible for general care** (at least three years of study or 4 600 hours of theoretical and clinical training); **Dental practitioners** (at least five years of theoretical and practical study); **Midwives** (at least three years of theoretical and practical study); and **Pharmacists** (at least four years of theoretical and practical training and a six-month traineeship in a pharmacy).

In addition, member States may that require migrants to have the knowledge of languages necessary for practising the profession. This provision must be applied proportionately, which rules out the systematic imposition of language tests before a professional activity can be practised. Furthermore, evaluation of language skills should be separated from the recognition of professional qualifications and should be organised afterwards.

Two special cases may occur for EEA nationals trained in third countries and for Nationals of third countries trained in the EEA. The former are not covered by the EU legislation but the new Directive on Professional Recognition entitles holders of third-country qualifications to benefit from the Directive if their qualifications have been recognised by a first member state according to its national rules and they have practised the profession for at least three years in that member state.

In October 2005, European countries also signed the **Health Professionals Crossing Border Agreement** which aims at facilitating the exchange of information between competent authorities notably for certificates and fitness to practise.

Finally, within the wider European region, 45 countries are currently participating in the **Bologna process** (started in 1999) which aims at establishing a European Higher Education Area by 2010 and thus to facilitate recognition of qualifications within Europe. Medical education is included in this process, although the World Federation for Medical Education (WFME, 2005) has drawn attention to the lack of specificities of the recommendations.

face particular difficulties in having their qualifications recognised (lack of language proficiency, absence of relevant documents...) may be particularly relevant in this context.

In order to address this issue, several OECD countries have implemented more or less ambitious bridging programmes. Canada is an example which allocated, in 2005, CAD 75 million over a five-year period to the Internationally Educated Health Professional Initiative. This programme aims at assisting the assessment and integration into the workforce of up to 1 000 physicians, 800 nurses and 500 other regulated health care professionals. Additional funds were allocated to this programme in December 2006 (CAD 18 million). On a much smaller scale, an interesting initiative has been launched in Portugal by the Gulbenkian Foundation and developed in cooperation with an NGO supporting immigrants, a Higher Education Nursery School, and a major Portuguese social solidarity institution. Its objective consists in assisting immigrant nurses legally working in Portugal in undifferentiated occupations, to obtain the equivalence of their educational and professional diplomas and skills so that they can work in Portugal as nurses.

The United Kingdom has implemented special programmes to support refugees and overseas qualified health professionals who are settled in the United Kingdom and wish to return to work in the health sector (www.rose.nhs.uk). Available estimates count at least 900 refugees and asylum seeker doctors in 2005, with only about 150 currently employed (Butler *et al.*, 2005). These programmes aim at assisting refugee doctors to pass PLAB or Clinical tests or offer bridging courses for nurses. Many similar initiatives exist in other OECD countries, for instance in the United States (*e.g.* the Welcome Back Initiative in California or Chicago Bilingual Nurse Consortium educational programmes for nurses in Chicago)

3.C. Employment conditions of the immigrant health workforce

The point has already been made that working conditions of migrant health workers can be, in some cases, less favourable than for their native-trained counterparts. In this perspective, it is often argued that foreign doctors and nurses play a key role in assuring the continuity of service, notably working on night and weekend shifts or in emergency care.

Based on Labour Force Survey data for European countries in 2005, Table III.6 presents data on the working conditions of doctors and nurses by place of birth. For EU15 countries as a whole, it shows that immigrant health professionals work longer hours. This is especially true for foreign nurses: Over 13% work more than 40 hours a week as compared to 7.7% for native born. But it is for nightshift work that the differences are the most striking, with twice as many foreign-born nurses and doctors reporting that they work regularly at night. The differences are also large for Sunday work. The specificity disappears, however, when differentiating the two groups by type of job contract (permanent/temporary).

One possible explanation of these results could be the fact that a number of immigrant doctors are pursuing professional training in host countries and thus have employment conditions which generally are similar to those of (native-born) junior doctors. Another explanation, notably for nurses, could be that foreign-born nurses ask for overtime work or night shifts to earn extra money to remit home to their families. Whatever is the case,

Table III.6. **Employment conditions of health professionals in selected European countries by country of birth, 2005**

Percentages

		Nurses (ISCO 223 + 323)		Health professionals, except nurses (ISCO 222)	
		EU27	EU15	EU27	EU15
Percentage of employees working more than 41 hours a week	Native-born	8.5	7.7	40.2	42.9
	Foreign-born	13.6	13.3	48.7	49.8
Percentage of employees working at night regularly	Native-born	26.3	26.6	10.8	12.1
	Foreign-born	40.4	41.0	20.9	22.1
Percentage of employees who usually work on Sundays	Native-born	35.4	39.4	10.4	11.2
	Foreign-born	47.0	48.1	14.6	15.3
Percentage of salaried employees with a permanent contract	Native-born	90.4	90.0	80.1	78.2
	Foreign-born	91.3	90.6	72.6	71.4

Source: European Union Labour Force Survey, 2005, authors' calculations.

StatLink  <http://dx.doi.org/10.1787/022733271412>

these data provide eloquent testimony to the key role that immigrants now play in health service delivery in a number of OECD countries, including in Europe.

In the context of increasing cultural diversity in host societies, due to rising migration and diversification of origin countries, foreign-born health professionals are more and more considered as an asset to deliver adapted health care services to the migrant community (see *National Standards for Culturally and Linguistically Appropriate Services in Health Care* in the case of the United States or in the European context *The Amsterdam Declaration Towards Migrant-Friendly Hospitals in an ethno-culturally diverse Europe*). This is, however, not always without raising difficulties, notably when immigrant doctors or nurses have to assume tasks for which they are not qualified or paid (e.g. translation, mediation with the community...) (Hawthorne et al., 2000).

Conclusion

On average, 11% of employed nurses and 18% of employed doctors in the OECD were foreign-born Circa 2000; there are large variations in the size of the foreign-born health workforce across OECD countries, partly reflecting general migration patterns, notably of the highly skilled. As a result, despite specific concerns related to health worker migration, the latter, as a sub-set of highly skilled migration, can not be looked at in isolation.

While there is a legitimate concern about the consequences of migration on origin countries, especially for lower income countries, the results presented in this chapter show that the global health workforce crisis goes far beyond the migration issue. In particular, the health sector needs for human resources in developing countries, as estimated by the WHO at the regional level, largely exceed the numbers of immigrant health workers in the OECD, implying that international migration is neither the main cause nor would its reduction be the solution to the worldwide health human resources crisis.

However, two key qualifying arguments should be taken into consideration. The first relates to the fact that international migration contributes to exacerbate the acuteness of the problems in some particular countries. This is the case, for instance, in Caribbean countries and a number of African countries, notably Portuguese and French-speaking, but also Sierra Leone, Tanzania and Liberia and to a lesser extent Malawi. Even in these cases,

however, international migration of health workers may be more a symptom than a determinant.

Second, since 2000, migration flows of health professionals have increased. If they seem to have mainly affected the main source countries like Philippines and India, they have also involved some African countries as well as central and eastern European countries. Clearly, the rate of growth recorded over the past 5 years or so would not be sustainable for the health systems in some developing countries.

It is important to emphasise that there are very few specific migration programmes targeting health professionals in OECD countries. Furthermore, bilateral agreements seem not to play an important role so far. In this context, because some origin countries nevertheless suffer some depletion of their workforce through migration, the short-term question may become “should receiving countries explicitly exclude health professionals from international recruitments of the highly skilled in order to avoid potential perverse impacts on the health systems of developing countries”? Would it be efficient? Would it be fair?

In the long run, it is probably necessary to pose the question slightly differently and to recognise that active international recruitment is a quick fix and/or a distraction from other home-built solutions to health resources management such as increasing domestic training capacity, improving retention, developing skill mix and co-ordinated care, and increasing productivity.

There is certainly not a unique or unilateral response to the challenges posed by international mobility of health care workers but data are now available to monitor the trends more closely and sound policy proposals to better share the benefits of the international mobility of the health workers, while insuring individual rights to move, have been made (e.g. WHO, 2006a; Stilwell et al., 2004; Buchan and Dovlo, 2004; Dumont and Meyer, 2004; JLI, 2004; Martinez and Martineau, 2002). Some of these proposals are already implemented. What is needed now is to scale the best initiatives up and to raise the attention and commitments of all stakeholders, including origin countries, receiving countries and migrants themselves. In this perspective, the increasing trends in Official Development Assistance to health (OECD, 2007) and the current efforts devoted by the WHO to develop a global code of practice for the international recruitment of health workers go in the right direction. However, they would need to be accompanied by measures to reinforce training capacity and to improve the management of health human resources, which is already the case in some of the OECD countries.

Notes

1. The *Joint Learning Initiative on Human Resources for Health and Development* (JLI) was launched in November 2002 in recognition of the centrality of the workforce for global health. As a follow up, the *Global Health Workforce Alliance* (GHWA) has been created recently. GHWA is a partnership hosted and administered by the WHO. Another related initiative was founded by Mary Robinson: *Realizing Rights: The Ethical Globalization Initiative*. It aims at addressing five urgent issues required for greater human development and security, including the international mobility of health workers. Finally, the Commonwealth Secretariat has been very active in this field. It has developed an international code of practice for the international recruitment of health workers.
2. This chapter focuses exclusively on international migration of health workers. It does not address other important aspects of the management of the health workforce, such as education and training policies, skill-mix policies or retention policies. The OECD plans to analyse these additional aspects in further work on the health workforce.

3. When population censuses were not available, either population register data were used (Sweden, Finland, Denmark) or in some cases Labour Force Survey data (Belgium, the Netherlands, Norway and Germany). For Germany, the available dataset does not allow one to identify some specific countries of birth (it also includes a significant number of cases where the place of birth could not be identified). In addition, a number of OECD countries could not be included in the analysis because of lack of data (Iceland, Italy, Japan, Korea, the Czech Republic and the Slovak Republic).
4. A similar approach has been adopted by Clemens and Petterson (2006) focusing on health professionals born in African countries. Their study covers 8 OECD countries (Australia, United Kingdom, United States, Canada, Portugal, Spain, France and Belgium) and South Africa. Lowell and Gerova (2004) also use Population Census data to identify foreign-born health professionals or associate professionals by detailed occupations in the United States.
5. Firstly, data refer to people born abroad and not to people trained overseas but they are completed by additional information based on professional registers by place of training. Secondly, population census data do not allow us to control for nationality at birth in all OECD countries, and thus some people may be incorrectly identified as immigrants based on their place of birth (repatriates or children of expatriates). Finally, data refer to people employed as health professionals and not to people who were trained as health professionals. Difficulties over the recognition of foreign medical qualifications in receiving countries can give rise to a significant gap between the former and the latter.
6. According to the French Employment Survey, 55.6% of the persons born in Algeria with tertiary education and employed in 2005 were repatriates (born in Algeria with French nationality at birth). Applying this ratio to the 10 500 Algerian-born doctors and the 8 200 Algerian-born nurses would reduce the percentage of foreign-born doctors in France by about 3 percentage points – to 14% – and that of nurses by 1 percentage point – to 4.4%.
7. Docquier and Bhargawa (2006) built a database on general practitioners in 16 OECD countries for the period 1991-2004 by place of training to estimate the impact of medical “brain drain” on HIV mortality in sub-Saharan Africa (Barghawa and Docquier, 2006). This pioneer work, after that of Meija in the 70’s, is a breakthrough. The database, however, has some severe limitations due to the availability of data and the heterogeneity of sources and definitions. Except for the United States, a significant share of the data has been interpolated casting doubts on the reliability of the figures for origin countries which are not prominent in US immigration.
8. In Belgium, until recently, there were important movements of foreign students from neighbouring countries, notably France, into medical schools and other health education institutions to avoid the numerical caps in their origin country. These possibilities have been reduced recently.
9. Almost all immigrant doctors must go through the US examination system and do their professional training – residency – in the United States
10. In the United States, a significant share (around 15%) of the foreign-trained doctors in fact comprises US citizens trained abroad, mostly in the Caribbean. These off-shore universities are mainly targeting the United States. This temporary migration of US citizens allows them to get round policies aimed at limiting the number of places in medical schools in the United States. Over the past decade, while the number of graduates has remained stable, the number of residency places has increased, and the gap is filled by foreign-trained doctors, increasingly US foreign-trained doctors.
11. On average, Asia is the main region of origin accounting for 42% of foreign-born doctors and 31% of nurses. These percentages are more important than for highly skilled in general (about 30%).
12. The migration of health professionals from Canada to the United States has attracted a lot of attention in the literature. Of the doctors who are leaving Canada, about half choose to go to the United States. The Canada Institute for Health Information, however, reports that over the past 5 years the number of doctors moving abroad has decreased (from 420 doctors in 2000 to 262 in 2004), while the number of returnees has increased. In 2004, Canada experienced a small net positive gain (CIHI, 2005). This is a noticeable change compared to what was observed in the 90s (Barer and Webber, 2000).
13. In the case of Africa, see WHO (2004a), Hagopian *et al.* (2004), Dolvo and Martineau (2004) and Clemens and Pettersson (2006), Clemens (2007), Connell *et al.* (2007). For the Pacific region see WHO (2004b). For South-East Asia see Adkoli (2006). For specific country case studies, see for instance Wibulpolprasert *et al.* (2004) for Thailand, Dumont and Meyer (2004) for South Africa, ILO (2005) or Ronquillo *et al.* (2005) for the Philippines, Chikanda (2004) for Zimbabwe, Mensah *et al.* (2005) or Buchan and Dovlo (2004) for Ghana, Badr (2005) for Sudan, Record and Mohiddin (2006) for Malawi.

14. For the former USSR, migration to Germany and to Israel is not taken into account, although large flows have been recorded over the past decades. It is estimated, for instance, that between 1989 and 1995 more than 14 000 physicians from the former Soviet Union emigrated to Israel (Borow, 2007). There are also about 10 000 *Aussiedler* from the former USSR who were employed as a doctors in Germany in 2002 and probably as many persons who entered with a different status (although not identifiable in the German microcensus).
15. It is not clear, however, if the importance of Filipino doctors in OECD countries, mainly in the United States, results from recent or older migration waves. In any case, a recent matter of concern in the Philippines is related to the increase in doctors retraining as nurses to emigrate (“*nursing medics*”). At least 45 Filipino nursing schools offer short courses for doctors to retrain as nurses.
16. For African countries, migration of health workers to South Africa is also supposed to be important, however not accounted for in our figures. According to Clemens and Pettersson (2006) there would be less than 1 500 foreign-born doctors from Africa in South Africa and about 200 nurses. This represents less than 5% of all the sub-Saharan-born doctors in OECD countries.
17. Emigration rates are computed as follows: X_i = number of foreign-born doctors (nurses) working in OECD countries born in country i ; Y_i = number of doctors (nurses) working in country i (source WHO Global Health Atlas 1995-2004 average); *emigration rate* = $X_i/(X_i + Y_i)$. Countries with under 50 nurses or with less than 10 nurses abroad have been dropped. (10 and 5 respectively for doctors).
18. Fiji has strong links with two OECD countries, Australia and New Zealand. Emigration as whole is important, and particularly for the highly skilled. Fijians nurses also emigrate, mainly temporarily, to the Middle East and to neighbouring Pacific countries. It seems that Fiji could move towards a situation like the one which prevails in the Philippines where nurses are trained to go overseas. Emigration of doctors seems to be more of a problem, partly compensated by inflows from the Philippines, Burma and China (Connell, 2006).
19. Sierra Leone and Tanzania were the two poorest in 2000, with about 500 dollars per inhabitant (GDP PPP, World Development indicators World Bank). Angola had a higher GDP per capita because of its natural resources (about 1 800 dollars per inhabitant in 2000) but suffered from a civil war for 27 years. To some extent, the result may be inflated for Angola and Mozambique which are overrepresented in Portugal because the repatriates cannot be identified in the population census (in Portugal there are 1 457 doctors born in Angola and 884 born in Mozambique out of 1 512 and 935 foreign-born doctors, respectively).
20. Some countries like South Africa, Kenya, Ghana and Côte d’Ivoire experience a paradoxical situation as they simultaneously have difficulties to fill vacancies and have unemployed health workers. In these countries, a better allocation of resources and targeted incentives could contribute to address, to a certain extent, this situation by making the health sector more attractive particularly in rural areas where poor working conditions, lack of professional perspectives, and safety are often major issues and a serious deterrent for health workers to take a position there. (see Buchan and Dovlo, 2004; Zurn *et al.*, 2002; Dumont and Meyer, 2004)
21. The shortage is calculated on a needs-based approach which sets at 2.28‰ health workers (doctors, nurses and midwives) per 1 000 population, the threshold under which, on average, countries fail to achieve an 80% coverage rate for deliveries by skilled birth attendants.
22. The WHO regional classification distinguishes: African Region, South-East Asia Region, West Pacific Region, East Mediterranean Region, European Region and the American Region.
23. In 1998, a passing score on ECFMG Clinical Skill Assessment was added to the requirements which induced a significant drop in the number of certificates granted in 1999 (Boulet *et al.*, 2006).
24. The peak in the UK figure for registration of foreign doctors in 2003 can be explained by the fact that the regulation has changed for some origin countries. As a consequence, several thousand doctors secured UK registration even though they had not immediate intention of emigrating to the United Kingdom.
25. To this total, we should add persons entering through the Highly Skilled Migrant Programme (17 631 persons in 2005 of which 33% with a medical occupation mainly doctors – although they are not necessarily employed), as well as the nationals of EU15 and EU10 countries. In total, the figure might be close to or even exceed the number of registrations.
26. H1-B visas are regulated through a quota system. The numerical limit cannot be lower than 65 000. It was raised to 115 000 in 1999 and to 195 000 in 2001. The quota went back to 65 000 as of October 2003, although important exemptions to the quota system have been introduced and still remain.

27. J-1 visas also play a key role for international medical graduates completing their graduate medical education in the United States (see *infra*).
28. In Italy, nurses are excluded from the annual work permit quota since 2002 (Chaloff, 2006).
29. In the United States, there have been several specific programmes for foreign nurses in the past but they are now terminated. H-1A visa was created through the Nursing Relief Act of 1989 but ended in September 1995. In 1999, the H-1C category was created through the Nursing Relief for Disadvantaged Area Act of 1999. It allowed for an annual quota of 500 registered nurses who could work for up to 3 years in the United States. This programme was terminated in September 2004. Since then, there is no specific programmes for nurses or doctors, except the J1 Waiver programme.
30. Federal agencies are not statutorily limited in the number of waivers that may be granted in response to their requests each year
31. In the United Kingdom, as a result of public consultations for both nursing (November 2003) and midwifery (October 2005) and evidence collected by the British Council, the Nursing and Midwifery Council decided that from the February 2007 a score of IELTS 7 was the lowest level acceptable for language skills (previously 6.5). In New Zealand, the minimum level was also raised recently. The required pass level is a score of not less than 7 in each of the four sections of IELTS. In Australia, the general score should not be less than 7 and each section not less than 6.5.
32. Based on Australian Medical Council (AMC) data, Hawthorne et al. (2006) analyse the pass rate of foreign-trained doctors to the written and clinical exams. It appears that about 80% of those taking the AMC written examination (MCQ) will eventually pass it (51% at first attempt), and that 86% of those taking the clinical exam (CE) passed it, but only 53% of those presenting the first exam took the clinical exam over the period 1978-2005. Length of time between obtaining the medical qualification and sitting the MCQ for the first time and passing the CE were important determinants of passing rates. Region of origin and mother tongue were also key determinants.
33. Bach (2003) reports a set of similar examples in different contexts.

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ANNEX III.A1

Origin-destination of Immigrant Health Professionals in OECD Countries, Circa 2000

Table III.A1.1. **Distribution of foreign-born doctors by countries of origin
in selected OECD countries**

Percentages

	OECD	Europe non-OECD	North Africa	Other Africa	Asia non-OECD	Latin America non-OECD	Oceania non-OECD	Total**	EU15	EU12 (A10, BUL, ROM)
AUS	41.2	3.0	2.7	8.1	42.5	0.7	1.7	100	29.6	4.4
AUT	65.1	15.0	2.1	0.7	16.6	0.6	–	100	37.4	27.8
CAN	40.5	4.2	4.1	12.1	32.5	6.5	0.1	100	25.5	7.8
CHE	72.4	11.0	2.8	2.3	7.3	4.2	–	100	55.6	14.0
DNK	55.3	14.3	2.0	2.8	23.3	2.3	–	100	30.0	14.6
ESP	23.8	2.4	8.5	1.7	8.7	55.0	–	100	16.7	1.2
FIN	38.3	43.5	3.5	2.6	10.4	1.7	–	100	26.1	13.9
FRA	14.1	1.7	53.8	11.3	16.7	2.4	–	100	11.4	1.9
GBR	20.0	2.3	3.6	16.9	54.9	2.2	0.1	100	13.6	2.6
GRC	37.4	36.2	9.1	4.8	11.4	0.9	–	100	17.8	20.1
HUN	10.4	75.4	0.3	2.9	10.2	0.8	–	100	3.7	58.4
IRL	45.1	0.4	–	6.5	48.1	–	–	100	38.1	0.4
LUX	79.7	2.3	2.6	5.6	8.6	1.1	–	100	74.8	3.4
MEX	27.1	0.8	0.2	0.4	1.8	69.6	–	100	8.9	0.9
NZL	50.4	1.7	0.9	15.9	27.3	0.6	3.3	100	40.2	0.3
POL	8.0	74.9	1.2	2.8	12.6	0.5	0.1	100	5.8	18.9
PRT	15.3	1.1	0.2	61.4	3.8	18.3	–	100	13.2	0.5
SWE	55.7	15.5	1.0	2.9	21.0	3.9	–	100	31.5	19.9
TUR	46.9	32.1	0.3	–	20.7	–	–	100	41.5	25.9
USA	21.7	4.3	2.3	4.6	51.8	15.2	0.1	100	9.7	4.0
OECD*	26.7	5.6	7.2	7.8	41.6	10.8	0.2	100	16.0	5.3

* Weighted average for the above countries plus Belgium, the Netherlands and Norway for which detailed figures are not significant.

** Excluding unknown and unclassified countries of birth.

– Negligible.

Source: See Table III.1.

StatLink  <http://dx.doi.org/10.1787/022583014365>

Table III.A1.2. Distribution of foreign-born nurses by countries of origin in selected OECD countries

Percentages

	OECD	Europe non-OECD	North Africa	Other Africa	Asia non-OECD	Latin America non-OECD	Oceania non-OECD	Total**	EU15	EU12 (A10, BUL, ROM)
AUS	63.2	2.6	0.3	4.4	23.6	1.9	4.0	100	47.2	2.5
AUT	48.7	26.9	0.8	0.4	22.6	0.6	–	100	18.7	32.7
CAN	38.4	2.8	0.4	3.9	29.8	24.2	0.4	100	26.0	5.1
CHE	68.1	17.1	1.2	2.6	7.7	3.2	–	100	60.1	4.1
DNK	78.8	3.8	0.6	4.4	10.3	2.0	–	100	39.7	5.7
ESP	39.5	2.7	10.5	3.1	3.3	40.9	–	100	30.9	1.9
FIN	69.1	25.5	–	3.2	1.1	1.1	–	100	62.8	7.4
FRA	22.7	0.8	52.9	15.8	6.5	1.3	–	100	21.0	0.6
GBR	33.4	2.0	0.3	25.4	24.5	14.3	0.1	100	25.4	2.1
GRC	50.6	39.0	1.0	1.8	7.2	0.4	–	100	35.4	16.2
HUN	11.1	87.8	0.1	0.1	0.7	0.1	–	100	3.4	77.7
IRL	66.7	0.4	–	3.6	29.3	–	–	100	58.9	0.3
LUX	88.5	2.9	1.8	4.0	2.1	0.6	–	100	85.3	2.1
MEX	68.1	0.4	–	0.2	2.2	28.8	0.4	100	14.4	–
NZL	64.3	0.7	0.1	7.7	13.3	0.9	13.0	100	51.7	0.7
POL	17.7	79.3	–	0.3	2.7	–	–	100	14.4	21.3
PRT	33.1	0.5	0.1	57.6	1.7	7.0	–	100	31.3	0.2
SWE	69.8	9.2	0.3	2.6	13.5	4.5	–	100	52.1	9.1
USA	26.0	2.2	0.4	6.1	39.8	25.1	0.5	100	11.7	1.7
OECD*	36.5	4.7	2.6	8.4	29.7	17.5	0.7	100	15.0	53.9

* Weighted average for the above countries plus Belgium, the Netherlands and Norway for which detailed figures are not significant.

** Excluding unknown and unclassified countries of birth.

– Negligible.

Source: See Table III.1.

StatLink  <http://dx.doi.org/10.1787/022583014365>

Table III.A1.3. Foreign-born doctors by country of birth and country of residence in selected OECD countries

Numbers

Country of birth →																													←Country of birth			
Country of residence ↓	AUS	AUT	BEL	CAN	CHE	CZE	SVK	DEU	DNK	ESP	FIN	FRA	GBR	GRC	HUN	IRL	ISL	ITA	JPN	KOR	LUX	MEX	NLD	NOR	NZL	POL	PRT	SWE	TUR	USA	Total	Country of residence ↓
Australia		74	27	143	45	59	22	409	26	22	17	58	4 587	120	183	329				46	96	9	139	4	1 086	378	218	25	55	232	8 409	Australia
Austria	4		8	17	70	292	135	1 195	5	12	10	33	19	50	227	2	2	202	11	8	34	5	20	11		245	1	22	106	63	2 809	Austria
Canada	150	110	125		110	135	120	430	45	75	30	410	3 630	105	345	380		180	70	200		65	210	20	115	645	50	55	35	1 350	9 195	Canada
Switzerland	17	178	104	51		207	78	2 050	10	107	32	383	85	61	170	4		317	10	9	16	21	77	12	4	169	22	42	62	240	4 538	Switzerland
Denmark	2	7	5	20	16	3		190		22	22	14	37	8	13	1	24	12	1	14		3	12	117		105	4	154	16	65	887	Denmark
Spain	15	14	76	36	142	5	2	459	18		12	496	213	8	3	10	1	99	7	21	3	222	76	15	1	24	61	30	6	168	2 243	Spain
Finland		5		5				50	5	5		10	10		10					5					5	20	5	60	10	10	215	Finland
France	21	97	646	114	184	47	12	1 611	36	297	16		125	114	40	36	4	562	40	29	92	24	64	4		134	164	9	102	133	4 757	France
United Kingdom	858	76	166	388	69	126	18	1 775	96	571	44	217		477	89	2 332	16	364	104	29	3	16	442	44	398	282	49	82	103	642	9 876	United Kingdom
Greece	39	6	7	15	4	9	1	141	1	2	1	7	6		1			28				1	3		1	19		8	98	44	442	Greece
Hungary	1	20	1	1	4	15	143	57		1	3	3	2	9				2						1		11	1		1	8	284	Hungary
Ireland	24	3	6	33				42		9	3	9	780	3				3			3			15	6	3		3		96	1 041	Ireland
Luxembourg		1	61	1	3	2		62		7	1	47	4					9								4	2		1	2	212	Luxembourg
Mexico	1	5	1	20	7	4		27	4	141		39	6	1	3			32	25				8			12		1	2	472	811	Mexico
New Zealand	186			66				57					1 512			51					6			42		12				93	2 025	New Zealand
Poland	3	9		3	39	6	99					51	9	12	6					3										9	249	Poland
Portugal	3	1	15	24	9	1	1	85	1	276		166	23	1	1	3		7	3		4	4	17	2		3		4	2	40	696	Portugal
Sweden	7	44	11	11	22	7	11	532	463	69	547	36	69	77	171	7	128	40	11	29		4	26	266	4	678	15		51	87	3 423	Sweden
Turkey	9	65	52	13	28	9		1 130	22	33	8	67	98	217	5	4		67	8	3			109	22		39		38		112	2 158	Turkey
United States	665	475	320	8 985	315			5 270	185	895	90	1 010	4 715	1 150	1 175	870	165	2 090	2 330		10	3 860	505	135	245	2 715	200	440	1 080		39 895	United States
Grand Total*	2 067	1 210	2 223	9 946	1 062	987	549	17 214	1 426	2 632	879	3 940	16 181	2 547	2 456	4 029	4 146	2 674	444	435	178	4 234	2 042	712	1 904	5 742	792	1 254	2 076	4 049	Grand Total	

Note: 973 doctors born in former Czechoslovakia who could not be attributed have been omitted. 8 014 doctors born in the Korean peninsula for whom the distinction between North and Korea was not possible are also omitted. In both cases the figures mainly concern the United States as a receiving country. For Belgium, the Netherlands and Norway as receiving countries, the detailed figures are not reported because they are not significant but are included in the column totals. Data for Germany are not available by detailed countries of birth.

Source: See Table III.1.

StatLink  <http://dx.doi.org/10.1787/022582603240>

Table III.A1.4. Foreign-born nurses by country of birth and country of residence in selected OECD countries

Numbers

Country of birth →																													← Country of birth			
Country of residence ↓	AUS	AUT	BEL	CAN	CHE	CZE	SVK	DEU	DNK	ESP	FIN	FRA	GBR	GRC	HUN	IRL	ISL	ITA	JPN	KOR	LUX	MEX	NLD	NOR	NZL	POL	PRT	SWE	TUR	USA	Total	Country of residence ↓
Australia		156	59	491	95	83	34	1 126	132	96	147	119	16 686	118	97	1 717	10	339	64		4	8	1 102	32	5 443	561	67	97	51	478	29 412	Australia
Austria	21		16	14	108	583	512	1 112	4	13	26	39	26	7	220	3	1	136	3	53	5	2	93	8	3	841	3	33	53	18	3 956	Austria
Canada	350	125	190		155	145	85	1 275	145	60	205	570	7 010	75	200	460		725	50	320		105	1 340	30	295	1 530	470	75	15	2 695	18 700	Canada
Switzerland	34	567	394	454		150	56	4 236	56	331	299	2 331	274	14	79	35		692	10	100	37	18	735	18	12	187	283	115	164	112	11 793	Switzerland
Denmark	16	8	10	43	27	1		240		15	95	29	122	2	6	13	72	5	6	92		5	54	433	5	93	1	327	16	81	1 817	Denmark
Spain	21	8	101	19	232	6	1	494	17		7	690	203	5	1	12	1	47	5	9	1	72	83	14	1	27	49	26	1	75	2 228	Spain
Finland	5			5	5			20	5			5	5													5		260	10	325	Finland	
France	14	93	1 316	103	61	21	8	2 175	65	123	20		61	17	28	62		799	9	58	41	21	17			24	108	4	9	4	5 261	France
United Kingdom	2 227	123	154	898	130	92	39	2 776	278	539	588	403		94	65	14 238	12	315	78	50	3	11	519	159	1 283	263	118	276	70	975	26 776	United Kingdom
Greece	155	9	33	63	20	100	1	1 199	4	3	3	19	22		18			10				1	24	3	3	133		50	38	53	1 964	Greece
Hungary	2	8		2	2	9	88	33		1	3	3	2											2	1		13		1	1	171	Hungary
Ireland	108	3	6	51				51	6	30	15	12	3 408					6						21		60	6		6	246	4 035	Ireland
Luxembourg	1	4	188	2	6	2		128	5	3		117	5		1	1		23		1		1	19			3	58	6	2	2	578	Luxembourg
Mexico	1	2	2	8	1			9		44		9	3					9	2				1							282	373	Mexico
New Zealand	615	9	6	135	21	6		111	21		6	9	3 291	3	6	186		3	24	33			309	6		12		12	105	4 929	New Zealand	
Poland		9	3			12	3	111				15		3	6			3				3				3			6	177	Poland	
Portugal	5		12	31	18	1		177	2	616	1	702	34	2	1	3		3			13		15	2	1			7	35	1 681	Portugal	
Sweden	20	50	20	20	15			340	430	35	3 340	30	115	40	100	25	55	25	10	130		10	65	565	5	475	20		55	85	6 080	Sweden
United States	937	482	248	22 110	285	83	176	12 960	371	722	381	1 370	13 143	424	500	3 128		2 245	4 450	1 721		12 100	1 246	399	405	2 721	710	646	400	84 363	United States	
Grand Total*	4 620	2 041	3 813	24 620	1 315	1 329	1 139	33 983	2 257	3 205	5 596	8 975	45 168	804	1 372	20 166	287	5 866	4 711	2 567	133	12 357	6 092	1 700	7 564	6 999	1 951	3 028	1 260	5 663	Grand Total	

Note: 367 nurses born in former Czechoslovakia who could not be attributed have been omitted. 7 572 nurses born in the Korean peninsula for whom the distinction between North and Korea was not possible are also omitted. In both cases the figures mainly concern the United States as a receiving country. For Belgium, the Netherlands and Norway as receiving countries, the detailed figures are not reported because they are not significant but are included in the column totals. Data for Germany are not available by detailed countries of birth.

Source: See Table III.1.

StatLink  <http://dx.doi.org/10.1787/022582603240>

ANNEX III.A2

Expatriation Rates for Doctors and Nurses, Circa 2000

 Table III.A2.1. **Expatriation rates for doctors and nurses, Circa 2000**

Country of birth	Nurses			Country of birth	Doctors		
		Number of persons working in OECD countries	Expatriation rate			Number of persons working in OECD countries	Expatriation rate
Albania	ALB	415	3.5	Afghanistan	AFG	613	13.0
Algeria	DZA	8 796	12.4	Albania	ALB	271	6.2
Angola	AGO	1 703	11.5	Algeria	DZA	10 793	23.4
Antigua and Barbuda	ATG	678	74.4	Angola	AGO	1 512	63.2
Argentina	ARG	1 288	4.3	Antigua and Barbuda	ATG	100	89.3
Australia	AUS	4 620	2.6	Argentina	ARG	4 143	3.7
Austria	AUT	2 914	3.7	Australia	AUS	2 067	4.1
Bahamas	BHS	560	29.7	Austria	AUT	1 599	5.5
Bahrain	BHR	77	2.5	Bahamas	BHS	178	36.3
Bangladesh	BGD	651	3.1	Bahrain	BHR	74	8.4
Barbados	BRB	3 496	78.0	Bangladesh	BGD	2 127	5.2
Belgium	BEL	4 125	6.4	Barbados	BRB	275	46.1
Belize	BLZ	1 365	81.8	Belgium	BEL	2 438	5.0
Benin	BEN	166	3.2	Belize	BLZ	76	23.2
Bolivia	BOL	358	1.3	Benin	BEN	215	40.9
Botswana	BWA	47	1.0	Bolivia	BOL	717	6.5
Brazil	BRA	2 258	0.3	Botswana	BWA	33	4.4
Brunei Darussalam	BRN	129	12.6	Brazil	BRA	2 288	1.1
Bulgaria	BGR	789	2.6	Brunei Darussalam	BRN	94	21.9
Burkina Faso	BFA	16	0.3	Bulgaria	BGR	1 856	6.2
Burundi	BDI	57	4.1	Burkina Faso	BFA	65	7.6
Cambodia	KHM	1 119	12.2	Burundi	BDI	71	26.2
Cameroon	CMR	1 338	4.9	Cambodia	KHM	669	24.6
Canada	CAN	24 620	7.4	Cameroon	CMR	572	15.5
Cape Verde	CPV	261	38.9	Canada	CAN	9 946	13.0
Central African Republic	CAF	92	8.4	Cape Verde	CPV	165	41.7
Chad	TCD	117	5.2	Central African Republic	CAF	83	20.0
Chile	CHL	1 965	16.4	Chad	TCD	69	16.7
China	CHN	12 249	0.9	Chile	CHL	863	4.8
Colombia	COL	2 625	9.9	China	CHN	13 391	1.0
Comoros	COM	64	11.7	Colombia	COL	3 885	6.2
Congo	COG	452	12.3	Comoros	COM	20	14.8
Congo, Dem. Rep. Of	COD	404	1.4	Congo	COG	539	41.6
Costa Rica	CRI	562	13.4	Congo, Dem. Rep. Of	COD	350	5.7
Côte d'Ivoire	CIV	337	4.2	Cook Islands	COK	16	53.3

Table III.A2.1. **Expatriation rates for doctors and nurses, Circa 2000 (Cont.)**

Country of birth	Nurses			Country of birth	Doctors		
		Number of persons working in OECD countries	Expatriation rate			Number of persons working in OECD countries	Expatriation rate
Cuba	CUB	4 209	4.8	Costa Rica	CRI	340	6.1
Cyprus	CYP	706	19.1	Côte d'Ivoire	CIV	261	11.1
Denmark	DNK	2 641	4.5	Cuba	CUB	5 911	8.2
Dominica	DMA	620	66.2	Cyprus	CYP	627	25.2
Dominican Republic	DOM	1 857	10.8	Denmark	DNK	1 629	9.4
Ecuador	ECU	1 126	5.4	Djibouti	DJI	25	16.2
Egypt	EGY	1 128	0.8	Dominica	DMA	58	60.4
El Salvador	SLV	2 398	32.0	Dominican Republic	DOM	1 602	9.3
Equatorial Guinea	GNQ	98	31.0	Ecuador	ECU	970	5.0
Eritrea	ERI	548	18.8	Egypt	EGY	7 243	15.8
Ethiopia	ETH	1 421	9.1	El Salvador	SLV	833	9.5
Fiji	FJI	2 025	56.2	Equatorial Guinea	GNQ	78	33.8
Finland	FIN	5 870	7.3	Eritrea	ERI	104	32.6
Former Czechoslovakia	CSFR	2 835		Ethiopia	ETH	633	24.6
Former USSR	F_USSR	10 034		Fiji	FJI	382	58.5
Former Yugoslavia	F_YUG	12 948		Finland	FIN	1 018	5.8
France	FRA	8 589	1.9	Former Czechoslovakia	CSFR	2 509	
Gabon	GAB	106	1.6	Former USSR	F_USSR	11 360	
Gambia	GMB	62	3.7	Former Yugoslavia	F_YUG	3 772	
Germany	DEU	31 623	3.8	France	FRA	4 131	2.0
Ghana	GHA	5 230	24.9	Gabon	GAB	57	12.6
Greece	GRC	1 367	3.1	Gambia	GMB	46	22.8
Grenada	GRD	2 131	87.6	Germany	DEU	17 214	5.8
Guatemala	GTM	1 204	2.6	Ghana	GHA	1 469	31.2
Guinea	GIN	94	2.1	Greece	GRC	2 830	5.6
Guinea-Bissau	GNB	227	18.0	Grenada	GRD	109	72.7
Guyana	GUY	7 450	81.1	Guatemala	GTM	486	4.7
Haiti	HTI	13 001	94.0	Guinea	GIN	99	9.1
Honduras	HND	917	9.9	Guinea-Bissau	GNB	182	49.2
Hungary	HUN	2 117	2.4	Guyana	GUY	949	72.2
Iceland	ISL	287	6.8	Haiti	HTI	2 209	53.1
India	IND	22 786	2.6	Honduras	HND	329	8.2
Indonesia	IDN	3 449	2.7	Hungary	HUN	2 538	7.2
Iran	IRN	4 234	4.8	Iceland	ISL	435	29.2
Iraq	IRQ	415	1.3	India	IND	55 794	8.0
Ireland	IRL	20 166	24.9	Indonesia	IDN	2 773	8.6
Israel	ISR	980	2.4	Iran	IRN	8 991	12.9
Italy	ITA	6 945	2.2	Iraq	IRQ	3 730	18.0
Jamaica	JAM	31 186	87.7	Ireland	IRL	4 029	26.6
Japan	JPN	4 711	0.5	Israel	ISR	2 436	9.0
Jordan	JOR	363	2.0	Italy	ITA	4 386	1.8
Kenya	KEN	2 523	6.4	Jamaica	JAM	2 114	48.4
Kiribati	KIR	19	9.0	Japan	JPN	2 674	1.1
Kuwait	KWT	152	1.6	Jordan	JOR	1 014	8.2
Laos	LAO	867	15.0	Kenya	KEN	2 385	34.6
Lebanon	LBN	1 400	25.2	Kuwait	KWT	465	11.5
Liberia	LBR	1 240	66.9	Laos	LAO	331	10.5
Libya	LBY	100	0.6	Lebanon	LBN	4 552	28.3
Luxembourg	LUX	104	2.4	Lesotho	LSO	7	7.3
Madagascar	MDG	1 157	24.4	Liberia	LBR	122	54.2
Malawi	MWI	200	2.7	Libya	LBY	592	8.5


Table III.A2.1. **Expatriation rates for doctors and nurses, Circa 2000 (Cont.)**

Country of birth	Nurses			Country of birth	Doctors		
		Number of persons working in OECD countries	Expatriation rate			Number of persons working in OECD countries	Expatriation rate
Malaysia	MYS	7 569	19.6	Luxembourg	LUX	549	31.3
Mali	MLI	227	3.7	Madagascar	MDG	889	14.6
Malta	MLT	649	22.0	Malawi	MWI	162	37.9
Mauritania	MRT	96	5.5	Malaysia	MYS	4 679	22.5
Mauritius	MUS	4 502	50.4	Maldives	MDV	6	1.9
Mexico	MEX	12 357	12.2	Mali	MLI	160	13.2
Morocco	MAR	5 730	20.5	Malta	MLT	458	26.8
Mozambique	MOZ	779	16.5	Mauritania	MRT	38	10.8
Myanmar	MMR	418	4.1	Mauritius	MUS	725	35.7
Namibia	NAM	30	0.5	Mexico	MEX	4 234	2.1
Nepal	NPL	205	3.5	Mongolia	MNG	39	0.6
Netherlands	NLD	6 798	3.0	Morocco	MAR	6 221	28.0
New Zealand	NZL	7 564	19.5	Mozambique	MOZ	935	64.5
Nicaragua	NIC	1 155	16.5	Myanmar	MMR	1 725	8.8
Niger	NER	19	0.8	Namibia	NAM	75	11.1
Nigeria	NGA	13 398	9.5	Nepal	NPL	288	5.1
Norway	NOR	1 700	2.5	Netherlands	NLD	2 412	4.5
Oman	OMN	18	0.2	New Zealand	NZL	1 904	17.4
Pakistan	PAK	1 803	3.6	Nicaragua	NIC	722	26.1
Panama	PAN	1 902	29.5	Niger	NER	26	6.5
Papua New Guinea	PNG	455	13.8	Nigeria	NGA	4 611	11.7
Paraguay	PRY	130	1.3	Norway	NOR	712	4.8
Peru	PER	2 807	14.1	Oman	OMN	23	0.6
Philippines	PHL	110 774	46.5	Pakistan	PAK	10 505	8.3
Poland	POL	9 153	4.6	Panama	PAN	1 026	18.8
Portugal	PRT	2 655	5.7	Papua New Guinea	PNG	136	33.1
Romania	ROU	4 440	4.9	Paraguay	PRY	283	4.3
Rwanda	RWA	54	1.5	Peru	PER	2 546	7.9
Saint Kitts and Nevis	KNA	711	76.7	Philippines	PHL	15 859	26.4
Saint Lucia	LCA	369	52.7	Poland	POL	5 821	5.8
Saint Vincent and the Grenadines	VCT	1 228	81.6	Portugal	PRT	792	2.2
Samoa	WSM	566	62.1	Qatar	QAT	45	3.3
Sao Tome and Principe	STP	138	35.0	Romania	ROU	5 182	10.9
Saudi Arabia	SAU	151	0.2	Rwanda	RWA	45	10.1
Senegal	SEN	256	8.9	Saint Kitts and Nevis	KNA	15	22.7
Seychelles	SYC	151	19.2	Saint Lucia	LCA	39	4.9
Sierra Leone	SLE	2 057	56.3	Saint Vincent and the Grenadines	VCT	115	53.2
Singapore	SGP	1 913	9.9	Samoa	WSM	46	27.7
Solomon Islands	SLB	38	10.1	Sao Tome and Principe	STP	71	46.7
Somalia	SOM	250	14.4	Saudi Arabia	SAU	421	1.2
South Africa	ZAF	6 016	3.2	Senegal	SEN	449	43.0
Spain	ESP	3 527	1.1	Seychelles	SYC	36	22.9
Sri Lanka	LKA	2 032	8.1	Sierra Leone	SLE	236	58.4
Sudan	SDN	183	1.0	Singapore	SGP	1 356	19.1
Suriname	SUR	18	2.5	Solomon Islands	SLB	11	16.9
Swaziland	SWZ	37	0.8	Somalia	SOM	155	33.3
Sweden	SWE	3 028	3.2	South Africa	ZAF	7 355	17.4
Switzerland	CHE	1 839	2.3	Spain	ESP	2 687	1.9
Syria	SYR	319	1.0	Sri Lanka	LKA	4 668	30.8
Thailand	THA	3 050	1.7	Sudan	SDN	778	9.3
Timor-Leste	TLS	61	4.0	Suriname	SUR	39	17.0

Table III.A2.1. **Expatriation rates for doctors and nurses, Circa 2000 (Cont.)**

Country of birth	Nurses			Country of birth	Doctors		
		Number of persons working in OECD countries	Expatriation rate			Number of persons working in OECD countries	Expatriation rate
Togo	TGO	78	4.0	Swaziland	SWZ	9	5.0
Tonga	TON	449	58.2	Sweden	SWE	1 532	5.0
Trinidad and Tobago	TTO	9 808	72.9	Switzerland	CHE	1 125	4.2
Tunisia	TUN	410	1.6	Syria	SYR	4 721	16.6
Turkey	TUR	3 565	2.9	Thailand	THA	1 390	5.8
United Arab Emirates	ARE	11	0.1	Timor-Leste	TLS	35	30.7
United Kingdom	GBR	45 638	6.1	Togo	TGO	153	40.5
United Republic of Tanzania	TZA	970	6.8	Tonga	TON	23	39.7
United States	USA	6 022	0.2	Trinidad and Tobago	TTO	1 206	54.6
Uganda	UGA	1 210	7.4	Tunisia	TUN	2 415	15.3
Uruguay	URY	506	14.9	Turkey	TUR	2 311	2.4
Vanuatu	VUT	20	4.5	United Arab Emirates	ARE	44	0.7
Viet Nam	VNM	5 778	11.5	United Kingdom	GBR	17 006	11.3
Yemen	YEM	231	1.7	United Republic of Tanzania	TZA	1 018	55.3
Zambia	ZMB	820	4.6	United States	USA	4 354	0.6
Zimbabwe	ZWE	3 619	27.9	Uganda	UGA	1 084	32.9
				Uruguay	URY	493	3.8
				Vanuatu	VUT	5	20.0
				Venezuela	VEN	1 710	3.4
				Viet Nam	VNM	7 591	15.2
				Yemen	YEM	248	3.5
				Zambia	ZMB	567	31.0
				Zimbabwe	ZWE	828	28.4

Note: Countries for which expatriates are under 10 for nurses (5 for doctors) or resident in the origin country are below 50 for nurses (10 for doctors) are not reported.

StatLink  <http://dx.doi.org/10.1787/022648658554>

ANNEX III.A3

*Migration Policies and Recognition of Foreign
Qualifications for Health Professionals*

		AUSTRALIA	AUSTRIA
Main characteristics of migration policy and specificities for health professionals	Permanent migration programmes relevant for health professionals	<ul style="list-style-type: none"> ● General Skilled Migration Programme (GSM). ● Employer Nomination Scheme (EN). ● Regional Sponsored Migration Scheme (RSM). 	<ul style="list-style-type: none"> ● Permanent residence permit and unrestricted work permit (generally after 5 years of residence and fulfilment of the integration agreement). EU8 nationals after 1 year and third country nationals with a key worker permit after 18 months can get an unlimited residence permit.
	Specific conditions for health professionals (e.g. point system)	Most medical occupations are included in the Skilled Occupation List (needed for GSM), in ENSOL (needed for EN), and in the Migration Occupation List in Demand (15 extra points).	No
	Temporary migration programmes relevant for health professionals #Y: Maximum duration Ⓞ: Renewable LMT: Labour market test	<ul style="list-style-type: none"> ● Temporary business long stay (457) 4YⓄ. ● Temporary medical practitioner (422) 4YⓄ. ● Occupational trainee (medical) (442) 2YⓄ. ● Working holidays 1Y (work period ≤ 6 months). 	<ul style="list-style-type: none"> ● Key workers permits. ● Restricted work permit 1YⓄ LMT. ● Work permit 2YⓄ LMT (52 weeks in employment over the last 14 months). ● Issuance of work permits to EU8 nationals working in the health and caretaking occupations (mainly qualified nurses) has been eased since 2004 (wage ≥ 1 500 € instead of 2 250 €).
	Quota	No	Yes , but no specific quota for health professionals.
	Shortage occupation list, specific mention of health professionals	<ul style="list-style-type: none"> ● Yes, in SOL, ENSOL, MOLD and SSASSL. ● Yes, in most regional occupation in demand lists: New South Wales (except nurses), Western Australia, Australian Capital Territory, Victoria (except medical practitioner), Tasmania. 	Work permits for EU8 nationals working in health and caretaking occupations are exempted from the Federal quota (<i>Bundeshöchstzahl</i>).
	Specific programmes for health professionals in underserved areas or particular regions	District of Workforce Shortage (Federal definition) or Area of need (State definition) enable to recruit under Region or Employer sponsored schemes. Medical practitioners in District of Workforce Shortage, even under conditional registration, are authorized to cash on Medicare (bulk bill).	No , but employment of non-EEA nationals is limited to Area of need of doctors.
	Bilateral agreements relevant for the recruitment of health professionals.	No , except with New-Zealand (Trans-Tasman Mutual Recognition Arrangement).	No , except with the EU.
Recognition of foreign qualifications	Conditions on citizenship	No	No
	Language proficiency test	Yes	Yes (5 years of practice in a German speaking country or a language test).
	Professional examination	It is necessary to pass Australian Medical Council (AMC) or Australian Nursing Council (ANC) exams to be registered, but State and Territory Medical Boards can proceed to conditional registration of doctors without examination.	For EEA and Swiss nationals (and non-EEA in some cases) , qualifications from Switzerland or EEA are recognised in accordance to EU Directive. Doctors: <ul style="list-style-type: none"> ● Special rules apply notably to qualification from former Yugoslavian countries. ● Third countries nationals or qualification need to be assessed. The Medical Doctors' Act mentions additional criteria (except for refugees) including a limitation to practice to 3 years (renewable) and a labor market test. Nurses: conditions are more or less similar than for Doctors. If third country diploma is not conform to EU standards additional board exams and/or practical training are required.
	Probation period Training programmes	Doctors: 1 year supervised training is needed after passing the AMC exam to obtain general registration. Nurses: It may be required to complete a 7 weeks competency based assessment programme when educational requirements for registration are not met.	
International recruitment agencies operating for health professionals are contracted or regulated	Yes , 16 recruitment agencies have been contracted by the Federal government to place foreign trained doctors in medical vacancies (no fee for employers). Some States also have contracted recruitment agencies.	No , but in general private employment agencies need a trade licence issued by the district authorities which are under supervision of the Ministry for Economics and Labour.	
Foreign medical students can change status after the completion of their studies to obtain a work permit	Yes , Skill Independent (880), Australian Sponsored (881) and Designated Area Overseas Student (882). <ul style="list-style-type: none"> ● Overseas students in Australia who have completed a medical degree, can undertake their internship in Australia but places are capped. 	Possible , but no specific programme. No permit is needed for "vocational training".	
Code of conduct for international recruitment of health professionals	No , but supports the principles outlined in the <i>Commonwealth Code of Practice for the International Recruitment of Health Workers</i> .	No	
Competent authorities for registration/certification or other relevant links	www.doctorconnect.gov.au www.amc.org.au www.anmc.org.au	www.aerztekammer.at	

BELGIUM	CANADA	CZECH REPUBLIC
<ul style="list-style-type: none"> ● A Permit (generally after 4 years of continuous residence with a B permit over the last 10 years). 	<ul style="list-style-type: none"> ● Skilled Worker Class (R 75). ● Provincial Nominee Class (R 87). 	<ul style="list-style-type: none"> ● Permanent residence (after 5 years of continuous residence with a Long-term Residence Permit).
No	No	No
<ul style="list-style-type: none"> ● B Permit 1Y@LMT and limited to bilateral agreements (wage ≥ €33k no labour market test and no condition on nationality). ● "Professional Card" for Independent practice delivered by <i>SPF Economie</i>, 5 Y@. 	<ul style="list-style-type: none"> ● Temporary Foreign Worker (R200) limited to the duration of employment, LMT except if included in Regional Lists of Occupations under Pressure (Alberta, Ontario, BC: Most health prof. included). ● Medical students visa (R186(p)) may work up to 4 months as a trainee (interns need a work permit). ● TN visa 1Y@ (NAFTA). 	<ul style="list-style-type: none"> ● Long-term residence permit for the purpose of employment >1Y@ LMT. ● Work Permit 1Y@ LMT. ● Project of Active Selection of Qualified Foreign Labour: For young qualified foreigners (from selected nationalities) already legally resident in the Czech Rep. (it gives a quicker access to a permanent resident status).
No	No	No
Yes, since June 2006 nurses are included in regional shortage occupation lists (as well as pharmacist in some regions). UE8 nationals with a job offer can get a Permit B without a labour market test.	Lists of occupations under pressure.	No
No, but shortage occupation lists are defined at the regional level.	Provinces and territories have the jurisdictional responsibility for Health Human Resource planning within their respective regions, recruiting domestically as well as supporting the integration of internationally educated health care providers into the Canadian health care system. This recruitment can be unique to the provincial or territorial jurisdiction of origin.	No
No, except within the EU.	<ul style="list-style-type: none"> ● North American Free Trade Agreement (NAFTA). 	No, except with the EU.
No	No	No
No, systematic exam.	Yes	Yes
<p>The following are for all health professionals.</p> <p>For EEA and Swiss nationals (and non-EEA in some cases), qualifications from Switzerland or EEA are recognised in accordance to EU Directive.</p> <p>EEA nationals/non-EEA qualification.</p> <p>Need to have their qualification recognized by SPF Santé.</p> <p>Non-EEA nationals/non-Belgium qualification.</p> <p>Need to have: their qualification recognized, a work permit or a professional card but also an authorization to practice. In practice the latter is almost never delivered to doctors, dentists or pharmacists but may be to nurses (because of shortages).</p>	<p>Foreign-trained doctors must pass the Medical Council of Canada Evaluating Exam and after completing supervised clinical training they need to pass the Certification Exam of the relevant college. In addition, for independent license to practice (LMCC) doctors need to pass the <i>MCC Qualifying Examination I&II</i>.</p> <p>Foreign trained nurses who lack a component of the education, (<i>e.g.</i> some internationally educated nurses do not study psychiatric nursing), may be asked to study or do clinical practice under supervision.</p> <p>Each province/territory is responsible for the regulation of the practice of medicine in their respective jurisdiction.</p>	<p>For EEA and Swiss nationals (and non-EEA in some cases), qualifications from Switzerland or EEA are recognised in accordance to EU Directive.</p> <p>Non-EEE nationals need to pass a professional accreditation exam (IPVZ) and a language test.</p>
No	No	No, but private recruitment agency need to have a licence.
Possible, but no specific programme.	Possible, but no specific programme except within Provincial Nominee Class.	<p>Possible, but no specific programme.</p> <ul style="list-style-type: none"> ● Foreign students may be allowed to work in health services only under the supervision of a professional for specific period of time (legally specified by occupation).
No	No, but supports the principles outlined in the <i>Commonwealth Code of Practice for the International Recruitment of Health Workers</i> .	No
www.ordomedic.be	www.cic.gc.ca www.img-canada.ca	www.lkcr.cz

			DENMARK	FINLAND
Main characteristics of migration policy and specificities for health professionals	Permanent migration	Permanent migration programmes relevant for health professionals	<ul style="list-style-type: none"> • Permanent Residence permit (after 7 years). 	<ul style="list-style-type: none"> • Permanent permit P (after 4 years with an A-permit).
		Specific conditions for health professionals (e.g. point system)	No	No
	Temporary migration	Temporary migration programmes relevant for health professionals #Y: Maximum duration Ⓞ: Renewable LMT: Labour market test	<ul style="list-style-type: none"> • Work Permit 1YⓄ Danish Immigration Service requests a statement from a relevant branch organisation about the need for labour. • Job Card Scheme 3YⓄ for occupations in the “positive list” and a job offer ≥ DKK 450k. 	<ul style="list-style-type: none"> • A-Permit 3YⓄ LMT. • B-Permit 1YⓄ LMT. Local labour market authorities also check the skill level and that the job offer satisfies collective agreements.
		Quota	No	No
	Shortage occupation list, specific mention of health professionals	Doctors and nurses are included in the “positive list”.	No	
	Specific programmes for health professionals in underserved areas or particular regions	No	No	
	Bilateral agreements relevant for the recruitment of health professionals.	No, except with the EU and the Agreement on a Common Nordic Labour Market.	No, except with the EU and the Agreement on a Common Nordic Labour Market.	
Recognition of foreign qualifications	Conditions on citizenship		No	Yes, in general but exemptions can be granted on an individual basis by the NAMA.
	Language proficiency test		Yes, for people trained outside EU/Nordic countries.	Yes
	Professional examination		For EEA and Swiss nationals (and non-EEA in some cases) , qualifications from Switzerland or EEA are recognised in accordance to EU Directive. Doctors and nurses must possess an authorisation from the National Board of Health.	For EEA and Swiss nationals (and non-EEA in some cases) , qualifications from Switzerland or EEA are recognised in accordance to EU Directive. To register, a doctor trained outside EEA has to receive practical training (6 months), pass a 3 part examination and a language test. Licenses are granted stage wise. The initial license is valid only for hospital work. It can be extended to cover health-centre work, then work in other institutions and finally private practice. If a holder of an extended license is granted Finnish citizenship, the National Authority for Medicolegal Affairs (NAMA) can authorize to practice medicine independently.
	Probation period Training programmes		People trained outside EU/Nordic countries must have their qualification assessed (including language proficiency). If the training is not fully equivalent to the Danish training, the doctor/midwife/nurse must complete probationary appointments and- for doctors/midwives – professional tests.	Other non EEA health professionals trained outside the EEA must have their qualification recognized and get a special authorization from NAMA.
International recruitment agencies operating for health professionals are contracted or regulated		No, but some regions (“amter”) have an agreement with private recruitment agencies to recruit health professionals mainly from eastern European countries.		
Foreign medical students can change status after the completion of their studies to obtain a work permit		Graduate Doctors, Doctor of Pharmacy, Midwife and nurses with a Bachelor Degree, Dental hygienist and clinical dental technician can extend for 3 months their residence permits after completion of their study to search work in Denmark.	Foreign students who earn a degree in Finland can apply for a work permit for a maximum of six months.	
Code of conduct for international recruitment of health professionals		No	No	
Competent authorities for registration/certification or other relevant links		www.nyidanmark.dk www.sst.dk	www.laakariliitto.fi/e/ www.teo.fi www.mol.fi/finnwork www.uvi.fi	

FRANCE	GERMANY	GREECE
<ul style="list-style-type: none"> ● Residence permit (after 3 years for people with a permanent worker permit). 	<ul style="list-style-type: none"> ● Settlement permit (generally after 5 years of residence or immediately for highly qualified – for instance with a job offer over 7 000 €). 	<ul style="list-style-type: none"> ● Residence permit-employment (1Y[®] but may be indefinite after 10 years).
No	No	No
<ul style="list-style-type: none"> ● Permanent worker permit 1Y[®] LMT: A job contract for unlimited duration is needed (Carte de Séjour Temporaire salarié). ● Temporary work permit <1Y[®] LMT (<i>Autorisation Provisoire de Travail</i>). ● Card "<i>Compétences et Talents</i>" 3Y[®]. 	<ul style="list-style-type: none"> ● Temporarily restricted residence permit for the purpose of employment (1Y[®] LMT) for people with a post-secondary qualifying education (incl. medical doctors and medical personnel with at least 3 years of vocational training). It is subject to a local labour market test and to Federal Employment Agency agreement. 	<ul style="list-style-type: none"> ● A-permit 1Y[®] LMT.
No	No	No
Since 2006, there is a shortage occupation list for nationals of new EU member states (No labour market test to obtain a work permit). No Health occupation are included.	No	The Law 2910/01 introduced the possibility to respond to local needs in labour force by specialty but in practice this has not been implemented.
No, but labour market tests are implemented at the local level.	No, but labour market tests are implemented at the local level.	No
Bilateral agreement to recruit Spanish nurses started in 2002 was ended in December 2004 (1 364 have been recruited in this framework).	Recruitment of foreign nursing aids is organised within bilateral agreements (no labour market test). In 2005, such agreement were signed with Croatia, Ukraine as well as Poland, Slovenia, the Czech and the Slovak Rep., Bulgaria and Romania.	No, specific bilateral agreement for health professionals, except with the EU.
Yes in general, but exemptions can be granted on an individual basis by the Health Minister.	No	No
Yes	Yes	No, but should produce a certificate of attendance in School of Foreign Language; Interview is in Greek.
<p>For EEA and Swiss nationals (and non-EEA in some cases), qualifications from Switzerland or EEA are recognised in accordance to EU Directive.</p> <p>Doctors: In theory one needs to be French, trained in France, registered and to hold a work permit. In practice, despite the recent efforts to regularise the situation (about 9 500 since 1999), many foreigner or foreign trained doctors work in public hospitals positions (about 6 700) with a student status (AFS or AFSA) or in precarious positions (DIS as associate).</p> <p>Nurses: Non-EU or Swiss trained nurses need to pass the selection exam in nursing schools and to do the training in France (on an individual basis they may avoid the 1st or 2nd years). People trained as doctors may be allowed to work as nurses for maximum 3 years on a case by case basis.</p>	<p>For EEA and Swiss nationals (and non-EEA in some cases), qualifications from Switzerland or EEA are recognised in accordance to EU Directive.</p> <p>Foreign-trained health professionals need to have their qualification recognised as fully equivalent to a German degree. If this is not the case they need to pass an exam. Licence to practice should also be delivered by responsible local authorities according to "public interest". Doctors who fail to obtain this licence can apply for the permission to practice at the local health authorities. The permit is then issued for the purpose of "vocational training and further education" for a maximum of 4 years.</p>	<p>For EEA and Swiss nationals (and non-EEA in some cases), qualifications from Switzerland or EEA are recognised in accordance to EU Directive.</p> <p>Non EEA nationals/people trained outside EEA</p> <ol style="list-style-type: none"> 1- <i>Academic recognition</i> by the Inter-scientific Organisation for Academic Titles Recognition and Information (DOATAP). 2- Submit to DOATAP a <i>residence and work permit</i>. 3- <i>Professional experience recognition</i> by the Council of Recognition of Professional Equivalence of Higher Education Diplomas (SAEI). Third country nationals with EU qualification must have 3 years of professional experience in the EU. 4- <i>License to practice</i> by the Health Directorate of the relevant Prefecture. 5- <i>Registration</i> by the professional association.
No	No	No
Student with a French master degree, with the perspective to return in their origin country, can ask for 6 months permit to seek work in France. Other foreign students can change status under general rules.	Students are entitled to remain in Germany for up to one year after successfully completing their studies for the purpose of seeking employment.	Possible , but no specific programme.
No	No	No
www.ordmed.org	www.baek.de	www.pis.gr

			IRELAND	ITALY
Main characteristics of migration policy and specificities for health professionals	Permanent migration	Permanent migration programmes relevant for health professionals	<ul style="list-style-type: none"> • Long-term residency permit (validity 5 years after 5 years of residence and unlimited duration after 10 years). 	<ul style="list-style-type: none"> • Residence permit (generally after 5 years of legal stay).
		Specific conditions for health professionals (e.g. point system)	No	No
	Temporary migration	Temporary migration programmes relevant for health professionals #Y: Maximum duration Ⓢ: Renewable LMT: Labour market test	<ul style="list-style-type: none"> • Green card permit 2YⓈ (€30k < salary < €60k and shortage occupation list or all occupations with salary > €60k). • Work permit 1YⓈ LMT (salary < €30k, occupation should not be included in the ineligible occupation list). 	<ul style="list-style-type: none"> • Work permit 1YⓈ LMT (fix-term contract). • Work permit 2YⓈ LMT (open-end contract).
		Quota	No	Yes, but except for nurses since 2002.
	Shortage occupation list, specific mention of health professionals		Shortage occupation list includes most health occupations (since 2000 for nurses, and 2003 for others). Ineligible occupation list does not include health occupations. Furthermore, no labour market test is needed for work permit applications in respect of nurses or doctors.	No
	Specific programmes for health professionals in underserved areas or particular regions		No	No, but work permit quotas are defined by sector and region.
	Bilateral agreements relevant for the recruitment of health professionals.		No, formal agreement but close links have been established with the Philippines for nurses.	Yes, some Italian regions have signed bilateral agreements notably with Romanian provinces (e.g. Parma with that of Cluj-Napoca or Veneto with Timis County). There are also semi-formal links with Spain to recruit Spanish nurses.
Recognition of foreign qualifications	Conditions on citizenship		No	Yes, for specialists and there are legal restrictions for non-EU nurses in the public sector.
	Language proficiency test		Yes	Yes
	Professional examination		<p>For EEA and Swiss nationals (and non-EEA in some cases), qualifications from Switzerland or EEA are recognised in accordance to EU Directive.</p> <p>Doctors Most people trained in old Commonwealth States or South Africa can be granted full registration. Other people can apply for a temporary registration (up to 7 years) which implies to pass the Temporary Registration Assessment Scheme (TRAS).</p> <p>Nurses An Bord Altranais determines the adequacy of the education and training. It has introduced a competency based assessment which includes an adaptation period under supervision (at least 6 weeks 12 on average) if necessary.</p>	<p>For EEA and Swiss nationals (and non-EEA in some cases), qualifications from Switzerland or EEA are recognised in accordance to EU Directive.</p> <p>Foreign-trained doctors need to have their qualification recognized by the Health Ministry (before 2002 a presidential Decree in the Official Gazette of the Italia Rep. was needed). The process takes about 5 years. Alternatively they can enrol in the 6th year of medicine to pass an Italian degree.</p> <p>Foreign-trained nurses are required to pass both language and nursing qualification exam organised by IPASVI (in 2004-06 about 60 evaluation commissions were organised in the main origin countries). Limited deficiencies can be compensated with work experience abroad or further formation in Italy.</p>
	Probation period Training programmes			
International recruitment agencies operating for health professionals are contracted or regulated		No	Some temporary work agencies have been licensed to organise abroad evaluation commissions. Both private and public institutions used recruitment agencies to recruit foreign nurses.	
Foreign medical students can change status after the completion of their studies to obtain a work permit		Students who completed a primary, master or doctorate degree may be permitted to remain in Ireland for 6 months to seek employment.	Yes, annual quota sets a maximum number of conversion of study permit to work permits.	
Code of conduct for international recruitment of health professionals		No	No	
Competent authorities for registration/certification or other relevant links		www.entemp.ie/labour/workpermits/index.htm www.medicalcouncil.ie www.nursingboard.ie	www.ministerosalute.it/professionisanitarie/paginaInterna.jsp?id=92&menu=strumentieservizi www.fnomceo.it	

JAPAN	LUXEMBOURG	NETHERLANDS
No	<ul style="list-style-type: none"> Permit type C (after 5 years of residence). 	<ul style="list-style-type: none"> Permanent residence permit (after 5 years of residence).
No	No	No
<ul style="list-style-type: none"> “Medical Services” residence permit 1-3Y[©] (maximum 4 years for midwives and 7 years for registered nurses). 	<ul style="list-style-type: none"> Permit type A 1Y[©] LMT (can not change employer or occupation). Permit type B 4Y[©] LMT (can not change occupation). 	<ul style="list-style-type: none"> Labour migrant work permit 3Y LMT non renewable. In general people are required to take a civil immigration test in their home country (Applicants must be between the ages of 18-45). Highly skilled migrant 5Y (wage \geq €33.3k for people under 30 or wage \geq €45.5k. No labour market test and spouse can work).
No, except within the Japan-Philippines Economic Partnership Agreement. A quota will be 400 nurses for the first 2 years (starting in 2008).	No	No, except for nationals from Bulgaria and Romania.
No	No	No, but in some cases the labour market test can be lifted for specific occupations or sectors. This was the case for instance for several occupations in the health sector for nationals of new EU countries between January and May 2004.
For doctors previous limitation on workplace to remote areas, where Japanese doctors cannot be recruited, have been lifted (they still apply to dentists for instance).	No	No
Japan-Philippines Economic Partnership Agreement (JPEPA): nurses with 3 years exp. and a contract with a hospital can stay for 3 years to obtain a Japanese qualification, including to pursue a language course and follow a supervised training.	No, except with the EU.	No, except with the EU. In 2003-05, “Pilot project for polish nurses in the Netherlands; development of competencies”.
No	Yes, in general but derogations can be given by the Minister on exceptional cases.	No
Yes	Yes	Yes
Need to obtain Japanese legal qualification.	For EEA and Swiss nationals (and non-EEA in some cases), qualifications from Switzerland or EEA are recognised in accordance to EU Directive.	For EEA and Swiss nationals (and non-EEA in some cases), qualifications from Switzerland or EEA are recognised in accordance to EU Directive. Foreign-trained doctors have to pass a knowledge and skills test (including in Dutch). If the skills are almost equivalent, registration is made with special stipulations which should be addressed within 2 years (full equivalence with no Dutch experience = 6 months supervision). If the skills are not equivalent (but not too low) and the applicant has professional experience he may be allowed in a Dutch training institute. This procedure started in December 2005 for doctors. It should be progressively applied to other health professionals (as of now they do not always have to take an exam but may be interviewed).
No	EU and Swiss nationals non EU trained need to have their qualification recognized. In some cases complementary courses or training may be required (maximum 1 year for doctors). Foreign doctors need to be proficient in 2 (out of 3) official languages.	
No	No	Recruitment agencies play an important role in both public and private sectors.
Yes, but overseas students have to obtain a “Medical Services” residence permit under general regulation.	Luxembourg does not have its own medical school.	Yes, international students after graduating can stay for up to 3 months to seek a job.
No	No	No
	www.etat.lu/MS/	www.bigregister.nl www.minvws.nl (Working in the Dutch health sector with a foreign certificate)

			NEW ZEALAND	NORWAY
Main characteristics of migration policy and specificities for health professionals	Permanent migration	Permanent migration programmes relevant for health professionals	<ul style="list-style-type: none"> ● Skilled Migrant Category (SMC). 	<ul style="list-style-type: none"> ● Permanent residence permit (after 3 years with temporary permit).
		Specific conditions for health professionals (e.g. point system)	Yes , most health occupations are listed in the Long-Term Skill Shortage List and get 10 extra points.	No
	Temporary migration	Temporary migration programmes relevant for health professionals #Y: Maximum duration Ⓢ: Renewable LMT: Labour market test	Work to Residence policy: <ul style="list-style-type: none"> ● Accredited employer (talent programme). ● Long-term Skill Shortage List. Work permits: Fast track if occupation in ISSL. Working holidays 1Y (work period ≤ 6 months).	<ul style="list-style-type: none"> ● Skilled worker/specialist (SWS) 1Y[Ⓢ]. ● Job seeker visa (generally 3 months).
		Quota	No	Yes , for skilled worker specialists, but if the quota is full, it is still possible to grant a permit but under stricter conditions (labour market test).
	Shortage occupation list, specific mention of health professionals		Yes , for medical doctors, dentists and other health occupation (except nursing), in the 6 regional Immediate Skill Shortage Lists (ISSL). Yes , for most health occupations, in Long-Term Skill Shortage List.	No
	Specific programmes for health professionals in underserved areas or particular regions		No , but people with a job offer outside Auckland get extra points.	No
	Bilateral agreements relevant for the recruitment of health professionals.		No , except with Australia (Trans-Tasman Mutual Recognition Arrangement).	No , except with the EU and the Agreement on a Common Nordic Labour Market.
Recognition of foreign qualifications	Conditions on citizenship		No	No
	Language proficiency test		Yes	Yes , course and examination for doctors with a first language other than Norwegian, Swedish or Danish.
	Professional examination		Doctors: IMG generally need to pass the New Zealand Registration Exam (NZREX) and to do 2 years of post graduate training (1 year for UK and Irish graduates) but people who worked in so called “comparable health system” (18 countries are recorded) for at least 3 years can practice with a 2 years supervision period.	For EEA and Swiss nationals (and non-EEA in some cases) , qualifications from Switzerland or EEA are recognised in accordance to EU Directive. The Norwegian Registration Authority for Health Personnel gives the authorisations and licenses. Authorisation is granted to applicants who have successfully completed “turnus” (residency). Licence is a permission to practise as medical practitioner, but on certain conditions (may be restricted in terms of time, locality, etc., and may only be granted following an assessment). If qualification is not fully equivalent it is possible to take bridging courses. When the foreign qualification has been approved the applicant start “turnus”. Prior work experience cannot be subtracted from the length of the turnus period.
	Probation period Training programmes		Nurses: Need to go through a competence assessment programme when educational requirements for registration are not met.	
International recruitment agencies operating for health professionals are contracted or regulated		No , but the Department of Labour’s Immigration New Zealand has a Relationship Management Team aiming at organising expos and recruitment campaigns abroad.	No	
Foreign medical students can change status after the completion of their studies to obtain a work permit		Yes , people who have completed in New Zealand a 3 year course or a qualification that would qualify under Skill Migration Category, may be granted a work permit for a maximum of 6 months to enable them to look for work.	Possible , foreign students <i>with a job offer</i> as health professional after completion of their education, may be granted a work permit for up to 1 year. Norway offers scholarship grants (1 100) to students from developing countries = return or repay.	
Code of conduct for international recruitment of health professionals		Yes , signatory of the <i>Commonwealth Code of Practice for the International Recruitment of Health Workers</i> .	No	
Competent authorities for registration/certification or other relevant links		www.immigration.govt.nz www.mcnz.org.nz/ www.nursingcouncil.org.nz/	www.safh.no www.udi.no	

POLAND	PORTUGAL	SLOVAK REPUBLIC
<ul style="list-style-type: none"> ● Settlement permit (after 5 years of residence). 	<ul style="list-style-type: none"> ● Permanent residence permit (after 5 or 8 years of residence depending whether the person is from PALOPS country – country with Portuguese as official language – or not). 	<ul style="list-style-type: none"> ● Permanent residence permit (after 3 years of residence).
No	No	No
<ul style="list-style-type: none"> ● Work Permit 1Y[®] LMT 	<ul style="list-style-type: none"> ● Work permit type II 1Y[®] (to carry out a scientific research activity or an activity that requires highly qualified technical skills – including doctors and nurses). ● Work permit type IV 1Y[®] LMT (IEFP list). 	<ul style="list-style-type: none"> ● Work Permit 1Y[®] LMT.
No	Yes , but in practice health occupations are not covered by the quota system.	No
Health professionals (doctors and dentists) who are trained according to the Polish law can obtain work permit without taking in consideration the local labour market situation.	No	No
No , but labour market test is organised at the regional level.	No	No
No , except with the EU	No , except with the EU.	No , except with the EU.
No	No	No
Yes for third country nationals (declaration of Polish language proficiency for EU/Swiss nationals).	Yes (All doctors, including Portuguese nationals, are required to take a medical communication test).	Yes
For EEA and Swiss nationals (and non-EEA in some cases) , qualifications from Switzerland or EEA are recognised in accordance to EU Directive. Third countries nationals must have their qualification recognised and pass a test in Polish language.	For EEA and Swiss nationals (and non-EEA in some cases) , qualifications from Switzerland or EEA are recognised in accordance to EU Directive. Foreign trained health professionals must have their qualifications recognized and be registered in their professional associations (“Ordens”). Qualifications are certified by the Education Ministry and the Health Ministry. Doctors, need at least 2 years of professional experience within the last 5 years to be allowed to autonomous practice. A Project developed by Calouste Gulbenkian Foundation with other partners is directed at immigrant nurses legally working in undifferentiated occupations. It helps them to obtain the equivalence of their educational and professional diplomas so that they can work as nurses.	For EEA and Swiss nationals (and non-EEA in some cases) , qualifications from Switzerland or EEA are recognised in accordance to EU Directive.
Recruitment agencies should possess special certificate issued by regional self-government authorities attesting their entry in the employment agency register.	No	No
Yes , no labour market test for medical students with a polish diploma. Doctors and nurses graduated in Poland do not need a work permit for post graduate training.	Possible , but no specific programme.	Possible , but no specific programme.
No	No	No
www.nil.org.pl	www.ordemosmedicos.pt www.ordemenfermeiros.pt	http://www.lekom.sk/

			SPAIN	SWEDEN
Main characteristics of migration policy and specificities for health professionals	Permanent migration	Permanent migration programmes relevant for health professionals	<ul style="list-style-type: none"> • Permanent residence permit (after 5 years of legal residence). 	<ul style="list-style-type: none"> • Permanent Residence Permit (PUT).
		Specific conditions for health professionals (e.g. point system)	No	No
	Temporary migration	Temporary migration programmes relevant for health professionals #Y: Maximum duration Ⓢ: Renewable LMT: Labour market test	<ul style="list-style-type: none"> • Work permit B type 1YⓈ LMT (limited to specific activities and area; can be renewed for 2 years). • Work permit C type 3Y LMT (after B type permits; no restriction). • Permits D and E for self employed. 	<ul style="list-style-type: none"> • Work Permit 5Y LMT7.
		Quota	Yes	No
	Shortage occupation list, specific mention of health professionals	Yes , when occupations are included in the shortage list (<i>Catalogo de ocupaciones de difícil cobertura</i>) no labour market test is needed but the number of permits is capped.	No	
	Specific programmes for health professionals in underserved areas or particular regions	No , but shortage occupation list are defined at the regional level. Health occupation are included in a limited number of areas (mainly nursing aids and General Practitioners in Barcelona, Girona, Lleida, Tarragona Zamora, Ourense, Las Palmas and Tenerife).	No , but labour market test is organised by County Labour Board and some County Councils or Regions have been active in recruiting abroad (mainly within EU – Germany, Poland and Spain).	
	Bilateral agreements relevant for the recruitment of health professionals.	Spain and the Philippines have agreed to develop a pilot project to recruit personnel for nursing homes (no nurses or doctors). Spain has also signed agreements with other EU countries (UK, FRA...) to send Spanish nurses abroad.	No , except with the EU and the Agreement on a Common Nordic Labour Market.	
Recognition of foreign qualifications	Conditions on citizenship	No	No	
	Language proficiency test	No , but exams and interviews are in Spanish.	Yes	
	Professional examination	For EEA and Swiss nationals (and non-EEA in some cases) , qualifications from Switzerland or EEA are recognised in accordance to EU Directive.	For EEA and Swiss nationals (and non-EEA in some cases) , qualifications from Switzerland or EEA are recognised in accordance to EU Directive. People must present evidence of sufficient knowledge of the Swedish language.	
	Probation period Training programmes	Foreign medical graduates qualified outside the EU/EEA/Switzerland need to have their qualification recognised as fully equivalent to the Spanish one or need to take a two stages exam (multi choice exam and oral exam on clinical cases). This exam can not be taken more than twice.	Foreign medical graduates qualified outside the EU/EEA/Switzerland are unable to work – temporarily or permanently – in the medical profession without passing a complementary training programme in Sweden. This programme involves courses and tests in the Swedish language, a medical exam as well as supervised practice and introductory courses in the medical legislation of this country.	
International recruitment agencies operating for health professionals are contracted or regulated	No	No , but some private agencies play an active role in recruiting internationally health professionals, including for the public sector.		
Foreign medical students can change status after the completion of their studies to obtain a work permit	Yes , foreign students can have a residence and a work permit after graduation if they have been in Spain for at least 3 years and did not benefit from a grant from their origin country or a co-operation programme.	No , as a general rule, a foreign student from outside the EU/EEA/Switzerland must leave after completing his/her studies.		
Code of conduct for international recruitment of health professionals	No	No		
Competent authorities for registration/certification or other relevant links	http://extranjeros.mtas.es/ www.msc.es/profesionales/formacion/home.htm www.mec.es/mecd/titulos/convalidacion.html	www.migrationsverket.se www.socialstyrelsen.se		

SWITZERLAND	TURKEY	UNITED KINGDOM
<ul style="list-style-type: none"> ● Settlement permit can be delivered after 5 years of residence for EFTA, USA and Canadian nationals or 10 years for other countries. 	<ul style="list-style-type: none"> ● Indefinite work and residence permit (after 8 years of legal residence and 6 years of legal employment). 	<ul style="list-style-type: none"> ● Permanent residence – indefinite leave to remain (after 5 years of legal residence with a work permit or a HSM permit).
No	No	No
<ul style="list-style-type: none"> ● Residence permit 1Y® (5Y® for EEA nationals). ● Short-term permit 1Y ® once. ● Trainee exchange schemes with about 30 countries 18 months maximum (may include a non negligible number of health professionals, notably nurses). 	<ul style="list-style-type: none"> ● Work permit 1Y® LMT (can be renewed for up to 3 years after one year and for up to six years the following times). 	<ul style="list-style-type: none"> ● Work permit 5Y LMT (no labour market test if occupation in included the skill shortage list). ● Highly Skilled Migrant Programme 5Y (no job offer needed, points test and language requirement). ● Training and work experience 3Y non renewable no leave to remain (incl. Medical Training Initiative). ● Student internship work permit 3 months.
No	No	No
No	No	Skill shortage occupation list includes almost all health occupation except general nurses since July 2006.
No	No	Fresh Talent: Working in Scotland scheme: Allow graduates from Scottish universities (Master or PhD) to stay in Scotland for up to 2 years without a job offer or any professional experience.
<ul style="list-style-type: none"> ● Bilateral agreement with the EU ● Agreement Protocol with Canada to facilitate migration notably of Canadians in the health sector. 	No, however, within the context of EU Accession (free movement of workers, recognition of qualifications and diplomas) preparatory work has been started.	Recruitment agreements with China, Spain and India. Memorandum of understanding with the Philippines. Agreement with South Africa for reciprocal education exchange of health workers.
No	Yes	No
Yes (reintroduced for EEA nurses in 2006).	Yes	Yes
<p>For EEA and Swiss nationals (and non-EEA in some cases), qualifications from Switzerland or EEA are recognised in accordance to EU Directive.</p> <p>Doctors: <i>Recognition of diploma</i> is a Federal responsibility. <i>Authorisation to practice</i> is a cantonal responsibility.</p> <p>Nurses: Diplomas are recognised by the Swiss Red Cross. If educational requirements are not met people will have to do an adaptation period for at least 6 months which could include a training component or an assessment test. Cantonal responsibilities are very limited.</p>	Only Turkish citizens are allowed to work in health occupations.	<p>For EEA and Swiss nationals (and non-EEA in some cases), qualifications from Switzerland or EEA are recognised in accordance to EU Directive.</p> <p>Foreign graduates qualified outside the EU/EEA/Switzerland. A language test is requested.</p> <p><i>Doctors</i> with acceptable primary medical education and who pass the Professional and Linguistic Assessment Board (PLAB) test get limited registration (1 year supervision). Special regulations may apply for Australia, New Zealand, Hong Kong (China), Singapore, South Africa, West Indies.</p> <p><i>Nurses</i> (people trained as a doctor are not eligible) need equivalent training, 12 months of practice after qualifying (or 450h in the last 3 years) and to go through Overseas Nurses programme. ONP includes a compulsory 20-day period of protected learning and when appropriate a period of supervised practice.</p>
No	No such agencies.	Yes, Employment agencies must comply with the Employment Agencies Act 1973. Private Recruitment Agencies wishing to supply to the NHS should comply with the Code of Practice for the international recruitment of healthcare professionals.
Possible, but no specific programme.	Possible, but there is no specific programme.	Non-EEA student who has obtained a degree level qualification may apply to switch into work permit employment without leaving the UK. Since April 2006, doctors and dentists in post-graduate training are considered in employment.
No	No	Yes, recruitment for the NHS is subject to Code of Practice for the international recruitment of healthcare professionals.
<p>www.bfm.admin.ch</p> <p>www.bag.admin.ch</p> <p>www.srk.ch</p> <p>www.fmh.ch</p>		<p>www.gmc-uk.org/</p> <p>www.nmc-uk.org</p> <p>www.workingintheuk.gov.uk/</p>

			UNITED STATES
Main characteristics of migration policy and specificities for health professionals	Permanent migration	Permanent migration programmes relevant for health professionals	<ul style="list-style-type: none"> ● Employment based immigrant visa EB2 or EB3 – Green card (H1B visa holders can ask for a green card after 6 years).
		Specific conditions for health professionals (e.g. point system)	No
	Temporary migration	Temporary migration programmes relevant for health professionals #Y: Maximum duration @: Renewable LMT: Labour market test	<ul style="list-style-type: none"> ● H1B visa 2Y@ maximum 6Y (specialty professional workers – bachelor degree or more: Includes doctors and registered nurses). H-1B1 for nationals of Chile and Singapore (special quota). ● TN visa 1Y@ (NAFTA), NAFTA occupation list includes most health professionals but physicians only for research and teaching activities. ● J1 visa 3Y@ maximum 6Y (exchange visitor skill) generally must return for 2 years to its former country of permanent residence (except if eligible to J1 waiver programme see below). ** H1A Registered nurses (ended in 1995).
		Quota	Yes for H1B but not by occupation, not for TN or J1 visa.
	Shortage occupation list, specific mention of health professionals		No
	Specific programmes for health professionals in underserved areas or particular regions		<p>J1 waiver programme allow someone who has been in the US for 2 years under a J1 visa and are medical graduate who has an offer of full-time employment at a health care facility in a designated health care professional shortage area or at a health care facility which serves patients from such a designated area, can remain in the US (each state is allowed to recommend 30 waivers per year to the US department of State and Bureau of Citizenship and Immigration services).</p> <p>** H1C Nurses in shortage areas (ended in 2004).</p>
	Bilateral agreements relevant for the recruitment of health professionals.		No , except with Canada and Mexico with the North American Free Trade Agreement (NAFTA).
Recognition of foreign qualifications	Conditions on citizenship		No
	Language proficiency test		Yes
	Professional examination		<p>Doctors: It is almost always required that physicians complete residency in the United-States. All International Medical Graduates (IMG) must hold a certificate from the Educational Commission for Foreign Medical Graduates (ECFMG). To obtain this certification they have to pass an exam which covers USMLE Step 1 and Step 2 (i.e. Medical Science Examination and Clinical Skills Requirement) and a language test. They must also prove that they have attended at least 4 years and graduated from a medical school in IMED. IMGs can then take the USMLE Step 3 but States may impose additional requirements (16 state boards allow IMGs to take USMLE Step 3 before they have had GME in a US or Canadian hospital). All states, however, require at least 1 year of GME for licensure, and 29 states require 3 years (39 states endorse for licensure the Licentiate of the Medical Council of Canada). Special conditions apply in some cases for Americans wishing to return to the US after attending a foreign medical school (Fifth Pathway Programme). ECFMG is authorized by the US Department of State to sponsor foreign national physicians as Exchange Visitors in accredited programmes of graduate medical education.</p> <p>Nurses: In order to be licensed for nursing in the US, one must usually pass the CGFNS Qualifying Exam (including a language test) in order to be able to take the NCLEX-RN or NCLEX-PN (National Council Licensure Examination) which is required in order to be able to practice as a nurse in the US.</p>
	Probation period Training programmes		
International recruitment agencies operating for health professionals are contracted or regulated		No	
Foreign medical students can change status after the completion of their studies to obtain a work permit		<p>Yes, F1 visas allow graduates to stay for up to 12 months to pursue professional training (6 months for M1 visa holders).</p> <p>Within the H1B programme there is special quota (20 000) reserved for foreign students with a Master or PhD from US academic institutions.</p>	
Code of conduct for international recruitment of health professionals		No	
Competent authorities for registration/certification or other relevant links		<p>www.ecfm.org</p> <p>www.ncsbn.org</p> <p>http://travel.state.gov/visa</p>	