Migration and Recruitment of Healthcare Professionals: Causes, Consequences and Policy Responses

Healthcare systems around the world are in crisis. In both developed and developing countries, systems are struggling to meet the needs of citizens. One of the most critical challenges these systems face is a shortage of healthcare professionals. In developed countries, national healthcare systems periodically experience shortages of nurses or physicians. Usually these shortages are simply a function of demand growing faster than supply. This is most often corrected by introducing greater incentives into the labour market. By contrast, developing countries have long experienced chronic shortages of healthcare professionals. These shortages are usually rooted in a lack of resources that prevents the training or retraining of sufficient numbers of nurses, physicians, or other healthcare professionals. However, in recent years, a number of demographic and societal changes have combined to create significant and long-term shortages in both developed and developing countries. There is an almost universal shortage of registered nurses (RNs), caused by increased demand in the face of a declining supply. Many countries also face significant shortages of medical doctors (MDs).

The recruitment of healthcare workers from less developed countries has emerged as one of the main responses of developed countries to the shortage of healthcare professionals. The latter are increasingly being recruited for temporary or permanent positions abroad. Though some of this movement occurs between developed countries, most is from developing to developed countries. The globalisation of the labour market for healthcare professionals has major implications for individual practitioners, for healthcare systems, and for governments. Some of these implications are positive, including the opportunities for nurses and physicians to improve their professional and personal lives and for developed countries to address the shortages of RNs and MDs they face. There are also significant negative consequences, primarily the drain this represents on the ability of less affluent countries to provide adequate healthcare for their citizens.

This policy brief begins by describing the extent of worldwide labour shortages in the healthcare sector as well as some general trends in the migration of healthcare workers. It then continues with a brief discussion of the factors which cause and influence this movement. The following section addresses the costs and benefits of the migration of healthcare workers, in both the sending and receiving countries. Finally, the brief presents some policy options which could be implemented by sending and receiving countries in order to mitigate the negative consequences of migration in this sector while balancing the rights and the needs of the main actors involved: healthcare professionals, developed countries and developing countries.

The situation in the healthcare sector

Worldwide shortages

Even if it is difficult to assess accurately the extent of present and future shortages, various sources indicate that they are present and growing in most regions of the world. In the case of registered nurses, nearly every European country is experiencing a shortage. As an example, in 2001 the UK had 57,000 fewer nurses than needed to staff the National Health Service. The Canadian Nurses’ Association has estimated that by 2011 Canada could have a shortfall of 78,000 nurses. Data suggest that Australia was facing a 40% shortage of nurses to fill open positions in 2006. In the developing countries of Asia, Africa, Latin America and the Caribbean, the situation is even more critical. Virtually all developing countries suffer from a chronic shortage of nurses. In 2003, the Pan-American Health Organization reported that 35% of nursing jobs across the Caribbean were vacant. The Philippines had 30,000 vacancies for nurses in 2004. In 2003, Malawi reported that only 28% of nursing positions were filled, and in the same year South Africa had a shortage of over 32,000 RNs. The best estimates indicate that, collectively, sub-Saharan African countries have a shortfall of over 600,000 nurses. The reasons for shortages in less affluent countries are somewhat different from those in wealthier nations. Developing countries generally lack the resources to train an adequate number of nurses. They have fewer nurse-training programmes and fewer qualified nurse educators. Moreover, very low pay and extremely unsatisfactory working conditions make it difficult to attract and retain nurses. Insane conditions, lack of medicine, inadequate supplies and equipment, huge nurse-to-patient ratios, a shortage of physicians, and epidemics of HIV/AIDS and other serious illnesses all contribute to making the practice of nursing tremendously stressful in many developing countries.

Foreign MDs make up a substantial proportion of the physician workforce in some of the most affluent countries in the...
world. More than 34% of physicians practising in New Zealand are from overseas. In the United Kingdom, foreign physicians represent 30.4% of that occupation. Other developed countries have similar proportions of foreign physicians, including the United States with 26.4% and Norway with just over 16%. The Philippines represents the greatest source of foreign nurses in the United States, followed by Canada, the Republic of Korea, India, and the United Kingdom. Although the global labour market for physicians is not as active as it is for nurses, the shortage of MDs in developed countries has led to an increase in physician migration in recent years. Again, English-speaking countries appear to be the most common target destinations; however, the number of foreign physicians is increasing in many countries where languages other than English are spoken. Almost half of the 10,000 new physicians registered to practise in the United Kingdom in 2002 were from overseas. In 2003, more than two-thirds of the 15,000 new physicians in that country were from abroad.

Migration patterns: sending countries

As suggested by the previous discussion, with over 150,000 nurses working overseas, the Philippines is the country from which the largest number of RNs migrate. A handful of other countries aspire to play a similar role in the global labour market but have not yet established themselves in this respect. These countries include China, Cuba, India and some of the states formerly constituting the USSR. Several sub-Saharan countries, including South Africa, Zimbabwe, Nigeria, Ghana, Zambia and Kenya, also actively export nurses.

Causes of healthcare worker migration

Worker migration is a result of the interplay of economic, social, cultural, political and legal forces. Here we will briefly address the factors encouraging cross-border migration. These factors are often considered under two categories: supply-push factors and demand-pull factors. Over time, migration patterns are sustained through networks that provide prospective migrants with information about job opportunities in destination countries as well as various forms of support to help adjustment after migration.

Supply-push factors

Supply-push factors are those issues and conditions that

<table>
<thead>
<tr>
<th>WHO Region</th>
<th>Number of countries</th>
<th>In countries with shortages</th>
<th>Total stock</th>
<th>Estimated shortage</th>
<th>% Increase required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>48</td>
<td>36</td>
<td>590,198</td>
<td>817,992</td>
<td>139</td>
</tr>
<tr>
<td>Americas</td>
<td>35</td>
<td>5</td>
<td>93,603</td>
<td>37,886</td>
<td>40</td>
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<tr>
<td>Southeast Asia</td>
<td>11</td>
<td>6</td>
<td>2,332,054</td>
<td>1,164,001</td>
<td>50</td>
</tr>
<tr>
<td>Europe</td>
<td>52</td>
<td>0</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>Eastern Mediterranean</td>
<td>21</td>
<td>7</td>
<td>312,613</td>
<td>306,031</td>
<td>98</td>
</tr>
<tr>
<td>Western Pacific</td>
<td>27</td>
<td>3</td>
<td>27,260</td>
<td>32,560</td>
<td>119</td>
</tr>
<tr>
<td>Total</td>
<td>192</td>
<td>57</td>
<td>3,355,728</td>
<td>2,358,470</td>
<td>70</td>
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In a report released in 2006, the World Health Organization (WHO) summarised the total stock of healthcare workers, estimated shortages, and percentage increases in the number of healthcare workers needed to eliminate the shortage by WHO region. Figure 1 is extracted from that report.

While these data may provide a starting point for gauging the situation around the world, they likely underestimate the global shortage of healthcare workers. For example, contrary to other sources, no European country is shown to be currently experiencing a shortage of doctors, nurses and midwives. Also, regional studies conducted in two US states suggest that the WHO’s estimated shortages for the Americas are too low. The contradictions between the WHO’s and other assessments stem, in part, from the WHO’s focus on “critical shortages.” While shortages of highly-trained healthcare workers in Europe clearly exist, the magnitude of these shortages is small relative to the much larger gaps between demand and supply in developing countries.

Migration patterns: destination countries

English-speaking countries constitute the most popular destination in the global labour market for nurses. The Philippines supplies the largest number of foreign nurses to the United Kingdom, while South Africa, Nigeria and Zimbabwe, Australia, India and a number of Caribbean countries also provide significant numbers of RNs. Ireland is another European country actively recruiting RNs in the global labour market, which is ironic since for decades it was an exporter of nurses. In 2001, about two-thirds of the new nurses registering in Ireland were from other countries, mainly Australia, India, the Philippines, South Africa and the United Kingdom. Norway has also recently recruited significant numbers of foreign nurses. Foreign nurses have long been part of the American healthcare workforce, but their numbers have increased rapidly in recent years. In 1997, foreign-educated nurses represented about 5% of new RNs in the United States. By 2003, this proportion had grown to 14%. The most recent data suggest that there are well over 100,000 foreign nurses registered in that country. The Philippines represents the greatest source of foreign nurses in the United States, followed by Canada, the Republic of Korea, India, and the United Kingdom.
cause healthcare workers to be dissatisfied with their work and careers in their home country, such as poor compensation, working and working conditions or career opportunities. These push factors may be present in some developed countries, causing healthcare personnel to leave one developed country for another. However, these factors are present in a much more dramatic way in developing countries, and they contribute significantly to the decision by doctors and nurses in these countries to emigrate.

Demand-pull factors
Demand-pull factors are the conditions in destination countries that motivate workers to migrate. Like push factors, pull factors can cause workers in one developed country to move to another developed country. However, the pull factors present in developed countries are a more powerful influence on individuals in developing countries. For example, after adjustment for the cost of living, nurses’ salaries in Australia and Canada are double those of nurses in South Africa, 14 times those in Ghana, and 25 times those in Zambia.

Employers are likely to regard the qualifications and experience of migrating healthcare professionals as highly country-specific and, therefore, require that the migrating worker undergo substantial retraining. Migrating workers are thus likely to be offered a “training wage” that is lower than that paid to local workers with comparable qualifications and experience. The limited bargaining power of foreign workers is also likely to result in their bearing a higher proportion of new country-specific training costs than domestic workers. The available evidence suggests that this is the case in most developed countries where large numbers of foreign RNs and MDs are employed.

Despite the likelihood of receiving lower wages in the country of migration than their domestic counterparts, there are still incentives for healthcare workers to migrate. Healthcare personnel who migrate to developed countries often do find improvements in compensation, working conditions and lifestyle, as well as opportunities for personal and career development that would not be available in their home countries.

The role of historical ties
Individuals and employers are, of course, not the sole agents shaping the patterns of health worker migration. Relationships among governments clearly constrain the extent to which free-market forces operate and individual contracts are executed. Many critics of existing migration trends view the patterns as simply another manifestation of systemic neocolonial exploitation. Such criticism emphasises that the migration of healthcare professionals often serves the interests of former colonial powers and insists that arrangements are largely agreed to by the elite in former colonies who are relatively insulated from the consequences of their decisions. In fact, in countries with both public and private healthcare, these elites are able to strictly avoid the public system.

In some cases former colonial powers are actively involved in setting educational and training standards in former colonies, and the type of training received is relatively adaptable to meet the needs of the destination country. These workers, however, have little bargaining power in negotiating their compensation and working conditions, leading to lower pay and less favourable working conditions than exist for domestic workers. In some cases, professionals are forced to accept positions that are one or more steps below their positions in their home countries (e.g. RNs working as – less skilled – practical nurses, or physicians working as RNs).

Most emigrating healthcare professionals move to the nation that formerly exercised colonial control over their country of origin. Other than those from the Philippines, most foreign nurses and physicians in the UK have migrated there from countries formerly part of the British Empire. Also, a significant number of the RNs and MDs in Portugal are migrants from former Portuguese colonies, such as Angola, Mozambique and Cape Verde. The Philippines, a former American colony, is the leading country supplying foreign nurses for the United States healthcare system.

Costs and benefits of healthcare worker mobility
Sending countries
The major costs of the migration of healthcare professionals are borne by the developing countries that lose significant numbers of nurses, physicians and other healthcare professionals. Healthcare systems in these countries range from barely adequate to completely dysfunctional. They suffer from a host of problems - inadequate funding, inferior technology, epidemics, war and political instability, a lack of infrastructure, insufficient training capacity, and a long-standing shortage of healthcare professionals. The further loss of nurses and physicians to developed countries renders poor healthcare systems even less capable of providing care for their patients.

Thus, one of the most significant cost factors is the source country’s diminished ability to provide care for its citizens. The impact is particularly significant when such personnel cannot be replaced because of a shortage. Not only does the healthcare system lose the services of healthcare professionals, but the inability to replace them puts added pressure on the remaining employees. Such pressure further strains the system, creating additional push factors that then contribute to the loss of more healthcare professionals.

Source countries also incur another significant cost when RNs and MDs migrate: their investment in training. The training of healthcare professionals in most developing countries is either entirely sponsored, or heavily subsidised, by the government. This substantial investment in training is lost when a nurse or a physician permanently emigrates to a developed country. The United Nations estimates that each migrating African healthcare professional represents a loss to the source country of US$184,000.

One of the major policy issues complicating efforts to develop an international consensus regarding the employment of migrating healthcare workers is how to compensate countries for lost services and investments. If healthcare workers paid all of the costs of training then there would be little question regarding their right to capture all of the benefits of that training by working in any setting they choose. However, in cases where governments have provided substantial subsidies that enabled future healthcare workers to enrol in educational institutions, the case is not so clear-cut.

The benefits accruing to source countries from the emi-
Receiving countries are twofold: remittances sent home to families and services of migrants who return with enhanced skills and experience. Remittances can have a significant influence on the living standards of the populace in source countries. Collectively, remittances play a crucial role in the economies of many developing nations since these funds represent one of the most important sources of foreign revenue. In the case of the Philippine government, encouragement of the emigration of nurses is a deliberate policy. In support of this policy, nursing schools train many more nurses than their country needs, and those who emigrate become part of a "labour outsourcing industry" driving the Philippine economy. In 2001, expatriate contract workers, including nurses, sent home US$6.2 billion in remittances. The countries employing the greatest number of Filipino nurses are the United States, Ireland, Saudi Arabia and the United Kingdom. In general, however, the Philippine experience appears to be unique and there is scant evidence that remittances compensate for the damage done to healthcare systems in source countries, particularly since remittances go to families, not directly to the healthcare systems.

Source countries can potentially benefit from emigration of healthcare workers in the case of temporary migration. When nurses and physicians leave to work in the healthcare system of a developed country, they gain experience and training in a more advanced setting. In this scenario, migration can be a positive arrangement for a developing country: the source country temporarily gives up its training investment, as well as the healthcare professionals’ services; in exchange, upon the nurses’ or doctors’ return, it recoups its initial investment, as well as the added qualifications and experience gained during the professionals’ time away. Unfortunately for developing countries, there is little evidence that more than a small percentage of emigrants actually return. Even in cases where healthcare workers do return, healthcare systems in developing countries may not be able to take advantage of the skills and expertise acquired abroad. The technologies available in developing countries may be much less sophisticated than those in developed countries, reducing the utility of qualifications and experience obtained overseas.

**Receiving countries**

While the available evidence suggests that the costs exceed benefits for source countries, benefits tend to exceed costs for receiving countries. There are, in fact, several types of costs incurred by countries hosting immigrant healthcare workers. First, there are costs associated with worker recruitment. The extent to which these costs are shared by employers and government varies from country to country. Such costs are likely to be passed on to consumers and taxpayers. The same can be said for resettlement costs, i.e. temporary support enabling workers to assimilate into a new society such as housing subsidies and public assistance. The UK probably has the most systematic and coordinated recruitment programme of any country in the world. The British National Health Service (NHS) has its own recruitment programme to identify healthcare professionals interested in immigrating to the UK. It operates different recruitment strategies for the various professions. It usually recruits physicians on an individual basis, but tends to recruit nurses in groups of ten, twenty, or more from a specific country. As part of its recruitment process, the NHS provides information on job locations, living arrangements and immigration procedures.

Some critics argue that the immigration of highly trained healthcare workers is linked to the erosion of employment conditions among domestic healthcare workers. For example, if immigrant workers are more willing to accept part-time and contractual positions than domestic workers, the wages and employment conditions of domestic workers are adversely affected. One negative outcome is lower tax receipts from domestic workers than would otherwise be the case. Although diminished worker commitment and associated negative effects on productivity would have the greatest impact at the firm level, the macro-economic implications should not be over-

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<th>Figure 2: Costs and Benefits in Sending and Receiving Countries</th>
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<tr>
<td><strong>Sending countries</strong></td>
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<tr>
<td>Costs</td>
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<td>• Reduction in domestic health care delivery capacity</td>
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Source: Authors’ summary
looked. As a final example, it is important to recognise that there may also be adverse effects on the quality of healthcare provided to citizens in the receiving country if immigrant workers are imperfect substitutes for domestic workers.

The benefits accruing to receiving countries from the inflow of healthcare workers are manifold. The most direct benefit is the reduction in the shortage of skilled healthcare workers plaguing developed countries. Even if the healthcare systems in these countries still face a shortage, the quality of healthcare available to consumers will be improved compared to a scenario in which shortages are greater, and public health risks will be reduced as well. If the employment of immigrant healthcare professionals depresses wages of workers in the healthcare sector, consumers could conceivably benefit financially if any of the reductions in labour costs are passed through in the form of lower prices (or taxes). Receiving countries will also benefit from taxes paid by immigrant healthcare workers. In addition, the recruitment of immigrant healthcare workers can allow local communities with a shortage of domestic healthcare workers to remain competitive in efforts to attract new employers, with the potential positive impact of increased local tax revenues.

**Policy perspectives**

**Sending countries**

The primary dilemma facing any proposal for regulation is how to balance the rights and the needs of the main actors involved - healthcare professionals, developed countries and developing countries. Most observers of globalisation agree that freedom of movement to improve one’s professional and personal circumstances is a basic human right. Denial of this right by source countries is not a tenable strategy for dealing with the problem of migration. However, unfair terms of trade and the legacy of colonialism have created market conditions in which a wholesale reliance on free markets will devastate healthcare provision in developing countries.

The types of policies that can best improve outcomes for sending countries should focus on meeting domestic needs and addressing the “push” factors that motivate healthcare workers to emigrate. There is an urgent need for countries to examine medical education curricula to ensure that training programmes focus on domestic, rather than foreign, healthcare problems. Improving compensation, working conditions and professional opportunities for healthcare personnel in their home countries would almost certainly reduce the impetus to leave. Some countries are trying less expensive incentives, such as better housing, subsidised transport to work, and inexpensive car loans. While many of the poorest nations do not have sufficient resources to make these types of improvements, some developing countries are exploring the use of international development funds to improve the remuneration packages for healthcare professionals - an option that did not exist in the past. A coalition of government and nurse association officials in the Caribbean has gone one step further, by developing a comprehensive Managed Migration Programme that attempts to ensure “the delivery of quality healthcare to the people in the Caribbean, in the midst of significant migration of skilled professional nursing staff.”

**Receiving countries**

Policies that can be implemented by receiving countries to solve their problems and to generate more equitable outcomes for all parties should focus primarily on reducing the strength of “pull” factors that artificially increase migration. Some countries have already taken voluntary steps of this kind. As an example, ethical concerns raised about the impact of migration on developing countries have caused the national health services in the UK and Ireland to adopt ethical guidelines for the recruitment of overseas nurses. These guidelines require the services to provide accurate and truthful information to poten-
tial recruits about terms and conditions of employment and, in the case of the UK, they prohibit the NHS from actively recruiting nurses from South Africa and the West Indies. However, these guidelines do not apply to private healthcare facilities. Nor do they restrict public healthcare systems from hiring foreign nurses who migrate and apply for positions on their own initiative. For this reason, their impact has been limited.  

Another approach to regulating the migration of healthcare professionals is the signing of inter-country agreements that place limits on the number of professionals who can be recruited, thus minimizing the damage to the sending country’s health system. In 2000, the UK signed such an agreement with Spain to engage in “the systematic and structured recruitment” of Spanish nurses for the NHS.  

In 2003, the NHS and the South African government reached agreement on an exchange programme entitling healthcare professionals of both countries to work in the other country for up to six months. Although the programme will probably bring more South African RNs and MDs to the UK than the reverse, the migration will be for a fixed period of time. The Caribbean Community (CARICOM) has implemented a programme “to encourage [healthcare] professionals to work overseas on a rotational basis, going for three years or so and then returning.” The CARICOM nations hope this programme will encourage temporary, rather than permanent migration.  

Perhaps the most ambitious attempt to address the problems caused by the recruitment of healthcare professionals is the 2003 Commonwealth Code of Practice for International Recruitment of Health Workers. The code establishes an ethical framework to discourage the recruitment of such workers from countries experiencing shortages, and safeguards the rights of healthcare employees who choose to migrate. The critical question is whether such bilateral or regional agreements can be effective in the context of global trade protocols emerging from the World Trade Organization.  

However, the most direct way of reducing the power of pull factors in developed countries is for those nations to address the reasons underlying the shortages of healthcare professionals they encounter more aggressively. Ultimately, recruiting RNs and MDs from abroad is a stopgap strategy. These countries need to take steps to train and retain the personnel they need from among their own populations. Falling medical school enrolments are a major factor contributing to the shortage of physicians in the US, and a second contributing factor is soaring malpractice insurance rates.

Conclusion

The various policy initiatives discussed here constitute useful first steps toward addressing the problems associated with the increased migration of healthcare workers induced by the global crisis in national healthcare systems. However, a long-term solution will require more active involvement from another group of actors – international and regional organizations such as the WHO, the ILO and PHR. These organizations have played an important role in examining and documenting the seriousness of migration and have also developed guidelines and codes of conduct that encourage the parties involved in migration to engage in responsible and ethical practices. However, while these entities have the expertise to help source and destination countries alike, at present they do not appear to have the standing needed to impose the types of regulations on the labour market for healthcare professionals that are needed to address the complex and dynamic aspects of the problem. One possible strategy to improve this standing of regional and international organizations would be the development of formal agreements between regional and national governmental and quasi-governmental bodies which provided an international supervisory body with some degree of specific regulatory and oversight authority.

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