This publication is a shortened version of the summary report “Mobility of Health Professionals: Health systems, work conditions, patterns of health workers’ mobility and implication for policy makers”, which was published in March 2012, in Bonn, Germany, by a consortium led by Dr. Caren Weilandt at the Wissenschaftliches Institut der Ärzte Deutschlands (WIAD, Scientific Institute of the Medical Association of German Doctors). The summary report was written by Frits Tjadens from Health and Social Care Associates, Caren Weilandt and Josef Eckert from WIAD, and the following organizations from the Mobility of Health Professionals (MoHProf) consortium:

• Centre of Migration Research of the University of Warsaw, Poland
• Institute of Health Policy and Development Studies of the University of the Philippines
• International Organization for Migration (IOM), Migration Health Division, Regional Office, Brussels
• International Hospital Federation, Geneva, Switzerland
• Medical University of Varna, Bulgaria
• Public Health Institute, California, United States of America

The publication provides an overview of the outcomes of the MoHProf project that aimed to gather more insights into the processes and effects of mobility of health professionals to, from and within the European Union (EU) and which was carried out under the 7th Framework Programme for Research and Development of the EU.

According to the World Health Organization (WHO), the world was lacking at least 4.2 million health workers in 2006. The European Union (EU) expects a shortage of a million health workers by 2020 and, in addition, health workers are not spread evenly across the region, and spending on health may vary widely. This implies major imbalances, resulting in an environment highly conducive to migration of health workers. Thus, the EU plays a role in the global process of migration of health workers. The enlargement process increased this tendency, ten countries joined the EU in 2004 (Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia (EU10). Bulgaria and Romania joined the EU in 2007 (EU2).

Shortages of health workers have widespread effects, as they may deplete regions and countries of much needed resources. As education and training of health workers are costly and time-consuming, and as major parts of health workers’ education and training may be financed by their countries of qualification, migration of health workers, although a personal freedom, can also represent a loss of investment for the sending country. These factors shaped the relevance of the MoHProf project.
Mobility of Health Professionals to, from and within the European Union

Caroline Schultz
and
Barbara Rijks
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<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>AVR</td>
<td>Assisted Voluntary Return</td>
</tr>
<tr>
<td>CPA</td>
<td>Comprehensive Peace Agreement</td>
</tr>
<tr>
<td>DFID</td>
<td>Department for International Development (United Kingdom)</td>
</tr>
<tr>
<td>GAM</td>
<td>Global Acute Malnutrition</td>
</tr>
<tr>
<td>GoSS</td>
<td>Government of South Sudan</td>
</tr>
<tr>
<td>IDP</td>
<td>Internally Displaced Person</td>
</tr>
<tr>
<td>IOM</td>
<td>International Organization for Migration</td>
</tr>
<tr>
<td>LRA</td>
<td>Lord’s Resistance Army</td>
</tr>
<tr>
<td>NGO</td>
<td>Non-governmental Organization</td>
</tr>
<tr>
<td>NRC</td>
<td>Norwegian Refugee Council</td>
</tr>
<tr>
<td>NSCSE</td>
<td>New Sudan Centre for Statistics and Evaluation</td>
</tr>
<tr>
<td>OCHA</td>
<td>Office for the Coordination of Humanitarian Affairs</td>
</tr>
<tr>
<td>SPLA</td>
<td>Sudan People’s Liberation Army</td>
</tr>
<tr>
<td>SPLM/A</td>
<td>Sudan People’s Liberation Movement/Army</td>
</tr>
<tr>
<td>SSCCSE</td>
<td>Southern Sudan Centre for Census, Statistics and Evaluation</td>
</tr>
<tr>
<td>SSDDRC</td>
<td>South Sudan Disarmament, Demobilization and Reintegration Commission</td>
</tr>
<tr>
<td>SSRRC</td>
<td>South Sudan Relief and Rehabilitation Commission</td>
</tr>
<tr>
<td>UNDP</td>
<td>United Nations Development Programme</td>
</tr>
<tr>
<td>UNHCR</td>
<td>United Nations High Commissioner for Refugees</td>
</tr>
<tr>
<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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1. INTRODUCTION: MOBILITY OF HEALTH WORKERS AND THE MOHPROF PROJECT

According to the World Health Organization (WHO), the world was lacking at least 4.2 million health workers in 2006. This is reflected by prognoses for the United States as well as for the European Union (EU): both expect a shortage of a million health workers by 2020\(^1\). In the EU, in addition to shortages, health workers are not spread evenly across the region, and spending on health may vary widely. This implies major imbalances, resulting in an environment highly conducive to migration of health workers. Thus, the EU plays a role in the global process of migration of health workers. The enlargement process increased this tendency. Ten countries joined the EU in 2004 (Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia (EU10). Bulgaria and Romania joined the EU in 2007 (EU2). These 12 countries together are referred to in this report as the EU12.

Shortages of health workers have widespread effects, as they may deplete regions and countries of much needed resources. As education and training of health workers are costly and time-consuming, and as major parts of health workers’ education and training may be financed by their countries of qualification, migration of health workers, although a personal freedom, can also represent a loss of investment for the sending country. These factors shape the relevance of the MoHProf project.

1.1 The MoHProf Project

MoHProf was one of several projects funded under the EU 7th Framework Programme for Research and Development,\(^2\) aiming to gather more insights into the processes and effects of mobility of health professionals to, from and within the EU. The MoHProf project unified a consortium of 25 teams from EU Member States, including major sending and receiving countries from around the world, with representatives from North America, Africa and Asia. This project was one of the first in its kind to seek a wider, in-depth view on the migration of health workers within the context of the EU.

1.1.1 Aims

The general objective of the project was to investigate and analyse current trends in the mobility of health professionals to, from and within the EU. Its policy dimension comprised the development of recommendations on human resource
policies in European and third countries. The project aimed to gather evidence about basic questions and knowledge gaps relating to the international migration of health workers, which involved analysis of migration flows, evaluation of policies addressing migration and the development of recommendations.

The project also aimed at gaining a historical perspective by acquiring time series data, including those concerning the international mobility of foreign and "native” health professionals, where possible, specified according to different professions, sectors and departments. Data on general migration processes furthermore helped to identify the particularities in the health system, while demographical and epidemiological data, together with additional information that indicate structures and processes in the health system, were also used to analyse and put into context migration flows of health professionals. Factors like general effects of migration on the health system (remaining staff, health-care services and health outcomes), social impacts and dimensions, and economic costs were analysed as well. In particular, the impact of incentives and policies regarding migration had to be considered to evaluate their effectiveness in addressing mobility trends. Therefore, relevant economic, legal and political issues, including organizational, financial and regulatory aspects of health systems, were taken into account.

The value of the project was further enhanced by focusing on several gaps in existing knowledge. The inclusion of a wide range of industrialized and developing countries, including both sending and receiving countries, aimed to give an extended perspective and knowledge of migratory patterns. The combination of quantitative and qualitative data contributes to a more comprehensive understanding of migration flows, and illustrates peculiarities of health-worker migration.

1.1.2 Selection of countries

Receiving countries were selected using two criteria following the Organisation for Economic Co-operation and Development (OECD) data (OECD, 2007):

- Countries with large absolute inflows of migrant health workers (at least 15,000 in one of the groups of health professionals around the year 2000);
- Countries with a high share of foreign health workers (higher than the OECD average around the year 2000).

Similarly, sending countries were selected based on OECD outflow data:

- Those with high numbers of emigrating health workers (over 15,000) or considerable numbers (over 5,000);
- Those with high expatriation rates of more than 10 per cent.
The use of the expatriation rate as a criterion aimed to allow for inclusion of small countries whose health systems might be severely affected by relatively minor absolute outflows. Research shows the biggest impact of emigration or immigration is experienced in small countries (World Bank, 2011).

Eastern European and South-Eastern European countries and the countries of the former Union of Soviet Socialist Republics (USSR) were taken into consideration, because OECD data suggested that the most important sending countries or groups of countries were the former USSR, former Yugoslavia, Poland and Romania. For reasons of probability of migration flows due to population size and geographical proximity, the Russian Federation and Ukraine were considered most interesting. Bulgaria and Romania were added to the sample as the newest EU Member States. Inclusion of African and Asian countries was considered relevant to illustrate possible outflows from these countries. Similarly, the most relevant receiving countries on the globe – the United States, Canada and Australia – were also included in the analysis. In sum, the countries shown in Table 1 were considered in the project.

Table 1: Typology of countries in the MoHProf project

<table>
<thead>
<tr>
<th>EU mainly receiving countries</th>
<th>Non-EU countries sending to EU</th>
<th>New EU countries sending within EU</th>
<th>'Eastern' countries sending to EU</th>
<th>Non-EU countries receiving from EU</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>India (for doctors)</td>
<td>Lithuania<em>1, Poland</em>1, Ukraine*</td>
<td>United States (receiving)</td>
<td></td>
</tr>
<tr>
<td>Germany</td>
<td>Philippines (for nurses)</td>
<td>Bulgaria<em>2, Romania</em>2, Russia*</td>
<td>Canada (transit/receiving from EU)</td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>Angola</td>
<td></td>
<td>Australia (ditto)</td>
<td></td>
</tr>
<tr>
<td>Ireland</td>
<td>Egypt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td>Ghana</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Portugal</td>
<td>Morocco</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sweden</td>
<td>Kenya</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>South Africa</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

Note: *former Soviet Bloc; 1EU Member State since 2004; 2EU Member State since 2007.

1.1.3 Process and output

The 25 national research teams produced national reports and condensed national profiles. These have been made available on www.mohprof.eu for interested parties. The reports followed general guidelines and structures as set by the consortium leadership; they all also accommodated relevant national requests and need for knowledge, thus feeding into both national and international agendas.
1.2 Mobility of health professionals: Conceptualization

Mobility of health professionals is a multidimensional concept. First of all, it is – in the context of MoHProf – primarily used to describe persons crossing national borders.

The concept is used to describe a multitude of health and care workers. It can mean a certain category of medical specialists or a general description such as “medical doctors,” “family care doctors” or “general practitioners” and may also apply to more specific health workers such as paramedical professionals, physiotherapists and nurses. In line with more general acceptance of the phrase, the “health workers” concept describes medical health workers and nurses (registered or licensed; in some cases, nurse-extenders). These are also the main categories mentioned in recent WHO and/or OECD reports about the migration of health workers. Where possible and relevant, more specific professional names and titles are used.

When discussing “health professionals” we must also take into account where the person is considered to be a health professional. By definition, this is the country where his/her qualifications are recognized and where, subsequently, this person may practise. Thus, a health professional entering a receiving country will, unless recognition and, sometimes, licensing has been achieved, not be perceived as a health professional by that country. He/She may, however, be a health or care worker in a job with lower status than the original professional title would warrant, or may even work in a different sector. Table 2 provides some general definitions, as used in this report.

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Emigration (of health workers)</td>
<td>Departing the source country with the purpose of (temporary) establishment in a receiving country and working in the receiving country’s health system.</td>
</tr>
<tr>
<td>EU</td>
<td>European Union, currently consisting of 27 Member States.</td>
</tr>
<tr>
<td>Foreign-born (health professional)</td>
<td>Health professional born abroad and possibly trained in the sending country but also possibly trained in the receiving country. Many of these professionals will have acquired the nationality of the receiving country.</td>
</tr>
<tr>
<td>Foreign national</td>
<td>A person with a (passport proving) nationality of a country other than the receiving country.</td>
</tr>
<tr>
<td>Foreign student</td>
<td>Student whose citizenship is that of another country than the country where study takes place. Residents in a country with citizenship of another country are counted and reported as foreign students in data collection.</td>
</tr>
<tr>
<td>Foreign qualified/trained</td>
<td>Health professional whose qualifications were acquired in one or more countries other than the receiving country. Some may also (have) acquired the nationality or citizenship of the receiving country.</td>
</tr>
<tr>
<td>Health professional/health worker</td>
<td>A health professional or worker qualified according to the regulations of a given country and whose qualifications relate to diagnosing, treating or nursing human beings. Within this category, professional titles such as (registered or licensed) nurse, medical doctor, physician, medical specialist, consultant, dentist and other titles are often used.</td>
</tr>
<tr>
<td>Mobility (of health professionals)</td>
<td>All processes in which persons cross borders between countries with the purpose or result of working as (qualified) health professionals in the country to which they move.</td>
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<td>-----------------------------------</td>
<td>--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
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<tr>
<td>Receiving country</td>
<td>The country where a migrant wishes to practise in line with his/her professional qualifications.</td>
</tr>
<tr>
<td>Sending country</td>
<td>A wide concept that can mean: 1) the country of citizenship or original nationality; 2) the country of birth; 3) the country where a migrant gained (most of) his/her qualifications as a health professional and which acts, in the process of migration, as country of origin of the person.</td>
</tr>
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</table>

Finally, mobility is a concept including more than migration of a person with the purpose of establishing himself/herself in the receiving country. While such migration may encompass the bulk of these movements, it is by no means the only shape of migration. Especially within the context of the post-2004 EU, new modes of mobility emerged together with the rise of cheaper transport options. Reduced barriers to mobility enabled, primarily, medical doctors to find new or additional modes of work elsewhere in the EU. Those living close to borders found new ways of commuting by crossing the borders on a more or less regular basis, and, within the context of the EU, temporary migration has become a more or less common phenomenon.

### 1.3 Research questions and structure of the report

This paper summarized the findings to a number of research questions of the MoHProf project:

1. What are the processes that a migrating health worker needs to deal with?
2. How are migratory flows of health workers affected by rules and regulations regarding migration in general and, more specifically, by those concerning health workers?
3. What is the role of the EU in the context of health worker mobility?
   a. What can be said about intra-EU flows?
   b. What can be said about flows into the EU?
   c. What can be said about flows from the EU?
   d. What can be said about the EU regulatory framework in discussing health worker mobility?
4. Health workforce management: How are countries preparing for the future health workforce and what are the preliminary consequences of the current economic slowdown in the migration of health workers?
2. INTERNATIONAL MOBILITY AS A PROCESS

2.1 Mobility of health workers: Who, what, how

As the goals of migration may differ, experiences during and after migration vary. As shown by studies conducted in countries that were to accede to the EU in 2004, many health workers in these countries indicated their intention to depart and work elsewhere in the EU; however, in most of these countries, the outflows remained lower than expected. This shows that between attitude and actual behaviour, there are many factors that can shape perceptions and perspectives, ultimately influencing the migration decision. Recruitment agencies can play a role here but so can “success stories” from others or the existence of diaspora communities in recipient countries. Moreover, existing traditional migration trends and destinations may be relevant, as well as new incentives and new ease to migrate to a given destination, for instance, through new easy access to relevant positions abroad via the Internet.

This chapter follows the migration process before, during and after international mobility, and includes questions relating to integration, remittances and subsequent steps, such as possible return migration.

2.1.1 There are varying motives and modes of migration: Commuting, locums, travelling, adventure, escape and emigration

Outmigration takes many shapes and forms. It varies from cross-border day-to-day or short-term commuting, to temporary migration or “travel,” to migration with the purpose of long-term or even permanent establishment. In some cases, however, mobility follows the need to escape, for instance, from political persecution or natural or man-made disasters. Yet, for asylum-seekers, options to practise as health professionals in receiving countries may be very limited due to the complexities involved in gaining legal residence and work permits.

2.1.2 Mobility patterns for nurses and doctors are different

While doctors can enhance their career development, among other things, by further qualifying abroad, for nurses the main argument for mobility is more likely to be the possibility of earning more money than at home. Moreover, in some countries,
nurses are expected to return more often than doctors. For instance, data from Bulgaria indicates that motivations for nurses to migrate differ from those of medical doctors. Whereas, the latter move primarily for professional and economic reasons; nurses move especially to sustain their families at home.

This difference in motivations could explain why nurses may be more likely than doctors to seek “cheap” mobility patterns. Their earning capacity is limited by their profession, whereas the earnings of doctors can increase as they add skills by gaining further qualifications. For this reason, for nurses, the cost of mobility must be as low as possible with a quick option to earn it back by rapid net earnings. This reasoning may explain why nurses, for instance, from the EU12, are willing to seek temporary, sometimes illegal, job placements in one of the EU15, preferably those close to their countries of origin. Such patterns allow for a “quick buck,” while also not endangering options to travel back and forth, as distances are not too long. However, as reports from Poland indicate, some nurses may lose their “domestic” licence due to EU requirements of proof of continued practice as a nurse and subsequently find themselves in a difficult situation after return. Both Canada and Bulgaria report that medical professionals leave permanently, while nurses and some other health-care professionals may be migrating on a temporary basis. Contrary to this, however, Moroccan medical professionals travel abroad on a temporary basis, whereas nurses and paramedical professionals, due to lack of prospects in their own countries, tend to cross borders permanently.

Moreover, receiving countries may differ in their requirements for health professionals. While there may be shortages in one profession, these may not exist, or may be to a much lesser extent, for another. While Sweden recruits many foreign-trained doctors, not many non-Swedish-trained nurses are licensed. The Philippines reports that it is those with specific skills who are most sought after in the global market. Intensive care nurses, those with experience in the emergency theatre, or with neonatal intensive care unit or cardiac care experience are in high demand abroad. Still, as with other nationalities, Filipino doctors tend to migrate for career advancement, while nurses migrate primarily for economic purposes and therapists for career prospects and acquisition of new skills. In fact, some reports show that Filipino physicians actually “de-train” to get a nurse’s licence in order to earn more abroad.

Differences in migration patterns between doctors and nurses can, furthermore, hold a gender component. For instance, female Romanian doctors are more likely than their male colleagues to migrate on a temporary basis, whereas their male colleagues will tend to move permanently.
2.1.3 It is often the young, with new knowledge, who move

Although conclusive evidence is lacking in some countries, available data suggests that younger health professions (below the age of 40) are more likely to migrate. For young people, the cost of migrating can be compensated by income earned in the receiving country (European Commission Directorate-General for Employment, Social Affairs and Inclusion, 2012). However, for those of middle age, the step is often more difficult because of personal, social, professional and material costs. Not only can it be more burdensome to acquire the relevant language skills, those around middle age will also tend to have built some sort of professional and social life (for example, a marriage or children), which leads them to experience higher transaction costs in leaving these behind. Moreover, migration often implies having to start from scratch, if only because of the process required for recognition of qualifications and entering an unfamiliar labour market and health system. For older health professionals, this may be difficult – as is reported by France about Romanian medical doctors – while it may be perceived as an opportunity and challenge for younger people. Even Australia, which is desirable for quality of living and climate, experiences an outflow of what is called the young and better educated. Similarly, 60 per cent of Irish fully registered doctors with overseas addresses are younger than 45 years of age. And it appears that, in some cases, professionals who migrate are getting younger. For instance, Ireland (for undergraduate medical students), Romania and Ghana (for graduate students) report that medical students already develop strategies to go abroad while being trained. The cumulative effect of this may be devastating, as sending countries such as Romania may easily get into the position of losing subsequent years of newly trained health professionals. This not only contributes to an increasingly ageing workforce but also means there is a shortage of workers able to replace those retiring, not to mention to support the growth necessary to meet the expanding needs of the population. Such an effect is also reported by Poland and can lead to a self-propelled process of outflow of some of the country’s most promising health professionals, as Ghana experienced in the early 2000s.

2.1.4 It is those with access to (future) resources who move

Data from Egypt shows that it is the medical professionals with resources, often financial, who will manage to study, or even to further qualify themselves abroad. This leads to the creation of a migrating elite, largely based on resources, rather than merit. South African nursing students, many of whom intend to work abroad, express the need for resources. However, many expect to work domestically until they are able to save the needed funds. In the culture of the Philippines, outmigration is actively promoted and families will incur substantial debts to allow (or even push) a person
to pursue work elsewhere in the world. Of course, for the migrant, this will imply a need to send remittances, first of all to repay the debt and, second, to sustain the family. As a consequence, options for return of these health worker migrants may be limited by financial pressures.

2.1.5 Networks play a substantial role in decisions about mobility

The family and the diaspora play important roles in migration decisions

A decision to move to another country is seldom made in social isolation. Family members, especially the nuclear family or family of origin (fathers/mothers but in some cultures also distant family members) are very much involved in the decision-making process, not only in the decision of whether to move but also in the decision of where to move. For South African nurses who moved to the United Kingdom, their major reason was the ability to earn enough to pay for the material and educational needs of their children. In contrast, for some Romanian doctors, the family is a reason not to migrate, even though many more career options may exist abroad. Furthermore, the need to care for ageing parents is also a reason not to migrate and, for some, a reason to return.

Data from Germany stresses the importance of acquiring a decent work–life balance, including a better social and family life, as a motivator for migration. In the Philippines, on the other hand, there is an overall culture of outmigration. The Government encourages labour migration as remittances are a major component of its GDP and family members impose pressure on young people to choose marketable professions. Moreover, family members are likely to take major loans to fund the costs of migration. In Ghana, family members are likely to have co-paid for their relatives’ tuition and they expect returns on investment, which, in the recent past, could not be made while in Ghana or were bleak compared with the remittances sent by migrant health workers.

In other cases, migration is a question of following one’s heart: a spouse or lover lives in the receiving country and the choice is made to follow him/her. Many MoHProf country reports mention this as a driver of migration.

Migrant communities are important to get a foothold in a host country. They can play a role in providing information about job opportunities, as reported by Lithuania, and can act as a bridge for the newcomers between the society of origin and the new society, as was reported by South African nurses in the United Kingdom. For instance, the major Irish outflow of doctors to the United States in the past grew to a community of now senior officials in the US health system who can act as a bridge for Irish
(under-)graduates wishing to pursue a foreign career or additional specialization abroad.

Active recruitment

Active recruitment plays a major role in the migration of health professionals. The MoHProf data supports this notion, although results differ from country to country. For instance, data from Germany reports no substantial active involvement of recruiters; apparently, flows are directed more informally or directed by employers with a need for health workers. This is also reflected by the very diverse experiences of migrant health workers regarding their integration into the German system. In part, though, it may also indicate little attention by the national report for those working in the black labour market in German long-term care, especially in home care. Given the fact that Slovak recruiters are active for Austrian home care, similar experiences could be expected for Germany.

In some countries, activities of international recruiters are part of the overall existing infrastructure, and are seen as such a natural part of the process that they are not even reported by the country teams. For instance, reports from some sending countries suggest that many migrants find their way across the globe through personal initiative, but do not always explain how that works nor what it means. Recruiters can play a role in this process, just as social experiences can. For instance, chain migration, or word of mouth, can play a major role. As advertising may affect perceptions of society and influence priorities, public campaigns by recruiters can encourage personal initiative to migrate. However, as these are private sector agencies, it is more difficult to encourage their participation in research, making it more challenging to analyse their roles. The national MoHProf research team for Canada, for instance, reports active recruitment for foreign health professionals. Evidence is anecdotal, however, but it seems that such recruitment includes bilateral agreements between a specific hospital or region in Canada and a facility in a sending country. For Egyptian doctors, informal networks serve as the key behind the country’s internationally mobile health workforce. Australia’s states themselves are acting as recruitment agencies and its Commonwealth subsidizes the expenses made in recruiting overseas-trained doctors. Ghana reports differentiated roles of recruitment agencies. Medical graduates seem to find their own way, while nurses, to some extent, depend on recruitment agencies. However, in recent years, many recruitment agencies have stopped business due to stricter requirements, such as in the United Kingdom. Ireland, however, similar to the United States, has been using recruitment agencies to recruit non-consultant hospital doctors, mostly from Eastern European countries, like Romania, Hungary, Slovakia, Lithuania and Poland, as well as from India. Recruited nurses originate mainly from the Philippines, India, the Middle East and countries across Europe, including predominantly Finland, Norway and the United Kingdom.
Private recruitment agencies are not always considered to be the best channel, given their two-way profit strategy, which makes them less likely to be concerned about proper information, labour conditions and rights in the event of conflicts between employees and employers. After Bulgaria’s and Rumania’s entry into the internal European market in 2007, France reported a steep increase in Romanian physicians entering the French health-care system. Some recruiters were perceived to not communicate clearly, completely and honestly with the persons recruited, which led to the health workers being disappointed and, in some cases, returning to Romania. To encourage better practices, Australia, which strongly relies on foreign health workers, has implemented a list of preferred providers among recruiters; Ireland reports that, in 2008, 87 per cent of the requests for verification of qualifications of nurses were made for Australia, as a result of active recruitment by Australian employers. However, Ireland also reports its own active recruitment for foreign nurses since the mid-1990s, especially from other English-speaking countries like the United Kingdom, South Africa and the Philippines. India reports the active roles of recruitment agencies, especially for nurses. The Philippines reports more than 3,300 known and accredited recruitment agencies, implying that probably many more are active but not accredited.

The Internet is also changing recruitment. In Portugal, 13 recruitment agencies were counted on the Internet – especially for health professionals – most of which are involved in international recruitment and not guided by an ethical code. Australia reports usage of Facebook and MySpace as a means to connect with networks and opportunities. As a consequence, more than ever before, local vacancies reported on the Internet may have an international impact.

### 2.1.6 Differentiated pictures over time and between flows and countries

Overall, a differentiated picture of the motivations and forms of migration undertaken by health workers emerges. Countries may be both sending and receiving for select professions; thus, they may exert a strong pull for workers in one health profession but not for those in another. Some countries will be sending countries for only a small group of professionals, while others will appear to send many (types of) health workers. Other countries, like Egypt, may be entirely focused on sending temporary migrant workers. Mobility patterns can also change quickly over time. For instance, Romania, while experiencing substantial outflows of health workers, experienced major changes in (preferred) destinations, with destinations varying according to what became the easiest to reach. EU entry also had different consequences for Romanian doctors than it had for nurses, as Romania already had several bilateral agreements with EU countries like Greece, Spain and Italy, which allowed Romanian nurses to practise their profession in these countries.
2.2 Entering the country

2.2.1 Perceived costs and benefits

For a health worker, thinking about mobility implies balancing related costs and potential benefits. When earnings are needed quickly, some health workers may choose irregular work situations. For instance, Polish nurses may not want to be recognized in Germany, and many migrants from Ukraine worked in Portugal and Spain illegally before they were legalized. Costs and benefits of migration link both to the (prospective) migrant and to the prospective receiving country.

For the migrant, there are clear psychological costs involved in moving away from family, friends and a familiar environment. In addition, travelling to an unfamiliar country and trying to find one’s balance abroad can be stressful. There are also material costs involved, such as the cost of travel as well as costs and effort involved in preparation for travel, including mastering of another language, finding accommodation and adjusting to life in another country.

The transaction costs of migration for the migrant are reduced, among other things, by:
- Sociohistorical connections, possibly enhanced by educational systems that are similar (including for the education of health professionals);
- Proximity to high-income countries (leading to reduced travel costs);
- Proximity to international borders for “commuting” (possibly not on a day-to-day basis but on a weekly or weekend basis, or even for longer periods);
- Ease of arrangements.6

2.2.2 Recognition or deskilling?

In most migratory processes, people have to “step down” from their previously acquired qualifications and status to make a living in the receiving country, especially when higher education and qualifications are involved and sometimes irrespective of the original qualification achieved and experience gained.

Recognition of qualifications, and sometimes subsequent licensing for medical professionals, is another example that shows how receiving countries have specific demands and systems and ask migrants to adhere to them.7 This outcome is in line with observations made about long-term care workforces, where migrant care workers
often have higher skill and qualification sets than native-born workers while working in less advantageous work settings (Colombo, Llena Nozal, Mercier and Tjadens, 2011). In the United States, for instance, in some cases, the recognition of a foreign qualified nurse may take as long as six years, longer than a total re-education would last (Martin et al., 2009). Both physicians and nurses interviewed in Germany saw their previous professional experiences not adequately acknowledged and some had to repeat training partly or completely.

Sometimes, however, deskilling takes on a new dimension: data from the Philippines shows that health managers and physicians migrating abroad and accepting entry-level positions in the receiving country as earnings and opportunities are still more attractive than at home; for physicians, this may include requalifying as nurses before migrating.

### 2.2.3 Costs and benefits of non-recognition

Achieving a qualification in line with that of the receiving country may, as discussed, require large financial and time investments and may drive health workers to enroll in studies or accept work below their original levels of qualification, or may drive nurses to work as unregulated health assistants (such was reported in Australia, the United States, Canada and Germany). Migrants are, for this reason, also more likely to become unemployed (European Commission, 2011).

For some qualified nurses, formal registration in the country of destination may not even be attractive. For instance, nurses in Poland may work on a temporary basis in Germany in home care, Slovakian nurses in Austria and many Ukrainian nurses work in Spain, Italy and Portugal in domestic services. The Italian care system is fully geared to migrant caregivers. While these caregivers are potentially leaving a gap in health services in their source countries, the earnings in the receiving country (even when considered extremely low in that country and even when no contributions are paid to this country’s social protection system) may be substantially higher than in the sending country. This may especially be the case if the work is provided in a semi-legal or illegal context and when travelling distances are relatively short.

Receiving countries generally profit from migrants working informally, including by not having to pay social protection premiums and taxes for these – much needed – workers. Seen from this perspective, non-recognition is another aspect of brain exploitation, which, to date, has hardly been recognized.
2.2.4 Language: How crucial, for whom and in what context?

All countries are faced with the question of how to deal with foreign qualified health workers who have a different language background. In some cases, registration requirements do not include language; in others, they do and can even lead to faster professional recognition, such as in Australia. Health professionals are required to speak and understand a receiving country’s language at the native level mainly because being able to communicate with patients and colleagues is a sine qua non in most health professionals’ tasks and responsibilities (Dickson, 2011). Even then, accents may restrict working experiences. For these reasons, the United Kingdom prefers Indian as opposed to South African nurses, while Ireland prefers nurses from the Philippines over Eastern European nurses.

Language requirements in receiving countries are varied. Where physicians, for instance, may be required to pass a language test at the native level before they will be allowed to work (either by an employer or by a registering or licensing authority), for those trained as nurses but working as health or care assistants, such requirements are less strict. This is even more likely if the work is done in private contexts, such as in Austria, when private care work is done in two-week shifts, after which workers return to their home countries. Generally, options for jobs will improve when the care workers speak the receiving country’s language. Data from South Africa, on the other hand, suggests that language knowledge is not overtly important. In a project aimed at strengthening health-care services in South Africa, English junior doctors are sent to rural and remote areas for a year. They do not speak some of the local languages and basically perform their duties by means of constant translator services with the assistance of local health workers, or communicate nonverbally.

2.3 After entry

2.3.1 Health workers may fill undesirable gaps

Globally, the distribution of health and care resources and workers is skewed. All MoHProf reports point to a global move of both health students and health workers from rural to urban, from resource-poor to resource-rich, and to areas where high production, professional challenges and better earnings can be made. Further, depending on the country, there will be flows from public (in some countries, government sector and other public) to private sectors\(^8\) and where population density and, thus, demand for services is not only increasing but personal and professional life as well as professional challenges and possible socioeconomic status are more
attractive. Indeed, the density of health workers is much higher in urban areas than in rural areas (OECD, 2011b).

Several receiving countries suffering major problems in the supply of health services in remote or rural areas – among which are Australia, Canada and the United Kingdom – adopted policies that require or stimulate foreign-qualified (internationally trained) physicians to work in rural areas. For instance, foreign-qualified general practitioners – in some countries called family doctors – entering Australia are required to work 10 years in remote areas, although recently a reduction from this period was installed if the physician in question would agree to work in an area designated by the Government as a shortage area. Portugal, by means of a government programme, has, since 2006, recruited physicians and nurses from Costa Rica, Colombia, Cuba and Uruguay to provide services to underserved areas. This is despite the fact that there is un(der)employment of “domestic” nurses, the latter though being unwilling to work in these areas. In the United States, internationally trained health professionals are also filling the gaps in rural and remote parts of the country. The need for this is, in part, increased by the medical education system in the United States, which leaves students facing major and rapidly increasing debts upon graduation. This drives many to seek postgraduate education in medical specialties that will allow them to repay their debts.

In France, aside from Paris and Côte d’Azur, many French government departments suffer from shortages of health workers. Inflow of foreign medical workers serves to alleviate these shortages. The picture is different for Germany, where, since 1997, the inflow of foreign physicians has been increasingly focused on hospital care.

Data from Ireland shows that its foreign health workers work in three different settings: either in small hospitals, especially in less desirable areas such as emergency; as general practitioners; or in private, often “ethnic,” clinics where physicians offer services in migrants’ native languages. The latter circumstances are attractive for doctors not fully competent in the English language and for those whose qualifications are not entirely compatible with Irish standards.

A somewhat unexpected receiving country is Angola. According to 2010 data, most of its health workforce in the public sector is foreign, of which more than half come from Cuba. However, this may underestimate the foreign inflow due to inadequate data. Once again, domestic-trained doctors tend to stay in the urban areas and foreign-trained health workers work in the provinces. South Africa also has systems in place to encourage returning migrants to work in rural areas. Some South Africans undertake their basic medical study under the umbrella of a bilateral agreement in Cuba. When basic training in Cuba is completed, students return to South Africa for internships and a clinical year but are supposed to work in remote areas before they can then sit a South African examination.
For nurses, different mechanisms apply, but with similar results: as deskilling is often a component of the migration process, many nurses trained for hospital care will have to adjust after migration. While in the process of recognition of qualifications, or while learning the relevant language, many will have to accept that work is only available in what, according to some, is the “stigmatizing” geriatric (Haour-Knipe and Davies, 2008), either institutional or in home care, and in those cases, possibly in quasi-legal or illegal conditions. However, as major health-care providers are often based in urban areas and as the need for nurses is highest in these areas, nurses, more than physicians, are likely to work in urban areas, for instance, in the United States and Australia. For those going to the United Kingdom, London was reported as the prime destination, even though the cost of living there is high.

This being said, in some cases, internationally mobile health workers, especially doctors, generally get better positions. This is the case when, as noted in some sending countries, mobility is driven by the aim to further specialize and thus increase market value.

### 2.3.2 Integration/acculturation

Whether integration or acculturation takes place after the migration process will depend on many factors, including migrants’ anticipated duration of the stay. When migration is intended to be temporary – for instance, for a specific study or for temporary work – the migrant will typically not put much effort into acculturation (Haour-Knipe and Davies, 2008). However, when persons “overstay” their intentions, they may come to find themselves in some form of social isolation, caught in the myth of return.

In addition to having to adapt to a new sociocultural environment, foreign-qualified health professionals may face professional challenges. These include different legal and ethical contexts, and divergent cultural and communication styles – even when migrant health workers are fluent in the receiving country’s language. Different technologies and professional roles as well as patient characteristics or patient load can make professional life a challenge, especially if professional peer groups of similar background are missing (Slowther et al., 2009). In many cases, adaptation to and by the workplace will be required, with the migrant required to adapt to a new situation and different meanings and connotations of certain concepts used, such as the relationship with and autonomy of the patient. Learning procedures and actions may be structured totally differently: from being thrown into the deep end with steep learning curves (South Africa), to very structured learning with very slowly increasing responsibilities (United Kingdom). At the same time, “domestic” staff may be torn by the need to
support the new worker and to assist him/her in adjusting to the new situation, as this may add to the burden of these workers – the original trigger to hire from abroad in the first place. Moreover, the arrangements made for the entry of new staff may induce jealousy (Tjadens and Roerink, 2002), which in turn may be perceived by the migrant as mistrust and discrimination. Moreover, such perceptions and experiences can add to social isolation due to lack of social networks and loneliness.

Migrating health workers may also end up working in circumstances that are not what they aimed for and deskilling is part of a frustrating experience, sometimes combined with discrimination (or perceived discrimination), as reported by South African returning migrants and foreign-trained health workers in the United States. Depending on their work, circumstances and challenges, health workers may be more or less likely to put in efforts to integrate (for instance, by means of language improvement). However, as it is especially the relatively young who are prone to migrate, potential for integration may be influenced by family building in the receiving country or by the presence of migrants’ own nuclear families in the source country.

2.3.3 Remittances

Remittances play a major role in migrant communities (World Bank, 2011), especially for those from low- and middle-income countries. Although the issue of remittances is of clear importance, the data generated by the MoHProf project does not provide much information about the remittances sent by the health workers in destination countries. Of the German health professionals that were interviewed, only one reported sending money home. On the other hand, data from the Philippines shows that health workers remit somewhere between 40 and 50 per cent of their salaries. Data from Ghana shows efforts to gain non-material remittances from Ghanaian health workers who return to Ghana through the Migration for Development in Africa programme implemented by IOM, in partnership with the Dutch and Ghanaian Governments. The most recent project aims to contribute to the Ghanaian health sector by encouraging Ghanaian professionals in the diaspora to return – even if only temporarily – to Ghana. Those who do are encouraged to provide voluntary services in their specialty and transfer knowledge, skills and experience. At the same time, the project offers health workers from Ghana the opportunity to do specialized short-term training in the Netherlands.
2.4 Moving on?

2.4.1 Country hopping

Country hopping does occur but has been extremely difficult to track. Only a few countries, including the United States, Canada, Australia and Angola, report this issue but, typically, substantiated quantitative data that could shed light on the size and importance of the phenomenon is lacking. Angola reports that health workers go to Portugal and subsequently on to the United Kingdom or the United States, but data remains scarce. Canada reports that the EU, especially after its expansion, is used as a springboard by health workers to cross the Atlantic. For African health workers, South Africa serves as a similar springboard to Canada. Indian nurses are reported to prefer working in the United States but go to the Gulf States as an intermediate step on their way to the United States or Europe. The reason behind this, among others, is that costs of migrating to the Gulf are lower due to the relative ease of the migratory process and facilitation provided by recruiters.

Data from Ireland shows that Canada is perceived, by non-EEA health professionals working in Ireland, as a country that has a much better system as regards citizenship and residency for family members. This is given as a reason for migrants to cross the Atlantic. However, data on flows is lacking, even though it is clear that after the Irish economy collapsed and hiring freezes were introduced, many foreign-qualified health workers opted for onward migration. Evidence suggests that many internationally recruited nurses view the United Kingdom as a springboard before moving to, mainly, the United States. This would apply especially to nurses from the Philippines (60%), and South Africa (22%). The Philippines also reports country hopping: for Filipino health professionals, some leave for transit countries, such as those in the Middle East, as well as Singapore, Australia and the United Kingdom, and then migrate to final destination countries, such as the United States or Canada.

2.4.2 Return migration

It is difficult to monitor return flows. Depending on the specificities of the migratory process, especially with short-term, or even repeated, temporary or circular migration, both source and receiving countries may be unaware of flows, and national reports indicate a lack of evidence of this. Such problems may also exist for health workers who have outmigrated but not lost their original entry in the source country register. Upon return, they do not need to re-enter data as this may be required only once, or within regular intervals of, for instance, five years. Only when a migrant’s qualifications have
changed and when they wish to practise according to the newly gained qualifications, renewed recognition procedures may be required. Similar monitoring difficulties arise when students go abroad and come back with more qualifications.

Recent data from within the EU27 suggests that it is disproportionally migrants with upper secondary-level qualifications, rather than those with tertiary education or only basic schooling, who tend to return (European Commission Directorate-General for Employment, Social Affairs and Inclusion, 2010). This is in line with the previous statements that nurses are more prone to temporary migration or have been more affected than physicians by the recession, driving them to return to their countries of origin. Bulgarian nurses, for instance, tend to work abroad only for a limited period of time, while physicians go for longer stints or may not likely return. Still, this is not always the case. Portugal reports rapid return flows of immigrant Spanish doctors after improvement of the Spanish economy around 2005. Canada reports that most physicians who emigrate early in their careers (before the age of 35) are likely to return; those who migrate later (after practising medicine for 15 years) will not.

Return mobility is especially pressing in discussions about recruitment from resource-poor countries and options for return from longer-term commitments abroad. Migrants from such countries may feel caught between conflicting emotions and priorities. In some cases, the thought of returning keeps a migrant health worker from fully committing to the receiving country, while the receiving country may feel inclined not to put much effort into making optimal use of the health professional (for instance, by promoting skill development), even though there is a need to retain workers. However, while some migrants may anticipate return, lack of improvement in the political and socioeconomic situation in the country of origin often prevents this. Portugal reports that health workers from Guinea-Bissau would be willing to return home if economic and social conditions became more favourable. Those who did return had already gained Portuguese nationality and permanent residence and thus could, if so required, re-return to Portugal.

Although return may benefit the country of origin, when a health worker returns, it may mean leaving the receiving country with gaps in its health system (Young, 2011). The current economic downturn in much of the developed world may have prompted an increased number of migrants to return. However, return may lead to major disappointments, as much is likely to have changed during their stay abroad: the migrant, his/her family and the source country. Such disappointments may amplify feelings of displacement and not fitting in. Haour-Knipe and Davies (2008) provide an overview of some of the issues that returning nurses may face, which is underlined here with additional evidence from the national reports. Return migration, as a result of the economic downfall in many receiving countries, was, for instance, reported
by the research teams in Angola, Ghana, Portugal and South Africa. The economic crisis may also add to frustrations about return, as it may increase competition for scarce opportunities at home.

As in the decision to depart, families play a major role in the decision to return. For nurses, return (after long-term residence abroad) is often linked to family patterns, such as a partner’s career or a perceived need for the children to integrate in a home country (even if they have never lived there, or were there only briefly), as reported by Egypt. Results from South Africa also show children are a powerful driver of return. Moreover, the need to take care of sick or ageing parents can play a role in return decisions. Data from the Philippines shows the desire to start a business, to retire, or to pursue higher education and to find work in the Philippines as other reasons to return. The Ghana country report indicates that the number of returning health workers is now outgrowing departures, but most returnees are retiring and do not aim to practise upon return.

Those returning with the aim of practising are, however, often unable to transfer the accrued benefits, professional or social capital (prestige), they have accumulated in the destination country. Nurses who leave public service positions, in particular, may face serious problems when they return home. Although equipped with new skills, they may find themselves demoted to the bottom of the career ladder and end up with lower salaries. The same may happen to physicians who return with an improved skill set and often greater efficiency. This may contrast with the ways of working in the home country, and can lead to tensions among colleagues, as reported in Ghana. Moreover, data from Angola shows that while sometimes having additional skills and a professional attitude, return migrants may have problems adjusting to the domestic patient load, bureaucracy, lack of equipment and epidemiology, which do not fit their experiences. For those who did not have their qualifications recognized in the receiving country, experiences may be of no use at all in the country to which they return. Data from Poland shows that nurses may lose their licences to practise, as they cannot prove having continuously worked as a nurse (abroad). Administrative hassles, including taxes and customs, can also act as practical problems. When the option of re-entry is considered, major concerns can include the availability of housing, and, indeed, employment. India, however, recently installed measures aimed at simplifying re-entry procedures: postgraduate medical degrees awarded in Australia, Canada, New Zealand, the United Kingdom and the United States are now recognized in India, while plans exist to introduce similar schemes to recognize degrees from Japan, France, Germany and other European countries.

In some cases, mobility of physicians is targeted from the start towards eventual return, which can make the reintegration process more smooth. For instance, the
Egyptian diaspora tends to return after one or more stints abroad in order to have their children educated in Egypt, or to care for their parents. Others migrate to benefit from training opportunities abroad, like the Irish, as they intend to use them at home or possibly in private practice, for instance, as reported in Angola, Egypt and Morocco. As a consequence, on return to the home country, foreign-trained doctors often earn more than domestically trained doctors.

Thus, issues relating to the recognition of qualifications also apply to sending countries, even in those that would prefer (parts of) their health diaspora to return. In several source countries, domestically trained workers who have gained additional qualifications while abroad and wish to return experience difficulties in getting their qualifications recognized. These strict mechanisms hinder re-entry of native health workers but could be implemented for similar reasons as in advanced economies, for instance, different patient requirements and patient safety. Some countries, more or less explicitly, make recognition for returnees difficult, under the assumption that it will discourage nurses from departing in the first place (Kingma, 2006, as reported by Haour-Knipe and Davies, 2008). However, other mechanisms are also relevant: mobile workers may be seen as having voted with their feet and can be seen as potentially politically threatening and thus their return may not be wanted. Angola reports this, partly resulting from past major political upheavals. The authors conclude that such policy may be counterproductive for health care, as it drives needed nurses to stay abroad instead of returning.
3. COUNTRIES, STRUCTURES AND SYSTEMS

3.1 Health workers

Most MoHProf countries expect mild or serious shortages of health workers. Of course, a shortage in a country with a very low density of health workers has a different meaning than in a country with a high density of health workers. International data to provide evidence of such trends is lacking, one of the reasons being that recognition of the relevance of gathering such data still is relatively young; another, that methodological issues may significantly distort actual insights, not least because of dual employment. This section provides some evidence on health workers, especially physicians and nurses.11

3.1.1 Physicians

More physicians but not everywhere

Density of doctors is lowest in several of the sending countries covered by the MoHProf – Ghana, Kenya, India, Morocco and South Africa – and is highest in a mix of receiving countries countries (Austria, Sweden and, to a lesser degree, Germany), and potential sending countries (the Russian Federation, Bulgaria, Lithuania and the Czech Republic) (Figure 1).12

Figure 1: Physicians per 1,000 population, 1990–2010


Notes: • 1990s data are for: United States, 1993; Germany and Norway, 1991; and Finland, 1995.
• Kenya data, 2002; Angola and Philippines, 2004; Romania and Ukraine, 2006; Bulgaria, Lithuania and Nigeria, 2008; Egypt and Morocco, 2009.
• Adaptation: MoHProf.
Although the density of practising medical doctors has increased in most countries over the last 20 years, this has not happened everywhere. Countries where density overall remained stable are Poland, Israel and the Russian Federation. In most other countries in the study, density increased, such as in the United Kingdom, India, Austria and, to a lesser extent, Sweden, Denmark and Australia. However, in Bulgaria, an EU2 country, density of physicians shrank.

Canada, with relatively few doctors, has seen a very mild increase in the number of licensed and professionally active doctors since the 1990s. In the Netherlands, Germany and, especially Ireland, there was a steep increase in the ratio of doctors licensed to practise. However, while their numbers increased, this did not necessarily lead to more doctors practising. For instance, in Germany, the number of practising doctors per 1,000 population has increased by some 10 per cent since 1990, while the number of doctors licensed to practise increased almost 40 per cent, implying that an increasing number of doctors work in other settings.

Ageing

Several MoHProf countries report that their health and medical workforces are ageing as well, suggesting that the growth of the workforce does not keep pace with required growth and replacement rates. Such data does not only come from European countries but also from Kenya and Canada. While the proportion of physicians aged 55 or over varies widely, from 13 per cent in the United Kingdom to a staggering 47 per cent in Israel, only in Ireland has the share of doctors aged 55 or older shrunk (from 21% to 20%) over the past decade, suggesting increasing new arrivals on the scene, either through domestic training or through immigration of students or qualified doctors. In all other countries for which data is available, the proportion of older doctors increased (OECD, 2011b). When looking at those aged at least 55, the total average went up from 23 per cent to 31 per cent.

Ageing of medical workforces is attributed to various factors. While this may be in line with overall ageing processes in society, it can also be a result of lack of preparation for an ageing society with more health needs. It may also be a result of more or less structural outmigration of younger doctors or a lack of adequate health workforce management and planning, leading to a lack of new young native qualified doctors. This seems, for instance, an outcome in several Central and Eastern European countries and also in Romania.

In Lithuania, older doctors are more likely than younger colleagues to be practising in more remote or rural areas. Their retirement thus leaves gaps. In the Netherlands, for example, remote areas have problems attracting new general practitioners, as their spouses also want or need a job at a suitable level but this is often not available.
Moreover, older doctors in the Netherlands tend to work alone, whereas the current trend is to modernize by means of group practices.

**Gender**

Increasing feminization of the medical workforce is reported by several of the Western countries that participated in the MoHProf project. This is discussed as a consequence of physical and sociocultural norms relating to childbirth and motherhood, as well as changing gender roles (Dubois, McKee and Nolte, 2006). While the share of women working as physicians varies widely across the globe, MoHProf countries with low shares of women physicians have typically seen a steady increase of this share since 2000. Countries with high proportions of women working as doctors have seen little or no change over the period.

Very high proportions of women working as doctors are typically found in Central and Eastern European countries. Very low proportions of female doctors are found in African countries. Cultural factors clearly play a role in the perception of relevant societal roles of men and women. Germany reports that the increase in the share of female physicians is a result not only of more women entering medical education but also of fewer men enrolling. Data from the United Kingdom suggests a slightly different trend for doctors: while the number of male doctors is still on the rise, the increase in the number of female doctors is more significant, thus increasing a gender gap with numbers of female doctors growing faster (GMC, 2011). Data from Morocco identifies an additional problem: as more women enter the medical workforce, there is less flexibility in where they work as many of the women wish to work in the same locations as their husbands’.

### 3.1.2 Nurses: Ageing workforces and wide variety in density

There is fewer data on characteristics of practising, licensed or professionally active nurses than for physicians. Thus, there is little statistical information about ageing of nurses; but long-term care workers, among which are nurses, are ageing across the OECD (Colombo et al., 2011). The median age of registered nurses in the United States is increasing – at 48 years currently (U.S. Department of Health and Human Services/Health Resources and Services Administration, 2010).

One in three nurse registrants in the United Kingdom is at least 50 years of age (Buchan and Seccombe, 2011) and Canadian nurses are ageing more quickly than the population they serve. This trend is ongoing (Dubois, McKee and Nolte, 2006) and is also seen in Africa, including in Angola. Eastern European countries, such as Ukraine, report neglect of both nursing education and the nursing workforce, leading to an aged nursing workforce.
Trends as of 2000 show a wide variety in nursing density, from less than 1 per 1,000 population (in India) to almost 13 (in Ireland). The EU15 countries, together with the United States, follow with lower nursing densities. Some of the sending countries in this study are those with the lowest nursing densities: Egypt, Ghana, India, Morocco, South Africa, and also some European countries, such as Bulgaria and Romania.

3.2 Income, life expectancy and health workers

Additional analyses confirm that GDP per capita and health workforce size are related (Figure 2). Moreover, the available data shows that many of the countries identified as receivers in this project are those with intermediate-sized resources for health. Non-MoHProf Nordic countries and Belgium are among those with the highest number of health workers per capita and have somewhat more human resources for health than expected based on their GDP per capita. Most of the MoHProf countries identified as sending countries – including Angola, Bulgaria, Egypt, Ghana, India, Lithuania, the Philippines, Poland, Romania and South Africa – all have insufficient budgets as well as a lack of human resources for health.

Figure 2: Human resources for health and GDP per capita, 2008: (Practising) doctors and nurses in the OECD plus additional MoHProf countries

Source: GDP, from World Bank national accounts data, and OECD national accounts data files, 2011.
Notes:
- MoHProf countries: Angola, Ghana, Morocco, Egypt, South Africa, Bulgaria, Nigeria, Romania, Philippines, Lithuania, Ukraine, Russian Federation, Canada, France, United Kingdom, the Netherlands, Finland, United States, Germany, Sweden, Ireland, India.
- Density doctors and nurses: see previous figure.
- *Nurses and midwives, latest available year, WHO; **professionally active nurses; ***nurses licensed to practise
- Angola data: doctors only
- Adaptation: MoHProf
3.3 Earnings in health care

Available data on earnings in health care is lacking in many countries. All data available on earnings in the country reports should be regarded as indicative more than as hard evidence, as circumstances may differ widely, just as the variables included backing this data. In addition, in some countries, including Lithuania and Poland, corruption and under-the-table payments are a standard for medical services. Such payments are usually not included in formal earnings estimates.

Earnings for self-employed general practitioners seem higher than for those working for a salary. Both for self-employed and salaried general practitioners, earnings are lowest in absolute terms in the countries that entered the EU after 2004. Similarly, annual income of medical specialists in the post-2004 EU entrants is among the lowest. Formal annual earnings for nurses may depend, first of all, on the question of whether they work full-time, and second on factors such as extra earnings for overtime and irregular hours. Nevertheless, OECD data gives an indication of differences between countries. It is often discussed that nursing salaries are low (for examples, see Colombo et al., 2011), but available data suggests that nursing wages are often comparable to a country’s average wages.

The overall picture varies between countries but, as far as data provides information, the wage levels in most non-OECD countries appear to be much lower than in most OECD countries. Among the worst paid are, for instance, health workers in African countries. Data for Egypt shows that early in his/her career, a doctor may earn as little as USD 50 per month, and a nurse even less. Although data is lacking, major earning differences exist between Angolan doctors in the public sector and those in the private sector, with many doctors working in both. Earnings in the private sector are between USD 2,500 and USD 5,000 per month, which is said to be double what is earned in the public sector. Furthermore, working conditions may also be much better with, among other things, paid lodgings, free collective transport and health insurance.
4. SOME NOTIONS ABOUT THE EUROPEAN DIMENSION

What conclusions can be drawn based on the MoHProf reports about the context of the EU in relation to health worker mobility? Does the data give any information about flows to and from the EU, and what can we say about flows within the EU, before and after the 2004 and subsequent 2007 enlargements? A second perspective relates to relevant regulations that aim to develop level playing fields within the EU.

4.1 Europe in the world: Stocks and flows of health workers

4.1.1 Coming to the EU or to a Member State?

Migrant health workers from non-EU countries do not seem to acknowledge, or even recognize, the “European Union” as an institution, entity or relevant context in their plans. This is reflected in the national reports of countries sending health workers to “Europe”. Reports do not mention the EU as a receiving unit but indicate receiving countries that happen to be a Member State of the EU first. However, data from Egypt identifies the EU as a factor prohibiting outflow of medical professionals to “the West”. This is supported by recent data showing that immigrants to the EU, with comparable skill sets, are disadvantaged as compared with natives with the same skill sets (Dustmann and Frattini, 2011). This outcome is in line with broader European policies, which focus on an internal market and free movement of skills within, but not necessarily to, the EU.

Some European receiving countries (for example, France) explicitly mention the EU context, especially the 2004 and 2007 expansion, as a background for the increased inflow of health workers with foreign qualifications, especially from the EU2. Moreover, the French report points to medical doctors from former French colonies, working in French hospitals. Their education and language strongly resemble that of France, which impacts their decision to migrate there. However, due to their origin outside the EU, these migrants have major problems in getting their qualifications recognized in France. Consequently, these health workers work as associée instead of as accredited medical doctors in French hospitals.

India has had a long relationship with the United Kingdom; however, a combination of policies geared to more self-reliance and the implementation of EU requirements have led to substantial negative effects for Indian medical students wishing to specialize
in the United Kingdom. In April 2006, postgraduate doctors and dentists who had graduated from UK medical schools remained eligible for a category, formerly known as permit-free postgraduate training status, allowing them to complete their medical education, acquire full registration with the General Medical Council (GMC) and attain foundation programme competencies. However, all other doctors in basic education who would previously have been eligible for the postgraduate doctor category were required to get a work permit (now known as Tier 2) under the changed rules. Although this was later revoked for those currently studying in the United Kingdom, based on “legitimate expectations,” it is implemented for new non-EEA students.

4.1.2 Outmigration of health workers from the EU

Along with receiving countries in the EU, Australia, Canada, the United Kingdom and the United States are top destinations for migrants. According to recent data (OECD, 2011d), the ranking of migrant origins in these countries has remained fairly stable since the early 2000s, with substantial importance of Chinese, Indian and Filipino immigrants in all four countries.

Health workers in Australia, the United Kingdom and, to a lesser extent, Italy may come from traditionally important origin countries. Some may work only temporarily and then return. Australia has set specific regulations to facilitate recognition of EU nurses, while the country already has a history of enabling relatively smooth entry of health workers from the United Kingdom. Canada reports high inflows from EU countries, especially from France and the United Kingdom. In 2007, 3 per cent of its foreign registered nurses were Polish by background. Even though quantitative data is lacking, Canada reports that the expansion of the European Internal Market has led to more health workers using work experience in France, Ireland or the United Kingdom as a springboard for working in Canada. Moreover, 20 per cent of all internationally educated health workers come from the EU, with the United Kingdom by far the largest supplier (12%).

While the total number of medical graduates in the United States increased between 1980 and 2007 by 93 per cent, the number of international medical graduates (IMGs) in the United States in the same period increased by 234 per cent. This implies an increase of the share of IMGs from 21 per cent to 25 per cent. Data based on the top 20 countries of origin of international medical graduates suggests that the EU – from a US perspective – is no longer a major supplier of internationally educated health professionals. In 2007, India, Mexico, Pakistan and the Philippines provided most health professionals to the United States. It is important to note, however, that while the number of IMGs from Germany, Italy and Spain decreased substantially between
2007 and 2009 – suggesting returns, retirements and lower levels of entry – the number of IMGs from Ireland and the United Kingdom increased rapidly.

### 4.1.3 Coming from a non-EU country: Bypassing the EU?

Data from the Philippines suggests that Europe, excluding Ireland and the United Kingdom, plays a very limited role in outmigration of Filipino health workers. For a number of reasons, including historical ties and educational similarities, as well as earning potential, other areas of the world are much more in demand among potential Filipino migrants (especially Saudi Arabia, for temporary workers, and the United States, for permanent migration). South African data suggests that the EU may be an attractive location for pursuing medical studies and thus for temporary migration, but Canada and the United States are preferred as destination countries for establishment. The health-care labour market in the United States has, thus far, kept growing and expectation is that there may be a shortage of 100,000 physicians, 1 million nurses and 250,000 public health professionals by 2020.

Such data indicates that in the global competition for qualified health workers, the EU may play only a limited role as a receiver of health workers.

### 4.1.4 Intra-EU migration before and after 2004 and 2007

The European Internal Market enables mobility within the boundaries of the EU and applies to all EU members, although the actual process of granting accession to new members was gradual. After the large initial expansion in 2004 and the second cycle of expansion in 2007, transition periods have been taken into account before workers from new Member States gain free access to the labour markets of other Member States (Table 3). This is done to prevent major shocks to labour markets in the previously established Member States, especially when wage and GDP per capita differences are large between older and newer members.
Table 3: Gradual opening of the internal market to newcomers in the EU

<table>
<thead>
<tr>
<th>Date</th>
<th>EU15 member states</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 2004</td>
<td>Ireland, Sweden, United Kingdom¹</td>
</tr>
<tr>
<td>May 2006</td>
<td>Greece, Spain, Portugal, Finland</td>
</tr>
<tr>
<td>July 2006</td>
<td>Italy</td>
</tr>
<tr>
<td>May 2007</td>
<td>The Netherlands</td>
</tr>
<tr>
<td>November 2007</td>
<td>Luxembourg</td>
</tr>
<tr>
<td>July 2008</td>
<td>France</td>
</tr>
<tr>
<td>May 2009</td>
<td>Belgium, Denmark</td>
</tr>
<tr>
<td>May 2011</td>
<td>Austria,² Germany²</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>EU15 member states</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 2007</td>
<td>Czech Republic,² Estonia, Cyprus, Latvia, Lithuania, Poland, Slovenia, Slovak Republic, Finland, Sweden</td>
</tr>
<tr>
<td>January 2009</td>
<td>Greece, Hungary, Portugal, Spain⁴</td>
</tr>
<tr>
<td>May 2009</td>
<td>Denmark</td>
</tr>
<tr>
<td>Still applying restrictions (November 2011)</td>
<td>Belgium, Germany,⁵ Denmark, France, Ireland, Italy, Luxembourg, Malta, the Netherlands, Austria,⁵ United Kingdom</td>
</tr>
</tbody>
</table>


*Notes:*  
¹ Access with mandatory worker registration.  
² With restrictions also on posting of workers in some sectors.  
³ Still under national law.  
⁴ Restrictions for workers from Romania (from July 2011).  
⁵ With restrictions also on posting of workers in some sectors.

The gradual opening of the internal market also affected the options for health workers from these new Member States to freely seek establishment (and recognition of their qualifications) in other EU countries. For instance, when France opened up its market for Romania, it led to an inflow of Romanian doctors with the purpose of establishing themselves. However, when looking at indicative data (not counting temporary flows), they show, first, that a general inflow (not specified for health workers) was already taking place before the EU expansion and second, that inflows into the EU15 from non-EU27 countries is far more relevant.

Migration streams seem to be targeted to and from specific countries. In Ireland, for example, the rate of foreign nationals doubled as of 2003, especially from the EU10. However, when the crisis hit the country in 2008, as one of the first in the EU27, rates of foreign nationals in Ireland dropped to 20 per cent lower in 2010 than it was in 2008. A similar observation, although to a much lesser extent, can be made about the United Kingdom. In most of the EU15, however, no fundamental changes...
could be observed over the years analysed, which also implies no major outflows: foreign residents stay in the receiving country, partly because opportunities in their countries of origin may also have deteriorated, or may have deteriorated to a greater extent than in the receiving country.

The gradual opening up of the internal market led to outflows from the EU12 to only six of the EU15, especially to Germany and the United Kingdom, followed by Ireland, Italy, Spain (especially to work in the construction sector) and Austria, with 75 per cent of the EU2 movers in Italy and Spain. A substantial share of migrants in Italy is working in its care system (Lamura et al., 2010; Di Santo and Ceruzzi, 2010) and also in the Austrian home-care system. A question, therefore, is to what extent health worker migration within the EU is different from labour migration in general. Generally, migrants from and to the EU15 work less frequently than the resident population in health or households, whereas EU10 recent movers are somewhat more likely to work in the health sector or private households than the resident population. Data from the EU2 and from third-country nationals, however, is staggering. While, of the total residents in the EU2, 0.4 per cent are working in households, 17.5 per cent of recent movers out of the EU2 are working in such situations. Third-country nationals are also very much overrepresented as employees in households. This does suggest selective processes in immigration and work opportunities.

Ireland, France, the United Kingdom and Germany are the main recipients of registered health workers with qualifications from the EU12, while non-MoHProf countries Italy, Portugal and Spain, and MoHProf country Austria (and to a lesser extent Germany) are among the main recipients of non-registered health workers. Thus, it appears that flows of registered health workers from the EU10 were smaller than expected but are much bigger than expected from the EU2. Moreover, flows from unregistered health workers have been substantial but may be underrepresented in official data due to relatively short working shifts abroad.

4.2 Recognition of qualifications

For health professionals qualified as doctor, dentist, nurse, midwife or pharmacist, the process of automatic recognition applies according to Directive 2005/36/EC33. This system, however, is not really automatic everywhere and may, depending on the country of destination, may take considerable time due to administrative hassles, including running a check on personality and qualifications, the “source registry” and other bureaucratic requirements. This process, for instance, require certified copies of documentation, which may be burdensome to acquire. The implementation of the process varies widely across the EU. Austria reports that recognition of qualifications can be arranged within 30 minutes.
For health workers coming from the EU12, a system of acquired rights may apply by which a combination of pre-harmonization of qualifications and years of experience may lead to recognition of the specific qualification. For other health workers whose qualifications are from within the EU, but who are not regulated, a case-by-case approach applies as it does to non-EU doctors, dentists, nurses, midwives and pharmacists.

The Directive only discusses hours of training and not content of training, which leads to frustration in some countries. For instance, medical diplomas acquired in Romania are not considered to be equivalent to those from France, but are to be recognized in France. As a consequence, automatic recognition does not always imply that health workers qualified in one EU Member State can easily practise their profession at the same level in the other. This is also an issue for Ireland, which refuses nurses from Eastern Europe because of an alleged lack of language capabilities. Accessing the local labour market may require additional adjustments to the receiving country’s system, for instance, by means of a licence or proof of language capabilities.

Currently, Directive 2005/36/EC is under review. One of the major ambiguities and discussions relates to the application of language tests: can a professional be recognized when not being able to communicate in the receiving country’s language? These and other complaints about the current Directive led some EU countries to develop additional means to deal with health workers from EU member countries with totally different health cultures and structures, for instance, by means of licensing. The review aims for more proactive communication between regulators about professionals unfit for practice. The current proposals do not discuss the requirement of national governments to empower their regulators to proactively communicate with one another (van Ormondt, 2011). Moreover, such mechanisms will not solve the pending cases of health professionals under investigation of possible misconduct. Revision is also unlikely to solve the necessary delays involved between complaints, formal investigations, verdicts and their translation in the register and subsequent communication.

The Internet-based Internal Market Instrument enables regulators across the EU to communicate more easily with one another and verify qualifications and registration in their own language. Use is voluntary and restricted to key questions in the process of mutual recognition. The system requires trust in “sending registrar” answers. Currently, renewal of the system is under discussion.
4.3 Working time: Impact on the medical workforce

The Working Time Directive (93/104/EC), and its amendment of 2000, harmonizes the working time of employees, in this case salaried health workers, especially salaried doctors. It applies particularly to doctors in training. Full and rapid implementation was considered risky. It was, for instance, calculated that it would require Germany to recruit between 15,000 and 27,000 doctors; the Netherlands, 10,000 additional workers; and the United Kingdom, 1,250 additional staff as well as 10,000 doctors. For this reason, a transition period had to be set.

The Irish MoHProf report suggests that full implementation of the Working Time Directive is in line with previous calculations: it could lead to reduced hours and salaries for doctors, which could motivate them to seek earnings elsewhere. Some of the national MoHProf reports mention the Directive, while others refer to national legislation, probably based on the Working Time Directive. There is, however, no sudden shock in human resources needs, which suggests gradual adaptation. For instance, while Germany reports no direct impact of the Working Time Directive, this may also be caused by the fact that German law has not yet fully implemented it. Furthermore, data from Germany indicates that attempts are made to avoid appropriate recording of working hours of physicians in hospitals and, at the same time, a steady decline in working hours coinciding with early retirements and feminization of the medical workforce – trends that all increase the need for physicians and make it hard to distinguish the Working Time Directive’s impact. Sweden, where most doctors are salaried, reports that the Working Time Directive led to reduced working hours of physicians, combined with several other trends that also had this effect. Subsequently, there was an increased need for health workers, especially dentists.

Lithuania reports a new working-time law equaling weekly working hours to 38 hours, although it is assumed that this, especially for the medical workforce, is mostly theoretical as many Lithuanian physicians reportedly work at more than one medical institution. Imposed working time regulations may drive physicians, such as those in Lithuania and Sweden, to find a second employer for work during the weekend, or to travel to a neighbouring country to do so. In other countries, dual employment, for instance in both the public and private sectors, is taken into account when deciding on the number of working hours. This tendency to work both in the public and private sectors interferes with the content and aim of the Working Time Directive.

A specific issue reported by South Africa is the effect of the European Working Time Directive on English junior doctors, in comparison with those that went to South Africa for a year working as doctor under the Out of Programme Experience.
Some suggest that changes in UK regulations, combined with the implementation of the Working Time Directive, negatively affect learning curves and opportunities for junior doctors because they reduce the number of hands-on working hours.

The above suggests that the implementation of the Working Time Directive seems to have led to creativity in attempts by both health systems and health professionals to avoid its implications in terms of working hours, and subsequently, earnings, especially of physicians. Moreover, the scope of the Working Time Directive appears unable to capture the complexities of health systems and health workers’ opportunities and needs. At the same time, when consequences are felt, they impact junior doctors most.

4.4 Provisional conclusions

Flows of health workers from the EU seem more significant than flows of health workers to the EU. While some of the main non-EU recipient countries also experience outflows to Europe, these are generally much smaller than the inflows. Main sending countries in the EU, at the moment, are France and the United Kingdom, as described by receiving countries. But quantitative data is poor, and still the impression is that overall, the EU is losing more health workers to the “traditional” immigration countries than it is gaining from other countries, in line with a conclusion drawn in an OECD report (2008). Moreover, initial signs after the crisis show that at least Ireland and the United Kingdom are now losing more health professionals to the United States than before. While the internal market provides a framework for health worker mobility within the EU, it is exactly the internal market that reduces inflows from non-EU member countries. This corresponds with the EU development policy that aims to sustain health systems in low- and middle-income countries. However, the EU Blue Card system, targeted at high-skilled labour, could – if means permit – easily become a means to attract wanted health workers from lower- and middle-income countries, as it has in the Netherlands. Thus, a conclusion seems that EU policies hold several potentially contradictory aspects in as far as international health worker mobility is concerned, while being in line with the 2010 WHO Code (WHO, 2010).
5. MANAGING MOBILE HEALTH WORKFORCES

5.1 Education of health workers

Although this report is about health professionals who are already qualified, it is necessary to also briefly explore nursing and medical education. Attractiveness of education systems and enrolment are relevant as they shape the next generation, and could lead to possible over- or undersupply of health professionals – both of which may influence migratory flows.

5.1.1 Nursing

There is not much evidence that those wishing to become nurses seek training abroad. Only Australia reports an increase in the number of international nursing students. However, because of the sheer size of the total health workforce, discussions about nursing education are relevant; a lack of domestic education and subsequent nursing shortages can lead to recruitment abroad, while oversupply can drive those qualified to seek employment abroad.

However, whether it is possible or desirable to recruit nurses from abroad also depends on a country’s attractiveness. For instance, several Eastern European countries, including Bulgaria and Ukraine, suffer from neglect of nursing, including nursing education. This, combined with very low fertility rates, led to quickly shrinking (as well as ageing) nursing pools and shortages, while working conditions do not allow for a decent living as a full-time nurse. These poor economic circumstances prevent these countries from recruiting nurses from abroad. Furthermore, as nursing education is below standard, relative to Western European countries, nurses from some Eastern European countries have difficulties travelling and working abroad as qualified nurses. For those from Ukraine, the additional hurdle of crossing EU borders comes into play. This leaves nurses from these countries who wish to migrate internationally with few options but working under unregulated conditions.

Countries such as the United States, Australia, Canada and the United Kingdom educate an insufficient number of workers to meet labour market needs. However, while the first two still seem in the position to recruit from abroad, the latter two face cutbacks in the health budget. Due to overall spending freezes in the United Kingdom, enrolment in nursing education programs has fallen again, leading to an expected reduction in the supply of new nurses (Buchan and Seccombe, 2011) and increasing
dependency on foreign supply in the future. Australia and the United States are putting in efforts to widen the nursing pipeline, aiming to reduce future dependency on foreign inflows. Sweden does not foresee a rapid return to a fully domestic born, domestic-trained medical workforce. Australia similarly does not expect that efforts are likely to be sufficient for the foreseeable future, among other things, because of the duration of training.

Nursing pipelines, more often than medical pipelines, show structural “leaks”. For instance, in the United Kingdom, some 40 per cent of starting students do not end up in the nursing workforce (Buchan and Seccombe, 2011), and the Netherlands experiences similar degrees of leakage (Tjadens, 2009). Such leaks, including early termination of studies and non-entry into the workforce of fully qualified nurses, impose a cost for society. This is especially the case when qualified workers do not enter the health workforce but instead flow to other sectors, which may be more attractive due to higher earnings and lower workload. Plugging such leaks could, while attractive for increased efficiency, also lead to oversupply.

5.1.2 Medical education: Funding, organization and international students

In many countries, academic education and training are paid for, at least in part, by public means, with additional costs carried by tuition fees. Paying for tuition (and student life) may be paid for by a mix of governmental or private scholarship-like measures as well as private co-payments. In some countries, the applicant has to find a means to pay for tuition. This can result in accumulated substantial debts for students, stimulating self-selective processes by which only the wealthy, or those from a wealthy background, can access medical education.

Countries vary widely in their funding systems for education, in total costs of medical education and in systems for endorsing students. Often there are tensions between supply and demand for entry into educational programmes, especially in medical studies, which are costly and sometimes scarce. Costs may drive countries to limit access. Moreover, a lack of forward planning can limit available places, while at times needed human resources are lacking. All these aspects can lead to caps on entry. Poor collaboration between the education and health ministries may further enhance such lack of effective allocation. How receiving countries deal with tuition fees for foreign students differs highly throughout both the EU and the OECD (Table 4).
Table 4: Tertiary tuition fees across the OECD countries

<table>
<thead>
<tr>
<th>Tuition fee structure</th>
<th>OECD and other G20 countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher fees for international students than for domestic</td>
<td>Australia, Austria,1 Belgium,1,3 Canada, Czech Republic,1,2 Denmark,1,2 Estonia,1 the Netherlands,1</td>
</tr>
<tr>
<td>students</td>
<td>New Zealand,4 Russian Federation, Turkey, United Kingdom,1 United States5</td>
</tr>
<tr>
<td>Same fees</td>
<td>France, Germany, Italy, Japan, Korea, Mexico,6 Spain</td>
</tr>
<tr>
<td>No tuition fees for either international or domestic</td>
<td>Finland, Iceland, Norway, Sweden</td>
</tr>
<tr>
<td>students</td>
<td></td>
</tr>
</tbody>
</table>

Source: OECD, 2011.

Notes:
• 1 For non-EU or non-EEA students.
• 2 No tuition fees for full-time domestic students in public institutions.
• 3 In Belgium (Flanders), different tuition allowed only if institutions reach 2 per cent of students from outside the EEA.
• 4 Except students in advanced research programmes or students from Australia.
• 5 At public institutions, international students pay the same fees as domestic out-of-state students. However since most domestic students are enrolled in-state, international students pay higher tuition fees than most domestic students, in practice. At private universities, the fees are the same for national and international students.
• 6 Some institutions charge higher fees for international students.

Countries implement different means to deal with the need for a differentiated health-care workforce and restricted entry. Applicants may enter based on merit (previous examinations or entry examinations), a lottery, or a combination of the two, while in some cases available funding is a condition. Austrian basic medical education is open to everyone from within the EEA (and attracts many German students), but entry into one of the medical specialist paths is exceptionally difficult. Many countries have caps on entry into medical education. The French explicitly pose questions about their education system and requirements for professional acknowledgement vis-à-vis the requirements in some other EU Member States. Similarly, the Dutch medical students are reportedly going to Belgium to avoid the domestic caps on specific education programmes. Portugal has 1,300 students abroad who are likely to return after training. The Angolan report mentions the lack of quality affordable medical education, driving students to depart the country and seek qualification elsewhere. However, when qualified, they will stay away or, when returning, will be paid at higher levels than domestically trained doctors, not least because patients will also know the difference and tend to favour foreign-trained physicians.

In some countries, private education can play a crucial role. Sometimes the private education sector adds value and inflow but may increase imbalances. For instance, in Portugal, the coexistence of public and private education leads to oversupply; in the Philippines, private education leads to production for the global market and sometimes is of poor quality. Moroccan private nursing education, although of high quality, is not recognized by its public health system, requiring graduates to seek other
employment options, for example, in foreign markets. Exporting graduates can also be a means to raise revenues. In McGill University in Quebec, Canada, there are more graduates than there are annual vacancies for English-speaking physicians and nurses in the province. Quebec has therefore agreed with other provinces to export a large portion of these graduates. Graduate lab technicians received one-way tickets to the United States upon graduation to secure employment.

5.1.3 Health student mobility data and trends

Internationalization of tertiary education is increasing (OECD, 2011a), facilitated, among others, by the Bologna process, the broad international acceptance of the bachelor-master model, and the increase in the use of English as the language of tertiary education.16 Although most receive medical education in their home countries, internationalization does play a role, either in basic or advanced medical studies.

Motives to study abroad can vary widely. In some countries, like the Netherlands, medical students may travel to Belgium, due to scarcity of available places in their home country. Others may go abroad to seek advanced career options or the best options for their education, for instance, by studying at prestigious universities or learning from distinguished scholars. Still, others may seek cheaper options to qualify with equal quality. Within the EU, international mobility of students is actively encouraged, for instance, by European programmes, which stimulate student mobility.17

In some countries, studying and working abroad for those aiming to join the domestic medical workforce is actively encouraged, either formally or informally. Encouragements can include better salaries for those who studied abroad (e.g. in Egypt), better specific job opportunities for those who gained experience or additional education abroad (e.g. in Austria and Ireland), or easier access to the labour market (e.g. Egyptian doctors accessing Gulf States). In such cases, the sending country uses the perspective of training abroad for the enhancement of its own health-care system. The Philippines, too, created such a programme, where those who receive a scholarship for a certain health professional education abroad are required to, after qualification, work two or more years in the Philippine public health system. Several countries (e.g. Ghana and Morocco) provide options for studying abroad, for instance, if a certain specialization is not available or underdeveloped, with the idea that the qualified professional may enhance the sending country’s system upon return. In Morocco, there is a rapidly developing industry of language schools to prepare prospective students to study abroad. Many students (especially for medical professions) thus migrate to Europe (e.g. France and Belgium) or to Canada and the United States. Sometimes such preparations, by means of language learning, are part of the curriculum in secondary education.
The United States is the most desired place for health education, or specialization, and still attracts increasing numbers of international medical students. However, although numbers continue to grow, the rapidly increasing cost of medical education in the United States makes it lose market share in medical education to other countries.\textsuperscript{18}

In 2006, Ireland restricted access to non-EU students (at almost the same time as the United Kingdom). The Irish Government decided to increase inflow options to medical schools for Irish and EU students to the detriment of inflow from non-EU countries. The latter comprised 60 per cent of annual intake of students and were mainly from North America, the Middle East and South-East Asia. The measure was taken at a time when about 18,000 Irish students studied abroad,\textsuperscript{19} mostly in North America.

The high inflow of foreign students, including health students, who avoided caps, led Belgium to introduce a cap on the number of foreign students for its publicly funded university system. Similarly, the Austrian Government introduced admission quotas for tertiary education (70\% for Austrians, 25\% for EU nationals and 5\% for non-EU nationals), as well as an entry examination. However, inflow from abroad into medical universities continues to increase. On the other hand, Australia changed its policies to become more attractive for international health students, as these flows currently shape the third highest import revenue.

Countries with few available options may support students, for instance, when the country does not have all relevant health or medical specialties available, or cannot provide enough training places itself. In such cases, countries may offer their students the same or similar conditions when studying abroad as when studying at home. Others may provide special or conditional grants (OECD, 2011a), implying expected – or even contracted – return after qualification, perhaps even specifying certain subsectors or areas. Some examples reported by the MoHProf teams include the following:

- In 2005, Romania set up a programme for Romanians desiring to study in Western Europe or North America. They can receive scholarships on condition of a return to Romania after graduation and working in public service management positions for a minimum of three to five years.
- Canadian students aiming to gain a position in the US residency programme may apply for medical education in Ireland, as they believe they have a competitive advantage by studying medicine in Ireland.
- Austrian medical students are supported to go to Germany to specialize, knowing that gathering a qualification will take them half as long as it would in Austria. Moreover, the right to practise is given earlier in the process in Germany than in Austria.
• Newly graduated Moroccan students can receive grants when wishing to study abroad, especially when wishing to acquire specialist qualifications, for which there are limited resources in Morocco. Top destinations include Belgium, France, Spain, and, more recently, Italy.
• Other countries encourage specific migratory waves by means of research grants. For instance, the French national profile reports temporary migratory flows of French nationals to, preferably, Canada or the United States. The trip helps these migrants to a higher profile after return.

Some medical students will avoid caps by seeking entry in countries with more opportunities. Some examples are as follows:

• Moroccan students who cannot study in Morocco and do not have funds to study in Western countries can study in Tunisia, which some 3,000 already do.
• Nigerian students are currently studying in Ghana.
• Irish medical students, even at the undergraduate level, apply at foreign universities (e.g. Great Britain or Eastern Europe). However, the major outflows occur when seeking specialist training (as well as foreign experience, which qualifies them for jobs as consultants upon return), as Ireland is too small to organize or teach all relevant medical sub-specialist studies.
• Portuguese medical students (estimated at 1,200) study in the Czech Republic, France, Germany, Hungary, Poland, Slovakia or Spain.
• French students avoid caps on entry by studying in Romania, after options to study in Belgium became less favourable.

Policies for medical professionals show that a key turning point is if they are supposed to bridge basic to specialist education and subsequently specialist education to work, and how. Are foreign or internationally mobile students simply a means for profit that does not require attention afterwards, or should they be seen as potential assets? The United Kingdom, for instance, has recently tightened access of non-EEA students to specialist medical training, while others such as Poland aim to smooth visa processes. At the same time, Australia put in place an enquiry to analyse whether student visas are not used inappropriately, as there are different (easier) language requirements when applying for a student visa than when applying for recognition of qualifications. Moreover, in Australia, migrant health professionals are known to use a student visa to bridge the time (and additional qualifications required) before recognition.
5.1.4 Coordinating the pipelines

The pipeline of education is crucial to sustain health workforces. Entry into education, transition to further qualifications and transfer from education to the labour market are key turning points. However, these transitions are not always smooth. Angola has recently established five new medical schools, but there still are no agreements with hospitals to have students fulfill the required internships. Similar challenges are reported, to a lesser extent, in Ghana. Australia struggles with a health sector that cannot cope with inflow; and the United States has problems with the high number of applications for nursing studies, hence the need to ask applicants from abroad to submit some requirements.

Many countries struggle with these issues and sometimes measures have contradictory effects. For instance, Romania only takes the public sector into account when planning for entry of foreign health professionals into advanced studies, while major shares of health services are provided in the private sector, often by the same professionals. Ukraine’s efforts to plan human resources in the 1990s led to discontinuation of public training; however, this planning also increased options for for-profit private medical training. The net effect was an increase in the number of medical graduates who subsequently went for more profitable professions, thereby counteracting efforts to improve primary care or to reduce expenditure growth. In most countries, the education ministry will be responsible for most of the education of health workers, and goals and approaches may differ from those of the health ministry, while both may be under the supervision of the finance ministry and, in some countries, may share responsibilities with other government bodies. This complex structure leads to overlaps, duplications and loopholes, such as reported by Angola.

Complications may also arise from the coexistence of public and private players, both in the education and health service markets. In Kenya, for instance, a major issue is the lack of coordination between donors (financers of development assistance) and the Government, with human resources in health often dependent on time-constrained project funding. It is also not uncommon in some countries to have separate health systems for public servants, for instance, or for those in the military, although government bodies do not always share information about needs, or even develop joint strategies. This means they may not develop together with the relevant professions. Moreover, hurdles may also appear within systems, when the curriculum, as in Angola, is not geared towards population needs.

Developing trustworthy and reliable prognoses of future needs for health workers is important but very challenging, given the many unknowns, the possible financial consequences, as well as the number of stakeholders involved. The Netherlands
annually reviews trends and policies related to its medical workforce and provides advice to the Minister of Health about required inflows in education. The Ministry then decides on caps on entry, together with the Ministry of Education. Many countries, however, lack such systems and developing them may be both politically and technically challenging. Changes in co-payments, health basket, technologies and population requirements, as well as production modes and changing skill mixes can easily lead to unexpected skill requirements, and subsequently, to over- or undersupply.20

5.2 Receiving countries

5.2.1 Some advantages and disadvantages of shortages and foreign entries

Shortages, especially in the case of countries with an immigrant history, are also used as a means to recruit cheap labour, and to simultaneously keep wages low for competing native workers. The same applies to working conditions. For instance, long-term care native workers do not want to do jobs with such poor working conditions (see also Colombo, Llena Nozal, Mercier and Tjadens, 2011). The same can apply to physicians. In the United Kingdom, explicit reference is made to the high remuneration for physicians, which attracts other EU-trained physicians. Employers note that hiring an EU-trained qualified physician for a junior level’s wage is attractive, but this could ultimately lead to no longer wanting domestically trained doctors as they are “too expensive”.

On the other hand, and especially in the case of self-regulating professions, such as medical doctors, shortages increase the chance of better remuneration and professional options as well as a louder voice in health policy debates. Professions that manage to develop their own curricula are effectively blocking immigration from foreign colleagues even though such new professionals could fill existing gaps in the national system. This can also help them to create better bargaining positions. For instance, shortages of operating theatre assistants in the Netherlands has led many to go freelance, enabling them to enjoy better working conditions and remuneration than as employees whose wages and working conditions are regulated nationwide in the collective labour agreement between employer organizations and trade unions. As “entrepreneurs,” they could negotiate better deals, because hospitals needed to compete to get them. From this perspective, the more a profession “owns” future workforce planning, the higher the chance that the professionals will be better paid.
In this vein, the United Kingdom also reports hospitals paying exuberant wages for foreign-trained doctors – often on locum status – to fill the major existing gaps.

5.2.2 Smoother entry for health workers?

Several receiving countries suggest options to further enhance the process of entry of health workers, among others, through improved professional recognition and/or licensing, introduction of one-stop shops (be it virtual or physical, in one specific location) or adjustment in procedures concerning language requirements. For instance, whereas France previously required foreign-trained health professionals to sit language exams, as of 2010, procedures have changed. Now, candidates simply have to show proof that they have adequate language knowledge.

Smoothing procedures could reduce spillover effects or brain waste, meaning foreign health workers willing to practise in the receiving country are restrained by that country’s regulations. In the United States, 40 per cent of internationally trained health professionals are working below their professional attainment, and in Canada, 44 per cent of the foreign-born care workers are registered nurses in their countries of origin (Bourgeault, 2009). Rough calculations suggest that, globally, hundreds of thousands of health professionals (e.g. physicians and nurses) have migrated but have not been recognized in the receiving country. Many countries, especially those that are historically considered immigration countries, such as Australia, Canada and the United States, and also countries like Lithuania, Poland and Sweden, all report losses of investment in health worker education. This increases the need for foreign workers to fill labour gaps. However, cumbersome bureaucratic procedures slow the process, contributing to professional inactivity and exacerbating the original problem of shortages. For these reasons, Sweden suggests setting up a European referral centre where qualifications can be checked. It might not only speed up the recognition process, but may also act as an incentive for foreign health workers and could lead to increased flows of non-EU health professionals to the EU.

Simplifying procedures can have both advantages and disadvantages. For instance, current procedures are a “keep-out” factor for potential migrants, leading to self-selection where only the ones most likely to succeed (or the most desperate) apply for recognition and where fierce competition takes place, leaving the receiving country to choose. Moreover, those with the best skills are the ones that are often most needed in the sending country and thus deplete that country of relevant skills should they move abroad.
Improving procedures is also likely to increase a country’s attractiveness. Ghana reports that many of its nurses went to the United Kingdom, whereas many of its doctors went to the United States: in both cases, entry was relatively easy. Similarly, the entry of Romania and Bulgaria into the EU led to smooth entry of their health workers elsewhere within the EU, leading to a rapid outflow, especially, of physicians.

Enhancement of entry procedures could, however, limit the actual need for foreign-qualified health workers, as efficient processes could reduce spillover effects in the pipeline for those already in the receiving country. Canada, for instance, introduced fast-track approaches in which nursing licences can be completed in two-year programmes, in order to reduce obstacles.

Smooth entry can also be an option for sending countries to receive returning qualified workers. For instance, one of the recommendations for Ghana is active implementation of integrated approaches, including fast-track procedures for returning health workers so they can more quickly be included in the Ghanaian health system.

5.2.3 Dealing with irregular flows

The OECD recommended the development of more migration arrangements that are directed towards lower-skilled labour migration, including for care workers (OECD, 2009; Colombo et al., 2011). However, this is often a politically sensitive issue. Still, some countries that experienced high inflows from care workers, regularly or irregularly, such as Portugal, Spain, Italy and Austria, took measures in the early or later 2000s to legalize some of the foreign care workers as they had become a major component of these countries’ health and care systems. However, with the current economic downturn, immigration flows are decreasing, in part due to disappearing job options and more strict immigration requirements.

5.3 Sending countries

5.3.1 Flexible approaches

Massive outmigration affects GDP, but it may also alleviate unemployment rates, as reported by Morocco. Structural outmigration of health workers does, however, leave gaps, to an extent that “trust” in the national system – for instance, in Bulgaria – is lost. Countries differ in their approach towards outmigration depending on their situation. For some, it is a major source of remittances. In others, outbound health
worker mobility is engrained in their culture, as in Egypt. India has laws in place that will only grant emigration to some countries when certain conditions to protect the migrant’s rights are in place. Moreover, efforts have been made to streamline the licensing of recruitment agencies as a protection against fraudulent operators. However, as recruitment agencies often work internationally, effective regulation would require a two-sided approach: both in the sending country and in the receiving country, something that is more difficult to achieve. Similar to Ghana, India’s stance is that migration should not be impeded but should be managed effectively to enhance its positive effects on development and to mitigate negative aspects. India’s policy also tends to view migration as something that can reduce unemployment, ease labour market pressures and generate remittances. For some countries, emigration is not permanent and can benefit the workforce of the sending country. For instance, Bulgarian and Polish nurses and physicians tend to migrate on a temporary basis and then return. They do so through locum arrangements, thereby not endangering the domestic system. Ireland reports foreign physicians – both from EU countries, such as Poland, and from South Africa – with similar objectives.

5.3.2 Retention and return

Lithuania’s medical workforce, similar to those in other former Soviet countries, is relatively old, partly as a result of an outflow of doctors after EU entry in 2004. One of the main Lithuanian measures to keep medical workers in the system after it entered the EU was a structured wage increase for medical professionals. Between the second quarter of 2006 and the same quarter in 2009, gross wages increased by 220 per cent (with an even greater increase of net wages). Poland also managed to increase wages for medical workers, as did the Philippines. Changes made in Poland altered mobility patterns. Where previously the focus was on emigration (something which had led to frustrations immediately after EU entry as Polish physicians abroad were often given work well below their levels of qualifications), since these changes, the focus is much more on short-term mobility or circulation.

Several countries adopted measures to discourage health workers from migrating after receiving their qualifications. For instance, Ghana implemented bonding schemes, requiring health workers to serve the country’s health services for a number of years after graduation before leaving the Ghana Health Service. Premature departure then would require the health professional to pay back the costs of education plus interest. The system failed to retain physicians and pharmacists however, as the tuition amounts were relatively low and could be earned back quickly when abroad; this subsequently led to higher repayment rates in 2007. South Africa requires its medical candidates to serve a period in underresourced areas before sitting their final examinations, and
this also applies to those studying in Cuba. Moroccan graduates are required to work seven years in unfavourable areas when paid by the State. This measure, however, does seem to have counter-effective consequences, as it drives many to “flee” the domestic health system.

A recently considered theoretical approach is to tax emigrants (Tosun, 2011). The idea is that these taxes could not only reduce actual emigration but could also be used to improve the domestic situation. However, this approach leads to many additional questions, aside from the question of how to tax those that depart. For instance, remittances shape, to a major extent, returns on investment. One may wonder what would happen with such remittances when taxes are being paid, even though remittances are mostly directed at the informal circuit (i.e. family), whereas taxes would be directed at the formal institutions of a given country. Moreover, how effective such taxes would be in countries where tax systems are not efficient is an issue.

Long-term measures relate to improvement of the health sector in the sending country or the overall quality of life. Ghana, with more than half medical workforce abroad, has adopted several policies to reduce outflows. Ghana and Angola invest in options to enhance domestic qualification. Kenya allows dual employment, both in the public and private sectors, as a means to retain health workers. Many countries, including Bulgaria, Egypt, Lithuania, Morocco, Poland, Portugal, Romania and South Africa, have such dual systems.

Another strategy for sending countries is inducing diaspora health workers to return. Successful approaches include small-scale projects initiated by the diaspora themselves, or projects guided by nongovernmental and government organizations, which imply short-term returns of health workers instead of permanent re-migration. Such projects can range from providing additional teaching to health students in the country of origin to actual clinical work; through these projects, diaspora health workers may also bring in new medical equipment. Lithuania promotes brain gain by encouraging temporary and permanent returns of skilled Lithuanians. Skilled Lithuanian researchers are attracted back from Europe and America to work in education and science institutions in Lithuania. In 2009, the Ministry of Education and Science awarded 250 scholarships to persons of Lithuanian descent to study in their country of origin, and encourages children of Lithuanian descent to learn their native language in secondary school.
5.3.3 Bonding at a distance?

Several countries have put in place mechanisms to stay in touch with the migrants while abroad. India has well-established infrastructure in place. The Philippines is developing such a system. France urgently requests expats to sign up with their consulates. Egypt has professional centres for potential migrants with special courses that aim to keep Egyptians abroad in touch with the Egyptian culture. The Moroccan Government developed a workshop for Moroccan health professionals abroad with the purpose of putting in place a series of lectures they could give in the new university hospitals of Morocco as part of their civic duties. As Moroccan outmigrants do not lose their nationality, they remain Moroccan nationals (also when born abroad to a Moroccan), in some cases leading to issues about dual nationality. Ghana allows its emigrants to acquire double nationality. Other measures include the option of voting while residing abroad and easing access when re-entering Ghana.

5.4 Codes and agreements

5.4.1 Ethical recruitment codes

Codes relating to international recruitment of health workers have been developed over the past 10 years, culminating, in 2010, in the WHO Global Code of Practice on the International Recruitment of Health Personnel. While the Code represents a milestone, its implementation is voluntary, as with other such codes, and would, in some cases, require substantial effort, for instance, from governmental bodies, especially in resource-poor countries. While in the United Kingdom the first code was already introduced in 2001 and adjusted in 2004, it held several drawbacks. For instance, the Code – although in principle applying to the whole country – in practice only applied to the National Health Service (NHS), and was not put into practice in the private health sector. This led the private sector to become an important recruiter of foreign health workers while subsequently becoming a supplier of foreign health workers to the NHS. In the United States, the health sector is mostly private and implementation of the WHO Code would require all private players to adhere to it. For many, though, the Code interferes with free movement, and the right for individuals to seek a future in the United States. Still, the Voluntary Code of Ethical Conduct for the Recruitment of Foreign-Educated Nurses to the United States was created, but it is unclear to what extent this code is implemented or adhered to.
5.4.2 Bilateral agreements

A specific form of polishing mobility – and entry – is by means of bi- or multilateral agreements. The European Internal Market is a key agreement in the EU. But many more such agreements exist. Increasingly, bilateral agreements are promoted as a means to stimulate “brain circulation”. These agreements are typically difficult to manage, while their results may be short-lived as they require full and relatively long-term commitment from both receiving and sending country participants where resources are often already limited. For example, a memorandum of understanding between Poland and the Netherlands in the early 2000s that aimed at brain circulation failed, because at that time Poland had an oversupply of nurses and there was little interest in the nurses’ acquired experience and knowledge from their time in the Netherlands. In other cases, sending countries may simply lack capacity to determine the content of bilateral agreements (Dhillon, Clark and Kapp, 2010).

Examples of bilateral agreements include the following: Australia has a specific arrangement with EU-qualified health workers. Context-specific agreements can also exist within the European Internal Market. For instance, several east German bundesländer have signed agreements with the Austrian Medical Chamber, enabling Austrian medical graduates (many of whom can actually be German nationals) to pursue their further qualification in these east German states, even if the students are preparing for an Austrian examination. These agreements help Austrian graduates start with a more favourable status. Romania, which has been losing health workers since the early 1990s, has signed 11 bilateral agreements since 1990 on labour recruitment, sometimes even at the regional level. For instance, several Italian provinces signed protocols with Romanian provinces to train and recruit nurses. Evaluations of these protocols are, however, unavailable. Ghanaians realize that many of their (nursing) graduates travel abroad and discuss the option of agreements with receiving countries, such as Australia, New Zealand and the United Kingdom.

5.4.3 Impact of codes and bilateral agreements

A key question is whether codes limit personal freedom to move, or whether they simply drive health workers to search for other avenues. Evidence from the MoHProf project suggests that those who are willing to migrate will do so, either to country A or, if that is not possible, to country B. Migrants will search for avenues that involve the lowest personal costs and highest future earnings. As deskilling upon return to the sending country is also possible, this complicates issues of brain drain. Moreover, supportive actions can be viewed with different perspectives. For instance, support by a receiving country to an education institution in a sending country, aimed at
advancing and stimulating domestic supply in that country, can also be perceived as 
an investment by the financing country to “train more for export” from that sending 
country. This is even more relevant as a major question is to what extent the skill set 
gained in a receiving country (for instance, in the context of a bilateral agreement) 
can actually be made productive in a sending country where totally different health 
questions and contexts may apply. For example, a South African nurse working in 
a care facility in London requires a different skill set than when working in a low-
income or rural area in South Africa.

5.5 Economies in turmoil: The impacts of the economic 
crisis

The MoHProf project took shape amid one of the largest global economic shocks 
in history. In the United States, health care has been the fastest-growing sector; in the 
Netherlands, during the past decade, the care and welfare sector has been the biggest 
job creator.

For health workers, two factors influence their opportunities as opposed to other 
migrants. First, their specific skills and competence (when at an internationally 
accepted level) are sought after by countries. Second, they often work in a system that 
is, at least in part, a public responsibility; meaning that countries may first try to avoid 
harsh cuts in the health sector (Tjadens and Colombo, 2011). However, if required, 
a country may restrict immigration of health workers, as has already been done in 
Canada, Hungary, Iceland, Ireland and the United Kingdom (for nurses) (Buchan and 
Black, 2011). Moreover, efforts to restructure health-care expenditures can lead to 
budget freezes or cutbacks. These, in turn, can directly or indirectly result in hiring 
freezes, lack of overtime payment or even measures aimed at substituting expensive 
labour with cheaper labour, thereby reducing the need for health workers and, possibly, 
leading many newly trained into unemployment. In Kenya, subsequent International 
Monetary Fund (IMF) programmes reduced spending on education and health in the 
public sector, leading to hiring freezes between 1994 and 2007; a subsequent IMF 
programme on poverty reduction between 2003 and 2006 resulted in rapid deterioration 
of working conditions of health workers, affecting pay and career opportunities, and 
driving these professionals to join the private sector or to find employment abroad. 
Rapid economic reforms in countries such as Bulgaria, Lithuania and Ukraine all led 
to crashes in their health systems and sharp reductions in health worker densities and 
continued neglect for nursing. Ireland, in 2010, decreased services fees – for instance, 
by 8 per cent for general practitioners – and saw 1,600 jobs lost while not paying for 
overtime.
The self-employed and those working in the private sector may experience different trends. In Canada, fast-track programmes aiming to reduce nursing shortages by providing foreign-qualified nurses easier access to the Canadian system were scrapped due to hiring freezes.

Economic downturn also affects opportunities for education, as education budgets may be endangered. For instance, in the 2000s, the United Kingdom improved education and training of health workers, even though not all improvements were considered adequate for the longer term (Cangiano et al., 2009; Cangiano, Shutes and Spencer, 2009; McHale, 2009). The data suggests that health care is perceived a safe haven in times of crisis, leading to an increase in perceived attractiveness of the sector, but options to enter into nursing education shrink due to budget cuts, while at the same time English and foreign nurses “deregister” to “escape”. The increased attractiveness is in line with the findings from the United States where demand for long-term care workers is much lower in areas of high unemployment than in areas of low unemployment (Wiener et al., 2009).

Cutbacks in education funding are likely to lead to thinner pipelines, and if teaching nurses are paid better in hospitals, they may return to their original jobs instead of working as educators, leading to a further loss of training capacity. Second, as the costs of education may, more than before, fall on parents or require a loan, those losing their jobs and investments may not have the means to pay for their children’s education anymore. Simultaneously, education costs are increasing rapidly and loans to pay for tuition may be harder to get. Increasing costs of education, combined with greater unemployment and financial hardship among families, may drive prospective students with fewer resources to seek less expensive options abroad. However, competing for places abroad may become harder when domestic students are being increasingly favoured over non-domestic students, as in Belgium. Similarly, Ireland and the United Kingdom restricted access to medical studies for non-EEA citizens. Furthermore, in some countries, the private costs of education – in terms of co-payments or loans – are likely to increase, as education costs are increasing and fewer resources are available. This could well imply a slowdown in the internationalization of tertiary education, which, at least, for the moment, has not yet been observed (OECD, 2011a). For sending countries, different dynamics apply. The Philippines, as a consequence of the global economic downturn, is now facing overproduction of nurses.

Moreover, economic downturn is likely to affect foreign health workers more than domestic health workers. This may be because migrant workers are expected to “make way” for domestic workers, or because migrants tend to be working in more precarious positions or ones that are first hit by cutbacks. Fast-track or supportive programmes may be halted or cancelled. It may affect those already working in the
receiving country, driving foreign health workers to depart, either to move to another
country or to return home. Angola and Ghana report that the crisis in Europe has led
health workers to return. If options are limited in the country of origin, migrants can
feel compelled to seek employment in third countries where options are still available.
For instance, Australia, less affected by the crisis than the EU, reports new immigration
processes, with highly skilled medical specialists now entering the country.

5.6 Health workforce management in a post-crisis era

It is clear that economic patterns change options for health workers to practise. In
literature concerning resources for health, however, there is no discussion
about financial sustainability as a driver for and background of health workforce
management. Even when discussing future needs for human resources in health care,
key drivers are often seen as population development and technological mega-trends,
while institutional change, although included, is seen only as a means for health-care
enhancement (Dubois, McKee and Nolte, 2006; Dussault et al., 2010) and not as a
potential disruption. In the current economic climate, however, short-term concerns
in many countries are much more likely to affect health workforces than long-term
concerns.

5.7 Rural and remote areas: An old challenge for a new
century

A recurrent issue throughout the MoHProf project is the skewed regional
distribution of health workers. In 2008, the European Commission (2008) wrote:
“Free movement of students and workers helps to ensure that health professionals
go where they are most needed.” However, the previous chapters shed light on the
fact that this statement must be seriously questioned. The latest expansion of the EU
(2007) led many physicians to depart from where they may have been needed most
(for instance, in Bulgaria and Romania) to where they can earn a better living, whether
within a country or in another country. But free movement of health professionals,
either within borders or across them, has global implications. First of all, students are
attracted to cities where educational facilities exist. As a result, many will tend to stay
in these urban areas or move to “even more promising” areas or sectors following
qualification. This implies a loss of health services in rural areas. Furthermore, due
to the sometimes high private costs of medical education, health students are more
likely to be from more wealthy, urban families and will therefore, when qualified,
tend to stay where they were raised and trained and where there is a population that
can afford their services. Thus, as in Ghana, rural populations not only have least access to further education but are also least likely to welcome qualified health workers. Considerations of health workers about the needs of their families may also be factored into the decision-making process. Since urban areas are generally better able to provide opportunities for migrants’ spouses and children, they may be chosen over more remote locations. While this trend is not new (Pong, Buske and Nagarajan, 2006), the speed of urbanization increases, while remote populations continue to shrink and age. Moreover, the tendency for health workers to move to cities leads to health resources in rural areas being “behind the times”.

Several countries apply targeted policies to tackle these issues, often involving periods of duty in rural, underserved areas. For instance, Morocco’s policy is a seven-year mandatory “tour of duty” for some graduated doctors. However, this drives doctors to migrate abroad to avoid this obligation. Ghanaian medical graduates saw their education extended with an additional year of “housemanship,” during which they are expected to work in a regional or district health facility. South Africa put in place several policies attempting to deal with scarcity of health professionals in more rural and remote areas, such as an occupation-specific dispensation implemented in 2010, and a scarce skills allowance and a rural allowance, introduced in 1999. In the United States, where students often need to take out a loan to study, the option of loan forgiveness exists if the person in question fulfills a specified term in a certain context or profession. France implemented two types of grants. There is financial support for medical students who want to carry out their general medicine internships in shortage regions. Moreover, certain regions – such as Burgundy – reimburse a percentage of the accommodation and travel expenses of these students. Such grants can also be designed to ensure that trainee physicians end up practising in a particular region. Students can receive up to EUR 24,000, on condition that they practise in a region in which there is a deficit of health-care professionals for a period of up to six years.

In addition, there seem to be some promising approaches to both physical and virtual outreach, the latter by means of ICT and e-health, and even more by the so-called “m-health” (via mobile phones) (Roodenbeke et al., 2011). One such approach could include developing medical and nursing education and training in rural areas (or partly provide it, through e-learning). This could not only encourage students to go (or even stay) and subsequently work there, but could also play a role in revitalizing rural areas. In the north-west of France, Lille University has started collaboration with hospitals in its area to do just this. Students devote part of their time to work in the “periphery” of the university hospital. Similar efforts are reported in Canada (OECD, 2008).
5.8 Nurses’ mobility: Wider focus required

As the results from several countries show, combined with other research (OECD, 2005; Colombo and Fujisawa, 2009; Colombo et al., 2011), outmigration of nurses is likely to lead them to accepting nurse-auxiliary jobs in the receiving country or other irregular and more irregular working situations (Lamura et al., 2010; OECD, 2010; Di Santo and Ceruzzi, 2010). Several of the MoHProf country reports discuss the fact that irregular migration may occur, as do illegal working conditions and circumstances. A major source country for irregular migrants or migrants working in illegal situations in Europe is Ukraine. Irregular employment is not uncommon, especially for nurses.

Thus, it is recommended that discussions on mobility of health and care workers take a wider approach and seek information about non-formal migratory pathways and their consequences, including trafficking and trade of women. Not only is this issue relevant in itself, it is also assumed that nursing professionals and nursing assistants (almost all women) wishing to migrate are more prone to find themselves in undesired situations than other health professionals. This issue could easily gain importance due to quickly deteriorating economic circumstances, both in sending and receiving countries. These lead to bigger pushes and shrink formal pulls, with the potential effect of driving many more care workers to pursue non-legal pathways into care provision or other circumstances abroad.
6. CONCLUSIONS, CHALLENGES AND RECOMMENDATIONS

6.1 Introduction

The MoHProf project gathered and compiled data about health systems, health workforces and mobility of health workers from 25 countries in four continents using both quantitative and qualitative methods. Sampling of countries was based on high absolute figures or high rates of foreign or expatriated health professionals in the health systems of mainly receiving or mainly source countries, respectively.

The MoHProf project team analysed the current situation, trends and developments in international migration of health workers in these 25 countries around the world with a focus on migration within, to and from the EU. The following recommendations are based on the main research findings. The research activities (mainly based on available data, context analysis and qualitative research at the macro and micro levels) carried out under the umbrella of the MoHProf project were considered in making the following conclusions and recommendations.

6.2 Conclusions and challenges

6.2.1 An interplay of factors jointly leading to international mobility

Migration of health professionals occurs for multiple reasons, including relatively low wages, poor working conditions and lack of further professional development opportunities in countries of origin, and growing demand for health professionals in developed countries, as a result of accelerating demographic changes in combination with inadequate domestic health workforce planning.

6.2.2 Health worker mobility: Paths and consequences

Doctors and nurses follow different mobility paths. The former will travel for further qualification and establishment and career options, while the latter, especially in Europe, are more likely to travel for mainly economic reasons. Moreover, for different specialist doctors, various mobility patterns can appear.
6.2.3 Multiple international effects of national policies

Policy actions implemented in one country can have major effects in another; thus, the supranational impacts of workforce-related policies and programmes applied at the national or even regional level have to be taken into consideration.

Several systems for fast-tracking recognition procedures exist, including within the European internal market. Such systems aim to limit personal frustration for migrants and increase their productivity in the destination country’s health system. A rough estimate is that fast-tracking could, on a global scale, limit the global shortage of health professionals by hundreds of thousands of workers. However, such policies, while attractive, can have the side effect that the transaction costs for migration decrease. Thus, the net effect may be that migration increases, leading to more outflow from countries with already substantial shortages. This was experienced by Romania and Bulgaria after their EU entry. These policies can also increase global competition between domestic and foreign workers and affect patient safety as language and culture may impact health provision in receiving countries, while shortages due to emigration affect patient safety in source countries. Thus, the development of workforce-management policies and strategies that are connected to mobility should take such potential side effects into account. Specific attention to health workers is required because, more often than not, they are trained by a public system (or trained with at least partly public funding) and serving the public.

6.2.4 Uncertainties about future health worker mobility

Health workers seek opportunities that match their skills, qualifications, personal and social context, and need for earnings. If such opportunities cannot be found in their own health systems, regions or countries, some of the workers are likely to seek them elsewhere. For this reason, health worker mobility will continue in the near future.

The structural differences between most of the sending countries reviewed in this project and the receiving countries are significant and consistent over time. This suggests that even without any programme targeting active recruitment of foreign health workers, the drivers of health worker migration will, ceteris paribus, lead to continuing structural flows. Currently, however, attractiveness to migrate to and opportunities for migrant health workers in many receiving countries are shrinking, due to the economic crisis, to an extent that some previously receiving countries (including Ireland and the United Kingdom) are now rapidly changing to become sending countries, while previously sending countries are now overproducing health workers, for which there is little demand on the global market.
Especially in receiving countries, ageing health workforces draw attention to the lack of strategic preparation for this upcoming extensive replacement need. Efforts towards adequate health workforce supply may need to be intensified. First, replacements are required for retiring baby boomers. Second, growth is required due to ageing populations. Third, there are signs that, especially in Western countries, younger generations of medical and nursing professionals tend to desire different work–life balances as compared with older workers.

Not accommodating these and other trends by means of strategic thinking and planning could well increase global competition for scarce health human resources. This may intensify especially when countries under economic pressures cut back on education of health workers, contributing to future shortages.

The ageing of health workforces is seen both in Europe and in countries like Canada, Japan, and the United States. In the United States, the sheer size of its medical workforce means demographic changes there present challenges to not only the country itself but also the EU and the world as a whole. The United States is a major receiving country of health workers, and data suggests that, ceteris paribus, demand for medical workers is likely to soar. Recent measures in the United States to improve the pipeline of education and training of health workers may not be able to meet the required replacements and growth. Challenges are amplified by the dynamics related to the rapid increase in the costs of medical tuition, which is likely to translate into further unequal distribution across regions and professions. It is more than likely that, as long as it is economically feasible, the United States will continue to recruit high numbers of health workers from abroad and the same applies to the Gulf region. This may well lead to outflows from the EU. Within the EU, flows, although currently slowing down, may tend to become more diverse. For instance, health workers may migrate not only East–West but also South–North, as the euro crisis is impacting most heavily in the southern European countries.

6.2.5 Conclusions relating to the European context

Conclusions relating to the European context, and especially the EU context, include:

- Health worker mobility in the EU takes place especially from the EU12 to some of the EU15; but for health workers who register in the destination country, different pathways apply compared with those who do not. There are more opportunities for physicians than for nurses.
• Health worker mobility to the EU has a tendency to follow historical colonial ties, likely due to linguistic and cultural connections. However, implementation of the EU legislation and changing economic conditions are affecting these flows.
• EU expansion in 2004 did not lead to overall massive outflows of health professionals from the newer Member States to the EU15. However, the entry of Bulgaria and Romania in 2007 led to critical shortages in these countries – in particular, of medical doctors due to their outmigration – thus endangering the sustainability of the respective health systems.
• It appears that the EU may be bypassed by third-country nationals who face difficulties accessing the EU due to its internal market system, and/or prefer the United States or Canada.
• It is unlikely that the EU will be able to attract health workers from outside the EEA, as Directive 2005/36/EC restricts access of non-EEA health workers. Moreover, countries, with their full implementation of the WHO Code or their cutbacks due to economic changes, may restrict opportunities for foreign health workers.
• The Working Time Directive is most relevant for the medical workforce in Europe, especially for employees and those doing internships and not for those who are self-employed. The Directive led to creativity of governments, employers and health workers, and mainly affects the position of junior physicians. At the same time, the scope of the Directive fails in its intentions as it does not deal with the complexities of varying working contexts, for instance, of medical health workers.
• Resource poor and rural or remote areas feel the greatest consequences of the internal market for health workers. As these are also the areas where the ageing process progresses more swiftly – due to outflow of youngsters – the needs in these areas are highest. Health workers in these areas often retire without replacement. As a consequence, special efforts are required to develop and maintain cost-effective infrastructure, skill mixes and services in rural and remote areas.
• While some health workers move abroad out of desire, most health workers do so out of perceived necessity. While relevant wages to earn a living are important, other factors, such as improvements in health systems, including working conditions, context and management, are important to retain health workers.
• Competition (between countries, regions, sectors, and public and private employers) on the market for health human resources is increasing, and long-term strategies are needed on a global market.
• Data and information on stock, flows and trends of health workers at national EU and global levels are limited, difficult to compare and currently insufficient for long-term strategic planning.
• Source countries (inside and outside the EU) lose significant investments in health worker education, not only due to outmigration of health workers but also due to competition with other economic sectors within these countries that may be more attractive or accessible. Tightening immigration as a consequence of the economic downturn leads to fewer opportunities for health workers abroad. This may drive migrants who are already abroad to return. However, resources in origin countries may be limited and competition for jobs stiff.

6.3 Recommendations

The following recommendations were developed by the MoHProf consortium and were discussed during a European conference in early December 2011. The draft recommendations were subsequently made available for comment on the MoHProf website: www.mohprof.eu.

6.3.1 Fundamental need: Self-sustainable health systems

There is a general need for countries to become more self-sustainable in their health systems and human resources for health. Policies addressing self-sustainability and strategies need to be formulated and implemented in order to reduce unequal distribution of the health workforce.

This does not imply that the freedom of individuals to move between countries should be restricted, but the mobility of health professionals between source and receiving countries should become mutually beneficial for both systems as well as for migrants themselves. This can be achieved through managed migration policies, meaningful human resource management policies at the (sub-)country level, better information sharing through monitoring and tracking systems, and further research, inter alia, on the effectiveness of human resources for health management strategies.

For sending countries, this implies, inter alia, increased and better training opportunities for nurses and physicians, and also for qualified health workers; increased salaries and secondary benefits – especially in the public sector, including reduction of workloads; improved worker safety; and better integration of returning migrant health workers. In general, in many low-income countries, tackling corruption in health education and health systems should be high on the agenda.
Motivating educated nurses and medical doctors working outside their fields to return to working in the health care sector is a less costly approach to increase health-care workforces than educating new health professionals. Related policy changes are needed by addressing issues like workplace stress, job design, flexibility of working times, staffing levels and management. This could also include reduction of administrative and documentation workloads of medical staff in favour of more clinical work, which will make the profession more attractive and lead to a better use of resources (see also Simoens, Villeneuve and Hurst, 2005).

6.3.2 General strategic planning at the EU and country levels

Encouraging EU Member States to articulate policy targets for self-sufficiency of their health workforces is vital to address human resources for health needs of the future.

For the time being, those countries that rely on a foreign-trained workforce have agreed to abide by the WHO Code, and to apply appropriate strategies to integrate foreign-trained health workers into the receiving workforce and receiving society and aim at fast-tracking acknowledgement of certificates. One such strategy could be the development of an EU-wide portal (linked to health workforce monitoring bodies) for comparing non-EU qualifications, enabling registrars to verify qualifications.

As health and care needs across the EU are changing, strategic rethinking of health and care systems is required to be able to meet changing demands, in particular, in a post-crisis period. Such a rethink should include health and care literacy, widespread implementation of self-management tools and techniques, including ICT, new job descriptions and responsibilities of health professionals, and substantial support to both family caregivers and volunteers as well as to those unlicensed care workers that may be providing services on a 24/7 basis.

EU Member States need to adjust education and training to the current and forthcoming health-care labour market needs. For most countries, this implies that they have to prepare to increase the number of domestically trained health workers. This may also require reducing the number of dropouts in education, especially nursing education. Furthermore, better retention strategies are required to keep health workers in the health system.
6.3.3 Monitoring and managing health workforces

There is an urgent need to improve the monitoring of health workforces, among others, as a prerequisite for informed management of migration flows of health workers. For this reason, it is recommended that a centralized EU-wide data and information collection system be established. This coincides with the conclusions of the Green Paper on the European Workforce for Health, the Council Conclusions on investing in Europe’s health workforce of tomorrow (Council of the EU, 7 December 2010) and an OECD/WHO communication (OECD and WHO, 2010).

This recommendation has already been expressed for a long time by researchers and policymakers at the national and international levels. However, so far, efforts towards improvements and harmonization of data and information to support decision-making about workforce planning are developing only slowly. This leads to the conclusion that there is a need for stronger support and coordination at the EU level and for further investments in monitoring and management of mobility of health workers to, from and within Europe. Such monitoring should also be supported by information on actual current and future needs and demands. This requires reliable data and information. Among other things, this will require the following tasks:

- Develop common key indicators on stocks, flows and trends in collaboration with other international bodies that are involved in monitoring the migration of health professionals.
- Increase compatibility of definitions of health professionals, migrants, migratory processes and the like, in order to increase the comparability of data and information.
- Set up guidelines for data and information collection at the national level.
- Collect, analyse and report clear and specific quantitative data to be complemented with qualitative information on the following:
  - Stock of health professionals according to profession, specialization (differentiating between nationality, country of birth, country of original health professional training and country of additional health professional training);
  - Short-term or long-term migration of health workers to, within and from the EU;
  - Internal flows, including mobility between subsectors of the health system as well as to other sectors;
  - Different types of mobility, such as short-, mid- and long-term, temporary, circular and return migration, weekend shifts abroad, and dual or multiple employment.
• Collect, analyse and report information about health professional education and training, and compare the supply of education/training with demand on the labour markets in order to adjust education and training to the current and forthcoming labour market needs.
• Improve dialogue, data quality and sharing of information (in particular, registration bodies) between source and receiving countries and build links with other source and receiving counties outside the EU.
• Develop policy options and recommendations for action at the global, EU, country and regional levels.
• Publish and disseminate examples of good practices in workforce policy, strategies and planning related to health professionals.
• Analyse the effectiveness of specific workforce management strategies.
• Develop and adapt common guidelines for recognition of licences from non-EU countries, facilitate recognition of licences and establish training-equivalency recognition.
• Contribute to the development of strategic plans to address health-worker shortages in the EU Member States.
• Formulate priorities for further research on the mobility of health workers and health workforce management.

6.3.4 Assisting countries to build and maintain sustainable health systems

One of the key findings of the project is that free movement of health workers within countries, within the EU and around the globe is likely to deplete underresourced areas of their health workers. Furthermore, it coincides with, and may in fact stimulate, wider flows of health workers to urban areas. Moreover, mobility of health workers is a global phenomenon; it is also clear that no easy solutions are available.

This leads to challenges relating to health workforce management that need to be reflected in wider European policies. Among these are Commission policy areas, such as those of Development and Cooperation, Employment, Social Affairs and Inclusion, Enterprise and Industry, Health and Consumers, Internal Market and Services as well as Education and Culture, and Economic and Financial Affairs. Preferably, a horizontal approach by and between these and other EU institutions is required to achieve the goals mentioned.

The importance of international cooperation to address the global shortage of health workers should, in particular, be reflected and incorporated in EU development
and cooperation strategic planning. The Directorate General for Development and Cooperation (EuropeAid) has a clear case of supporting health systems in low- and middle-income countries. Financial and policy assistance for global health workforce capacity development need to be taken into account when agreements with low- and middle-income countries are negotiated.

The EU, and in particular the main destination countries of non-EU trained health workers, should invest in strengthening health systems and health-care strategies in source countries. These investments should focus primarily on innovative workforce approaches, health workforce training, retention policies, health systems and information improvements, and address health-care needs in rural areas. Where international cooperation is required, issues relate to supporting frail states, defending human rights of health professionals and their personal health, and fighting corruption in health systems.

EU Member States need to learn from each other’s experiences and those gained in third countries in building and maintaining sustainable health systems and related workforces. The work of the OECD, for example, is of great value. However, the EU has a wide array of instruments available to enhance such exchange of knowledge and experiences which can be used beyond “mere” data gathering and monitoring. Moreover, EU instruments have been and are used to assist new members and neighbouring countries to implement and discuss consequences of EU policies. These instruments could also be used for a wider exchange and development of knowledge.

Overall, it is urgently required for the EU to stimulate, facilitate, evaluate and endorse cost and quality effective workforce management strategies related to its Member States. This would require identifying, publishing and disseminating examples of good practices and cost effectiveness in workforce policy, strategies and planning, including health workforce management. Such examples could include issues, such as:

- Innovative use of recruitment pools and re-recruiting;
- Professional education and skill mixes;
- Leakages between health education and employment in the health sector;
- Productivity versus quality of health-care delivery;
- Retention strategies (including workplace stress management policies, age-related worker policies, worker-oriented management and patient-oriented organization, e-health, task shifting and work–life balance);
- Integration of foreign-trained health workers into the health sector.
Furthermore, a number of initiatives – such as the ones below – should be taken at the EU level:

- Regulate rights and duties of international recruiters of health workers to protect workers and hold employers accountable for not using regulated recruiters;
- Work towards an EU knowledge base of third-country qualifications or certificates;
- Develop common guidelines for recognition of licences from non-EU countries, facilitate recognition of licences and establish training-equivalency recognition;
- Analyse options to improve efficiency of investigation on misconduct of medical professionals while protecting the basic human rights of those health professionals under investigation;
- Encourage Member States to develop policies geared towards prevention of parallel grey markets in health care;
- Investigate options to improve competitiveness of health care sectors, in what is expected to be an increasingly fierce competitive global market for health workers.

6.3.5 Strategies for third countries: The case of African sending countries

There is a need to make health worker mobility beneficial for both receiving and sending countries. This can be achieved through managed migration policies, evidence-based and coordinated country human resource management policies, and better information sharing between source and destination countries through monitoring and tracking systems and further research. Multilateral agreements between countries should be further developed and evaluated.

**Improve work conditions for health workers in sending countries**

For all African sending countries covered in the MoHProf research, it was found that they face a shortage of health professionals – the degree differing somewhat per country. To reduce this shortage, all countries mentioned that it would be necessary to improve the working conditions of health professionals. Study results indicate that by tackling the major disadvantages health professionals in sending countries face – for example, heavy workloads, inadequate supplies of medicine and equipment, risk of occupational exposure to diseases such as HIV and tuberculosis, and low and/or delayed salaries – more health professionals would consider staying and working in their countries of origin. Improved working conditions have to be focused mainly on
the public health sector, as study results indicate that many health professionals in Africa’s sending countries tend to prefer working in the private sector due to better working conditions than in the public sector. This tendency is problematic as, due to financial constraints, the majority of the population in the researched countries has to rely on health care provided by the public sector.

*Improve education of health professionals*

Particularly in Angola, Ghana and Egypt, there is a need for improvement of the education of health professionals, not only regarding the quality of training but also quantity. There is a need for more universities and training institutes, particularly in rural areas. Accordingly, governments should allocate enough budgetary resources for the education and training of health professionals. This budget should include resources to provide students with a sufficient number of scholarships to study both within the country and abroad.

*Improve health-care provision in rural areas*

In the African countries included in the MoHProf project, rural areas faced the most severe shortages of health professionals and health facilities. Furthermore, rural areas often have higher poverty levels, and, consequently, may have greater disease burdens. Financial resources to afford adequate health care – which, as previously mentioned, can often only be provided by the private sector – are practically non-existent. More and better-equipped public health-care facilities and a greater number of quality trained health professionals are needed to face this challenge. Existing incentive packages to encourage health professionals to accept postings to rural instead of urban areas do not appear to be working. This is because the advantages to be gained from staying in urban areas far outweigh the rural incentive package.

*Ensure timely and smooth reintegration of returning health professionals*

Particularly in Angola, Egypt and Ghana, it was mentioned that returning health professionals often face a number of problems when trying to reintegrate into their home countries’ health systems. It was reported that, particularly in Ghana and Angola, returning migrant health professionals often feel discriminated against, which is reflected in low remunerations and positions, as well as delayed promotions of returning health professionals.
Address health-care provision shortages through advance bilateral agreements

Bilateral agreements were mentioned as one possible approach to tackle the shortages in health-care provision in the researched African countries for reasons such as these:

- Bilateral agreements can help to improve health care in rural areas. For example, a bilateral agreement between the United Kingdom and South Africa was reported as a successful example in this regard. British doctors would gain important skills and competencies during their time in South Africa, which would assist them in fulfilling a number of requirements for their specialty training, while South Africa received a consistent inflow of suitably trained, highly professional junior doctors to fill vacant posts in rural and underresourced hospitals.

- Bilateral agreements can also work the other way around, by sending health-care professionals from a low-income or very-low-income country to a high-income country for a certain amount of time. The receiving country will benefit from the bilateral agreement, as incoming workers will reduce shortages in the health care sector, at least temporarily. The sending country will benefit, as the skills and expertise of its health personnel will improve. By limiting the length of stay of the health professionals in the receiving country, sending countries can make sure that the acquired skills are indeed transferred back.

Establish close monitoring of intra- and international migration flows of health professionals

At the national level, resources should be allocated for creating a reliable and comprehensive national database on health professionals. This would enable governments to effectively assess and address the impact of the mobility of health professionals on the country’s health system. Such a database is currently missing for all African countries included in the MoHPProf project. Exact numbers are needed regarding return migration rates, emigration rates, information on destination countries and in which facilities diaspora members in the health field are working, and remittances – segmented by profession, gender and age. This data could also facilitate close cooperation and transfer of information between health-care facilities in sending and receiving countries. Highly skilled health-care professionals residing in destination countries could, for example, be contacted and involved in the transfer of skills to their respective origin countries, for instance, by providing training programmes for fellow health professionals.
6.3.6 Wider areas of research and innovation

Further analyses of short-, medium- and long-term consequences of and factors contributing to mobility of health professionals are urgently needed at the national and global levels. Such analyses should concern the individual migrant, the social networks (for example, remittances and social costs), and the health systems and economies of the source and receiving countries. Furthermore, sound research on the effectiveness and consequences of health workforce management approaches is needed.

The WHO Code of Practice on the International Recruitment of Health Personnel and other instruments

The WHO Code is a positive step towards the management of health worker migration. However, concerns exist regarding its implementation, especially because the Code does not clearly define the institutions that will be responsible for its implementation. Several factors are recommended for the WHO Code to become effective:

- The Code implementation should be a joint responsibility of the different ministries within governments, particularly involving ministries of health, labour, development and finance.
- Civil society and professional/licensing bodies should also be invited to become involved in the process.
- A system of periodic reporting on the implementation status of the Code by the Member States should be introduced.
- Core indicators should be developed to monitor progress in the implementation of the Code, including regular reporting on these indicators. These indicators should be based on a minimum dataset that each country should be encouraged to adopt and maintain. WHO could play an important role in harmonizing these indicators across different countries.

Policies and health systems

- Conduct further research on the global market of health workers to improve understanding of global developments and move beyond purely national strategies. This will contribute to better responses and management of national and local human resources for health.
- Examine implications of the financial crisis on health worker mobility and health-care systems at the regional, national and EU levels. Analyses should look at workload and burden, career opportunities, health education, wages and working conditions, health management, and system innovation vis-à-vis ageing European societies.
• Assess the impact of international agreements, codes of practice and other health workforce management strategies (such as twinning, bilateral agreements, etc.) on health worker migration and their effects on health systems.

• Analyse how different forms of health worker migration impact patient safety in both origin and receiving countries. This should include analyses of various orientation methods provided to health workers when they start working with the health system in a destination country.

• Analyse the issue of nurse migration from wider perspectives, including within the context of female migration in general and the grey market for home care. Analyses should address the impact of legislation on social home-care services and protection of the rights of migrants.

• Analyse the impact of changing population demographics on health workforce requirements.

• Analyse the impact of the Internet as a recruitment tool and develop good practices.

• Identify the costs and benefits of health worker migration, including financial costs, social costs and returns.

Migrant health workers

• Conduct qualitative research on emigrating populations, including their general profiles, motives, career plans, intentions regarding temporary or permanent stay, relevance of family bonds and other social factors in relation to economic factors.

• Analyse channels of foreign-trained health workers entering the systems and, in particular, the role of recruitment agencies.

• Track health graduates from education to employment and deployment, including those receiving bursaries (from destination countries).

• Trace career path of migrant health workers to better understand conditions for: (a) remaining in the health care field; (b) working in a different sector; and (c) entering into illegal labour arrangements.

• Analyse experiences of emigrated health workers from different types of source countries. For instance, expectations and realities in areas such as job satisfaction, career development, social and workplace integration or discrimination, working conditions and secondary benefits.
ENDNOTES

2. Some others being PROMeTHEUS and RN4CAST.
3. Where possible, this report provides historic data to show how trends develop, but tends to focus on events and developments since 1990. The report aims to provide an up-to-date picture of factors that influence flows as they are currently experienced in and by countries participating in the MoHProf project. However, data provided by some countries or by international data sources, at the time of writing, was still unaffected by the global downturn and increasing insecurities. Thus, some data and notions reported may already be outdated. Where possible, this was taken into account by comments.
4. Some people can – due to different legislative contexts – hold multiple nationalities and passports.
5. Source: Eurostat/OECD/UNESCO.
6. “Ease of arrangements” refers to the fact that “natural” preference may not coincide with the actual decision to migrate. For instance, Indian nurses clearly prefer working in the United States, but they often go to the Gulf States. The reason behind this is that, inter alia, “costs” of migrating to the Gulf States are lower, due to relative ease of the migratory process and facilitation provided by recruiting agencies.
7. This is not limited to health workers. See, for instance, Kahanec, Myunghee Kim and Zimmermann, 2011.
8. For nurses in some countries, it is exactly the opposite. The crucial distinction here is where options are best: in some countries this will be the private health sector, but for nurses in England, for instance, options are best in the public sector.
10. This is before the economic crisis hit Spain.
11. Authors fully acknowledge that national reports and realities provide many more details on specific health professions. The reader is referred to these national reports for such specifics.
12. Not all MoHProf countries have information about practising doctors. The closest indicators available then are those professionally active and those licensed to practise. These indicators are less accurate and imply higher numbers as compared with the indicator “practising doctors”.

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13. These can include registered nurses, licensed practice nurses or other professional titles.

14. In this context, the high density coincides with high shares of foreign nurses. In fact, Ireland, alongside the United Kingdom, is most reliant on foreign nurses in the EU (Maier et al., 2011).

15. Recent data from source countries like Ireland and the United Kingdom suggests that economic deterioration leads to rapid increases in outflows from these countries to Canada, Australia (New Zealand) and the United States.

16. One should be wary though about continuance of this growth. Especially in Europe, economic circumstances are changing rapidly with possible consequences for further growth of internationalization of (medical) education.

17. International data sources are, unfortunately, not capable to provide more specific data than the wide category “health” studies, neither are they capable to distinguish all these kinds of mobility that can last from student cross-border commuting, via a few weeks to several years.

18. As, increasingly, the United States’ population is also Spanish-speaking due to past and recent immigration, there are few language barriers. Moreover, it may provide students with fewer resources the option to study.

19. There were almost 35,000 non-Irish students in Ireland in 2008, compared with 22,000 in 2004. Of these, nearly 13,000 were non-EU nationals. In 2006, 18,600 Irish students enrolled in foreign universities, approximately 600 more than in 2005. Most of these were in the United Kingdom, the United States, Australia and Canada.

20. Overexpectation of substitution to dental technicians and lower-level dental workers, for instance, led to caps on entry in dental education in the Netherlands, which, subsequently, have led to persistent shortages of dentists. The shortages are expected to last at least a decade (Capaciteitsorgaan, 2011).

21. As included in the Patient Protection and Affordable Care Act (Obamacare). Note that if and when this law were to be considered unconstitutional, as it is currently being challenged, this could also affect the provisions aimed at improving (access to) education and training of health workers and thus could lead to further holes in planning for an ageing society.

22. The conference “Ensuring Tomorrow’s Health: Workforce Planning and Mobility”, organized by IOM Belgium (in Brussels), gathered major players such as the OECD, WHO, European Commission as well as representatives of three research projects carried out in the European 7th Framework Programme of Research and Development. The conference also presented outcomes of the PROMeTHEUS project as well as of the RN4CAST project. Moreover, the outlines of the European Joint Programme on Health Workforces were discussed.

23. Implementation of the WHO Code could follow the example of the WHO Framework Convention on Tobacco Control, including bi-annual meetings to discuss research, policy findings and implementation.
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Furthermore, the following data sources have been used:
- Eurostat 2011 and 2012: several databases
- OECD databases such as:
  - Health data 2011
  - National accounts data
  - Education data
- WHO Euro 2009
- WHO 2011
- IMF World Economic Outlook 2011
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This publication is a shortened version of the summary report “Mobility of Health Professionals: Health systems, work conditions, patterns of health workers’ mobility and implication for policy makers”, which was published in March 2012, in Bonn, Germany, by a consortium led by Dr. Caren Weilandt at the Wissenschaftliches Institut der Ärzte Deutschlands (WIAD, Scientific Institute of the Medical Association of German Doctors). The summary report was written by Fris Tjadens from Health and Social Care Associates, Caren Weilandt and Josef Eckert from WIAD, and the following organizations from the Mobility of Health Professionals (MoHProf) consortium:

- Centre of Migration Research of the University of Warsaw, Poland
- Institute of Health Policy and Development Studies of the University of the Philippines
- International Organization for Migration (IOM), Migration Health Division, Regional Office, Brussels
- International Hospital Federation, Geneva, Switzerland
- Medical University of Varna, Bulgaria
- Public Health Institute, California, United States of America

The publication provides an overview of the outcomes of the MoHProf project that aimed to gather more insights into the processes and effects of mobility of health professionals to, from and within the European Union (EU) and which was carried out under the 7th Framework Programme for Research and Development of the EU.

According to the World Health Organization (WHO), the world was lacking at least 4.2 million health workers in 2006. The European Union (EU) expects a shortage of a million health workers by 2020 and, in addition, health workers are not spread evenly across the region, and spending on health may vary widely. This implies major imbalances, resulting in an environment highly conducive to migration of health workers. Thus, the EU plays a role in the global process of migration of health workers. The enlargement process increased this tendency. Ten countries joined the EU in 2004 (Cypus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia (EU10). Bulgaria and Romania joined the EU in 2007 (EU2).

Shortages of health workers have widespread effects, as they may deplete regions and countries of much needed resources. As education and training of health workers are costly and time-consuming, and as major parts of health workers’ education and training may be financed by their countries of qualification, migration of health workers, although a personal freedom, can also represent a loss of investment for the sending country. These factors shaped the relevance of the MoHProf project.