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Research Paper No. 2006/82

International Mobility of Health Professionals

Brain Drain or Brain Exchange?

Stephen Bach*

August 2006

Abstract

The consequences of health professional mobility have become a prominent public policy concern. This paper considers trends in mobility amongst doctors and nurses and the consequences for health systems. Policy responses are shifting from a reactive agenda that focuses on stemming migration towards a more active agenda of managed migration that benefits source and destination countries. Improved working conditions and effective human resource practice are required to encourage retention of health professionals in both source and destination countries.

Keywords: international mobility, health, nurses, doctors

JEL classification: F22, I18, J44

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* Reader in Employment Relations and Management, Department of Management, King's College, University of London, UK.

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UNU World Institute for Development Economics Research (UNU-WIDER) Katajanokanlaituri 6 B, 00160 Helsinki, Finland

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There is increased attention and widespread controversy surrounding the international movement of health professionals. One strand of debate considers the health workforce shortages affecting some of the world's poorest countries, especially in sub-Saharan Africa, which is most affected by the HIV/AIDS pandemic. The second strand of debate focuses on the destination countries of international migrants and explores the factors prompting the increased employment of overseas health professionals and the consequences for health systems. Underlying these developments is a recognition that the mobility of health professionals is an integral component of the globalization process whose consequences continue to be fiercely contested (Stiglitz 2004; Wolf 2004). The high profile and politically sensitive nature of health professional mobility was reflected in the May 2004 World Health Assembly which passed a resolution urging member states 'to develop strategies to mitigate the adverse effects of migration on health personnel and minimize its negative impact on health systems' (World Health Organization 2004). The WHO is not alone in focusing on this issue with a variety of international organizations concerned with development, employment conditions, human rights and trade directing attention towards the migration of health workers (see ILO 2004; Physicians for Human Rights 2004; Van Eyck 2004).

The debate is polarized because at one end of a continuum advocates of international health mobility point to the benefits for individuals in enhancing their career and earnings' opportunities by moving to other countries, suggesting that source countries benefit from remittances and other components of knowledge transfer. Moreover, free movement of labour is a fundamental and inalienable right of individuals, irrespective of the circumstances that they leave behind. For key custodians of the global economy, including the World Trade Organization (WTO), the migration of professionals forms an integral and beneficial component of globalization (Adlung 2002). By contrast critics accuse the richer countries of the North as acting like a vacuum cleaner, unethically sucking in labour from some of the poorest countries in the world that can ill-afford to lose health sector staff (Physicians for Human Rights, PHR 2004).

Health service professionals: a special case?

There are several distinctive features of the debate concerning health professional mobility that suggest its social consequences may need to be considered as a special case that requires different policy goals and interventions from the circulation of other professional occupations (Akire and Chen 2004: 3). In a number of countries, the migration of health professionals has exacerbated shortages, undermining the capacity of countries to deliver adequate health care for its citizens. In sub-Saharan Africa, a shortage of nurses and doctors represents a major obstacle to scaling up AIDS treatment and is hindering the achievement of Millennium Development Goals (PHR 2004: 22).

Health services frequently require health professionals to be located in the same physical location as their patients. This is not the case for many other services and manufactured goods. Consequently whereas health professionals migrate to employment opportunities, in other sectors more 'source' country employment has developed (e.g. call centres). Discussions of brain circulation (the return of talented people) and brain exchange (when two countries exchange highly skilled personnel) frequently draws on the experience of the information technology (IT) industry. Migration of IT professionals, however, has not undermined an *existing* industry in the

source country but reflects strong growth in demand for IT professionals overseas. By contrast health services are an essential service that are needed in source and destination countries. Moreover, shortages in destination countries often reflect poor working conditions as much as an absolute numerical shortage of appropriately qualified staff.

Finally, the mobility of health workers is distinctive because it is influenced strongly by the regulatory frameworks of individual governments that control the training, recruitment and deployment of health professionals, which gives rise to particular national patterns of migration. The centrality of government regulation is a significant difference from the migration patterns of, for example, IT workers and this provides greater scope for policy interventions. Health sector work is characterized by both a highly interdependent labour process and the proliferation of specialized professional roles with long lead times in terms of training. These features can jeopardise health provision because even small-scale changes in migration flows amongst specialist groups (e.g. intensive therapy unit nurses) can undermine a country's health system. A well known example is the temporary closure of the Centre for Spinal Injuries near Johannesburg, following the recruitment by a Canadian Institution of the two anaesthetists based at the Centre (Martineau et al. 2004: 4). Consequently the movement of health professionals produces externalities which influence the functioning of health systems that extend beyond the private costs and benefits that accrue to individual health workers.

This paper considers the mobility of health professionals focusing on doctors and nurses that have been in the forefront of current debate about health worker migration. The paper examines patterns of international health profession mobility; considers the main determinants of these patterns of mobility; the effects of this mobility; and the policy implications.

Patterns of mobility

Data and sources

There is widespread agreement that statistics on doctor and nurse migration have been fragmentary and incomplete (Diallo 2004; OECD 2003: 19). The most common difficulties highlighted include the variety of sources used by countries to record migrants (e.g. work permits, population registers) and the absence of data linked to occupation. The establishment of accurate data on stocks and flows of health professionals remains a major challenge that continues to inhibit effective migration management.

Two main sources of data are used. A first source is derived from immigration data in which entry visas and work permits provide insights into the flow of health professionals by occupation and country of origin. Second, because of the educational and certification requirements governing medical and nursing employment, indications of the flows of migrant doctors and nurses can be gauged from professional registers that record the numbers of nurses or doctors registered to practice in a particular host country. It is important to note that registration data indicates the intent to work rather than actual employment status (Buchan 2002: 10). Consequently some health workers

join the professional register but work in less skilled 'assistant' roles or are employed as live-in care givers and nannies. In many countries registration applies to qualified health professionals and excludes assistant nurses and auxiliaries which are an important component of the health sector workforce (Diallo 2004: 605). For example, in the majority of Latin America countries between 60-80 per cent of the nursing workforce is comprised of nursing auxiliaries with only basic training (Malvarez and Castrillon 2005: 20-1).

Despite these limitations because registration data has usually been compiled on a consistent basis over time, it is a widely used source of trend data on flows of professional staff. Similarly verification data, which refers to when an overseas regulator checks that an individual is on their home country's professional register, is often used as an indicator of intention to work overseas. Verification data provides insights into which countries are actively recruiting overseas (Nursing and Midwifery Council 2004: 12).

There is little systematic analysis or agreement about the degree to which health professional mobility represents a temporary or permanent phenomenon. Mobility is a complex process in which professionals shift from country to country. For example, a Filipino nurse may move initially to the Gulf States, obtain a job in the UK in the private sector, transfer to the National Health Service (NHS), and ultimately move to Canada or the US. The duration of migration has become an integral element of the policy response to health professional migration as policy makers seek to convert permanent brain drain into temporary brain circulation.

A second distinction relates to the supply side characteristics of the home country's labour market and the degree to which the migration of health professionals represents a systematic attempt to train a surplus of doctors and nurses who are encouraged to 'voluntarily' seek employment abroad. In this type of case migration does not necessarily undermine the existing health system. By contrast for countries that have a scarcity of health workers the 'involuntary' movement of health professionals has a more detrimental impact on the health system (Forcier *et al.* 2004: 6). Aggregate date, however, needs to be treated with caution because surpluses may coexist with shortages for example between rural and urban areas, between private and public facilities or because of insufficient health service resources to fund posts.

There is an increased awareness of the important role that gender plays in international migration. This reflects the increased proportion of women that are migrants alongside increased recognition that the experience of migration differs for men and women (Taran and Geronimi 2003: 10). It has also been argued that structural adjustment programmes and other forms of health sector restructuring have a disproportionate effect on women's employment and working conditions which provides the context for increased mobility amongst female-dominated care occupations (Van Eyck 2004: 9-11). The migration of women reinforces what Hochschild (2000: 131) has termed global care chains: 'a series of personal links between people across the globe based on the paid or unpaid work of caring'. The implication is that policy analysis of migration has been gender-blind, ignoring the emotional labour expended by women and the stress they confront as part of trans-national families in which filial obligations are altered rather than severed. Women migrants are not a homogenous group, however, female migrants tend to be more reliable remitters, despite being deskilled in employment (International Organization for Migration 2002: 10).

Dimensions of health professionals' mobility

In the 1950s and 1960s many countries expanded their welfare states rapidly and this was accompanied by increased mobility. Fears of a brain drain prompted WHO to undertake a detailed study of the flow and stocks of physician and nurse labour force in 40 countries (Mejia *et al.* 1979). They concluded that in 1972 about 6 per cent of the world's physicians (140,000) were located in countries other than those of which they were nationals. Significantly approximately 86 per cent of all migrant physicians were found in five countries (Australia, Canada, West Germany, the United Kingdom and the United States of America. For nurses the stock of nurses overseas was estimated to be lower at about 5 per cent, but the main recipient countries were the same as for physicians with the exception of Australia (Mejia *et al.* 1979: 399-400).

Since the Mejia study the mobility of health professionals has increased. Although much recent analysis focuses on the *flow* of health professionals, it is important not to lose sight of the cumulative impact on the *stock* of health professionals as illustrated in Table 1 for physicians. It is amongst registered nurses, rather than physicians, that increased mobility is most marked and is having the greatest impact on source and destination countries. It is the health crisis in sub-Saharan Africa in particular that is galvanizing policymakers to place a high priority on managing migration. This brief synthesis of general trends in health professional mobility needs to recognize that a relatively small number of countries have a disproportionate impact on patterns of mobility.

Table 1: Origins of foreign (trained) physicians in selected OECD countries

Country (year)	% of foreign-train	ned	Top 3 countries of origin		
	physicians		(as a proportion of foreign-		
			trained physicians, %)		
Australia (1998)	21.4	of which	UK (39)		
			Asia (28)		
			New Zealand (12)		
Canada (1998)	20		UK (32)		
			South Africa (9.7)		
			India (9.6)		
Switzerland (2001) 19.1			Germany (59.7)		
			Yugoslavia (13.1)		
			Belgium (7.4)		
United Kingdom (2001)	12.6		India (18.3)		
			Ireland (15.2)		
			South Africa (7)		
United States (2001)	27		India (19.5)		
			Pakistan (11.9)		
			Philippines (8.1)		

Source: EUROSTAT Labour Force Survey cited in Forcier et al. (2004).

Source countries

The Philippines has a central role in the political economy of migration and has figured prominently as a source country for nurses and to a lesser degree, physicians. The Philippine government has actively promoted labour migration and the 2001-04 Medium Term Philippines Development Plan, views overseas employment as a key source of economic growth (Go 2003: 350). This policy is based on the premise that migration eases domestic unemployment, brings in substantial dollar remittances and increases productivity by enabling skill transfers (PSLINK 2003: 22). During a period when there has been increased sensitivity about ethical recruitment of health sector staff, deliberate over production of nurses has allowed host governments to view recruitment from the Philippines as compatible with ethical guidelines (Aiken *et al.* 2004: 75).

During the mid-1970s 13,480 physicians worked in the Philippines compared to 10,410 Philippines trained physicians that were employed in the US (see Goldfarb *et al.* 1984: 1-2). Overseas employment of nursing staff started slightly later but has increased markedly, stimulated by the expansion of nurse supply and the strong demand for Filipino nurses because of their proficiency in English and their College based education. In 1970, there were almost 40,000 registered nurses in the Philippines, but by the end of 1998 this total had increased to approximately 306,000 registered nurses, reflecting the increase in the number of schools of nursing from 63 in the 1970s to 198 in 1998 (Corcega *et al.* 2002: 3). The number of schools of nursing has continued to expand rapidly, to 305 by 2003, raising questions about quality assurance and the degree to which all nurse graduates have gained sufficient hands-on practice (PSLINK 2003: 21). The Philippines government is considering tighter regulation to ensure that the standing of Filipino nurses is not jeopardized by the increasing number of nursing schools.

These trends have enabled a massive increase in overseas employment, to the extent that an estimated 85 per cent of employed nurses (over 150,000) are working internationally (Aiken *et al.* 2004: 75). Over 70 per cent of nurse graduates leave the country each year and this contributes to the annual estimated outflow of 15,000 nurses per annum with Saudi Arabia, the United Kingdom, the United States, Singapore and Libya being the most common destinations for Filipino nurses (Adversario 2003; PSLINK 2003: 9). Approximately 2000 doctors are re-training as nurses because of the relative ease in gaining employment in the US, compared to the complete retraining required to gain employment as doctors (PSLINK 2003: 16). This outflow is reinforced by unattractive home working conditions and funding shortages which contributes to the estimated 30,000 unfilled nursing positions in the Philippines, despite substantial levels of underemployment amongst registered nurses in the Philippines (OECD 2003: 75).

The Philippines is not the only country within the Asian region that is an important source of health professionals. During the 1970s, India was the largest source country of doctors (Mejia *et al.* 1979: 277). This has ensured that Indian trained doctors continue to make up a substantial proportion of the stock of doctors in Canada, the UK and the US (see Khadria 2002: 32 and table 1). Since Mejia's study India has become a more important source country for nurses as indicated by the Department of Health in England's agreement with the Indian government to recruit from India (especially mental health nurses). During 2003 the US Commission on Graduates of Foreign

Nursing Schools (CGFNS) opened a new examination centre in Cochin, Kerala state, India (CGFNS 2002), facilitating entry to the US labour market.

It is amongst African countries that the effects of 'brain drain' have exacerbated a deepening health sector human resources crisis. This catastrophe is reflected in the extent to which the proportion of health workers to the population has stagnated or declined in nearly every African country since 1960 (see Liese *et al.* 2003; PHR 2004). In conjunction with other aspects of the working environment, migration has been a contributory factor to the problems faced by African health systems, as signified by high vacancy rates. In Ghana, the medical vacancy rate in the public sector was 47 per cent in 2002 and was even greater—57 per cent—for registered nurses (Dovlo 2003: 2). Data from Zambia and Zimbabwe indicate a similar picture of attrition from public health employment, with losses of 15-40 per cent per annum. During the 1990s, 1200 physicians were trained in Zimbabwe; only 360 were still practising in the country by 2001. Pharmacists comprise another professional group that are emigrating from African countries in increased numbers (PHR 2004: 19-20).

Much recent attention has focused on South Africa. The scale of South African migration has increased substantially in recent years, with many registered nurses moving to the UK (see Table 3). Confirmation of this trend can be gleaned from the number of nurses seeking verification of their qualifications prior to applying for overseas employment which increased from 511 in 1995 to 2,543 in 2000 (Xaba and Phillips 2001: 2-3). South Africa has also been a significant host country for health professionals from other parts of Africa and there are 450 Cuban physicians practising in South Africa. Since October 2001, however, South Africa has committed itself not to recruit nurses or physicians from other countries that face shortages, except under the specific agreements with source country governments, which has provoked criticism in South Africa (Dumont and Meyer 2004: 134).

In Europe, historical links play a part in explaining flows of physicians between North Africa and France. The European Union (EU) has been keen to promote the free movement of labour within the Union as well as encouraging migration into certain regions and sectors. The liberalization of labour markets and the mutual recognition of qualifications is a necessary but not sufficient condition to stimulate mobility. The movement of nurses and physicians between countries remains at a relatively low level partly attributable to linguistic and cultural barriers (Jinks *et al.* 2000). The context is altering, however, since the enlargement of the EU to incorporate ten countries from Central and Eastern Europe in April 2004. There are indications that the movement of physicians and nurses from countries including Poland, the Czech Republic and Hungary will be a more significant feature of health professional mobility in the EU than in the past.

In Latin America, public sector restructuring, the social and economic crisis in many countries, and divergent economic performance between countries has stimulated increased mobility within Latin America (Keeling 2004: 12-13; Solimano 2003: 57). In the health sector there is considerable movement between poorer countries such as Ecuador and Peru to countries with higher levels of per capita income, notably Chile. Jobs in the public sector are being made available to migrant workers because increased numbers of Chilean health professionals are moving out of municipal employment into the private sector (Van Eyck 2004: 32).

Latin American and Caribbean countries also comprise an important source of health workers for the US, especially as a key source of nursing aides. In 2000, Mexican immigrants comprised the largest group of overseas born nursing aides in the US (13 per cent) followed by Jamaica and Haiti (22 per cent). By contrast these countries are relatively under-represented amongst overseas physicians and registered nurses employed in the US (Lowell and Gerova 2004: 485). Overall, although analysis of mobility of health professionals in Latin America has been less comprehensive than in other regions there are signs of increased mobility. In comparison to some regions such as sub-Saharan Africa, there is less attention focussed on shortages of nurses and more concern with imbalances notably between rural and urban areas, public and private institutions, and between higher and lower income countries within Latin America (Malvarez and Castrillon 2005).

Destination countries

The US is regularly identified as the favoured destination for nurses and physicians seeking employment abroad (e.g. Khadria 2004: 23-9; Van Eyck 2004: 22) and the US with a rapidly growing and ageing population, a history of migration, and unrivalled levels of health expenditure has proved to be a major destination country for overseas trained health professionals. Official Bureau of Labor statistics projections suggest that between 2002-12 health services will comprise the greatest source of employment growth in the US (see Lowell and Gerova 2004: 474). More than a quarter of physicians in the US are overseas trained (see Table 2) and although the proportion of overseas registered nurses is much lower, at 5-6 per cent of the workforce, this proportion is increasing steadily (Brush *et al.* 2004: 79-80). Overseas trained nurses are likely to play an increasing important role in the provision of nursing care in the US (Buerhaus *et al.* 2003).

Since the late 1960s there has been a switch in recruitment from Canada and the UK towards the Philippines and other Asian countries (e.g. Sri Lanka). In recent years there has been considerable relaxation of immigration restrictions on skilled labour, including some specialist nurse categories, which could be expected to continue (OECD 2003: 21). Amongst physicians some commentators have predicted shortages, encouraging inmigration (see Cooper *et al.* 2002). A recent analysis of African trained international medical graduates (IMGs) indicated the substantial proportions of medical professionals from a few African countries that are resident in the US.

The United Kingdom has historically been a major destination country of doctors and nurses. In 2002 over 200,000 doctors held provisional, full and limited registration. In terms of full registration over half were doctors trained outside the UK especially from outside the European Economic Area (General Medical Council 2004).

Table 2 Country of medical school of sub-Saharan African international medical graduates (IMGs) in the US and Canada

Country of training	Number of African trained IMGs in US	Number of trained IMGs in Canada	Number of physicians remaining in home country	% of total African trained now in US or Canada
Nigeria	2158	123	22894	9
South Africa	1943	1845	23844	14
Ghana	478	37	1210	30
Ethiopia	257	9	1564	15
Uganda	133	42	722	20
Kenya	93	19	4001	3
Zimbabwe	75	26	1694	6
Zambia	67	7	676	10
Liberia	47	8	72	43
Other 12 countries*	83	35	12912	1
Total/average	5334	2151	65589	10

Source: Hagopian et al. (2004: 5)

Note: * other 12 countries with at least one graduate in the United States.

Overseas trained nurses have accounted for a substantial proportion of the 660,000 nurses on the register at March 2005 (Table 3). In the year to March 2005, there were more than 11,000 overseas-trained nurses registered, a significant fall of 19 per cent from the previous year. The Philippines is no longer the primary source country with numbers from India exceeding those from the Philippines (NMC 2005). The decline in overseas nurse registrants has been attributed to a number of factors. First, the UK government has invested considerable efforts in growing its own workforce, increasing the numbers of student nurses entering the register and encouraging health care assistants to enter nurse training. Second, overseas nurses have been used primarily to fill entry level nursing posts (Grade D) and this has proved successful, requiring fewer overseas recruits. Finally, there are blockages within the system with overseas nurses having difficulty finding supervised practice placements. Consequently there is a backlog of some 50,000 overseas trained nurses seeking to enter the UK register, indicating that the decline is relative rather than absolute (NMC 2005; RCN 2004).

Table 3 Overseas trained nurses registered per annum in the UK 1998-2005 (excluding the European Union)

Country	1998/99	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
India	30	96	289	994	1830	3073	3690
Philippines	52	1052	3396	7235	5593	4338	2521
Australia	1335	1209	1046	1342	920	1326	981
South Africa	599	1460	1086	2114	1368	1689	933
Nigeria	179	208	347	432	509	511	466
West Indies	221	425	261	248	208	397	352
Zimbabwe	52	221	382	473	485	391	311
New Zealand	527	461	393	443	282	348	289
Ghana	40	74	140	195	251	354	272
Pakistan	3	13	44	207	172	140	205
Zambia	15	40	88	183	133	169	162
US	139	168	147	122	88	141	105
Mauritius	6	15	41	62	59	95	102
Kenya	19	29	50	155	152	146	99
Botswana	4	-	87	100	39	90	91
Canada	196	130	89	79	52	89	88
Nepal					21	43	73
Swaziland						81	69
China							60
Malawi	1	15	45	75	57	64	52
Others						637	495
Total	3621	5945	8403	15,064	12,730	14,122	11,416

Source: NMC (2005).

Listed by most numerous country applicants in 2004-05

Discussion

Countries that in the past would have been relatively immune to the migration of health professionals are being incorporated into a more integrated global labour market in which international mobility is a more significant and volatile component of the human resource planning context. Each country's pattern of migration reflects context specific factors that relate to the level of economic development, the influence of structural

adjustment programmes, civil war or other forms of civil unrest, and the impact of HIV/AIDS. Focusing exclusively on the 'pull' factor of shortages in developed countries risks ignoring the 'push' factors, diverting attention away from the full spectrum of policy interventions.

In many countries the flows of health professionals are in both directions. For example, whilst recent attention in the UK has focused on the recruitment of overseas staff, many UK trained nurses and doctors work abroad (Goldacre *et al.* 2001). The number of verifications (checks) of UK nursing qualifications by nursing regulatory authorities overseas has been on an upward trajectory. During 2003-04, the NMC register indicates that 7,610 checks were sought by overseas regulators, of which nearly two thirds were from Australia (36 per cent) and the US (27 per cent) combined. The number of verifications from the US has risen fourfold since 2000-01 (NMC 2004: 12-13). This data provides an indication of recruitment drives by other countries, but it does not distinguish between UK and non-UK trained nurses so it is not possible to establish whether some nurses are using the UK as a 'staging-post' before moving to another country.

Historical links and associated cultural ties, including language, play a role in explaining migration pathways between Australia, Canada, India, and the UK. Portugal has links with Mozambique and the Netherlands has looked to former colonies like Surinam or Dutch speaking countries such as South Africa as a source of health professionals (Tjadens 2002: 35). In Latin America it is reported that nurses from Argentina, Peru and Uruguay are often recruited by Italian recruitment agencies to work in Italy and Spain (Malvarez and Castrillon 2005: 26).

Nevertheless an important facet of the globalization of health labour markets is that these historic ties are loosening as destination countries become more utilitarian in encouraging migration primarily on the basis of economic requirements rather than historical or family connections. These historic patterns are also in decline as migration management shifts from bilateral agreements between governments, that was the dominant pattern of the 1950s and 1960s, towards unilateral management, in which destination countries signal their willingness to accept migrant workers, but do not enter into agreements with source countries (ILO 2004: 15). This enables migrant workers to be drawn from a wider range of countries than the more targeted state-led migration of the past. It effectively represents the privatization of the migration process because the role of the state in managing the migration process has been usurped by private recruitment agencies, the internet and networks of out-migrants.

Causes of international mobility of health professionals

It is acknowledged that a there are a variety of factors that shape international mobility of labour. In aggregate terms, differences between countries in the mobility of their health professionals has been noted above, but even within countries the motives of health professionals may differ between occupational groups. Khadria (2004) in his survey of health professionals in New Delhi reported that the primary motive of outmigration for doctors related to training and career opportunities, compared to nurses that focused on improved income prospects and quality of life. Similar patterns were reported amongst Ghanaian nurses and doctors (Mensah *et al.* 2005: 28). It is not clear

whether these differences relate to the distinctive labour market context of each occupation or whether other factors related to gender and other workforce attributes influence the motives of migrant health professionals.

A widely used framework to analyse health professionals' mobility differentiates between push and pull factors. Push factors focus on those pay, working conditions and broader management and governance factors that encourage health professionals to exit their own health systems and leave their country. More comprehensive analyses incorporate factors that push health professionals to shift from rural to urban areas, from public to private sector employment and at times out of the profession altogether as part of the interplay between internal and out-migration. Pull factors direct attention to the factors that encourage health professionals to move to other countries, including shortages and active recruitment from high-income countries.

This framework, with its roots in neoclassical economic orthodoxy, focuses on individual migrant behaviour in terms of economic utility maximization, especially wage differentials between source and destination countries. A focus on the individualistic calculations of migrants needs to be complemented by awareness of how structural factors influence migration patterns. The reform of health systems, often as part of programmes of structural adjustment, and the liberalization of trade in health services are contributing to the restructuring of labour markets for health professionals. These patterns of restructuring influence mobility indicating that migrants' choices are underpinned by the ways in which nation states are integrated into the global economy (Van Eyck 2004: 9-10). The case of Ghana has been used to illustrate how its health professionals have become integrated into a global labour market. This integration process is indicated by: potential migrants being able to make informed comparisons of wages and conditions across countries; increased private investment in employment agencies to facilitate international recruitment; information on migration processes being widely available; and the existence of feedback effects in terms of upward pressure on wages and conditions in the source country (Mensah et al. 2005: 16-19).

Remuneration and employment opportunities

The scope to enhance earnings remains a key push factor in explaining the propensity to migrate, albeit with important differences between occupations and countries. It has been estimated that source-destination country wage differentials can be in the order of 3-25 times with very large wage differentials in Southern Africa, for example, between Zambia and South Africa (see Vujicic et al. 2004: 7). Amongst doctors and nurses in Ghana, low salaries were invariably mentioned as a primary motivation for migration (Mensah et al. 2005: 20). In Poland, doctors in public hospitals typically earn US\$362 per month after tax, which is not enough to live on (Bala and Lesniak 2005: 235). Kenyan nurses report that they earn US\$70 a month, which does not constitute a living wage (ICFTU 2004: 4). Even if staff feel that they earn sufficient to meet their current financial needs, they often cite the inability to ensure the long-term security of their family and children, for example, an inability to purchase property as a motivating factor (Mensah et al. 2005: 28). It has been noted, however, that when account is taken of purchasing power parities and the high cost of living in the London area the differential may be smaller than anticipated leading to reports about the plight of South African nurses in the UK (Dumont and Meyer 2004: 129) or difficulties in meeting the expectations of relatives in terms of levels of remittances (Mensah et al. 2005: 28).

Finally the availability of employment opportunities within the source country has been identified as an important influence encouraging exit. Programmes of structural adjustment, promoted by the IMF, in conjunction with policies implemented by ministries of finance which aim to ensure macroeconomic stability have been implicated in restrictions of health sector expenditure with direct consequences for health sector employment. In Mozambique, it required pressure from the Clinton Foundation to persuade the IMF to reduce temporarily restrictions on health sector employment (see PHR 2004: 80). Retrenchment of public health staff over the last few years has been noted in Uganda (Corkery 2000: 99) and EU accession countries such as Poland (Domagala *et al.* 2000: 73). Intriguingly, a report from the World Bank on the human resources crisis in sub-Saharan Africa documents the impact of structural adjustment programmes on the health sector in Cameroon and Ghana (Liese *et al.* 2003: 8-9).

Professional development and training

For health professionals, continuous professional development is an integral component of individual career planning and progression. Amongst doctors in New Delhi, the availability of better training or training not available in India was the most important factor motivating out-migration. Gaining more academic qualifications and exposure to advanced professional infrastructure were viewed as crucial for long-term career advancement (Khadria 2004: 22). Brazilian doctors have sought a period of specialist training abroad in the belief that it would enhance their career prospects when they return (Zarrilli 1998: 182).

Kingma (2001: 209) reports similar priorities amongst nurses with a strong emphasis placed on the scope for learning opportunities. This includes access to specialist training that may not be available in the home country or similarly the chance to use technologies and other equipment which is not routinely available. The absence of opportunities for professional development and promotion, in contrast to perceived opportunities abroad, reinforces the attractiveness of overseas employment. South African nurses have complained about the lack of opportunities for promotion within hospitals and the difficulties of being granted study leave (Xaba and Phillips 2001: 5).

There has also been criticism levelled at both medical and nurse training that there is a disjuncture between the curricula of many training institutions (in Africa in particular) and the actual opportunities to utilise such training in the prevailing circumstances. This leads to medical and nursing staff becoming frustrated at the lack of opportunities to use the knowledge in their local circumstances, encouraging them to seek employment abroad. It has also been argued that the medical school culture in many African countries encourages graduates to practice abroad, not least because it affirms the standard of training and is prestigious for the institution concerned (PHR 2004: 47-51).

The working environment and human resources management

Poor working conditions, including heavy workloads are factors that entice health professionals to seek employment outside their country. The influences that are frequently cited in this context relate to violence, whether in the work environment or the external context, and amongst health professionals in sub-Saharan Africa the devastating toll reaped by the HIV/AIDS pandemic (Shapiro 2002). The lack of

protective clothing (e.g. gloves) reinforces these concerns and more generally the toll from HIV/AIDS adds to the workload of those that remain in post (PHR 2004: 40-1). Similarly war, civil unrest, and crime are common factors encouraging health professionals to seek employment abroad (Dumont and Meyer 2004: 128; Kingma 2001: 207).

Low staffing levels in relation to the volume of patients leads to heavy workloads for health professionals. Interviews with Nurses in Kenya and Sri Lanka have highlighted the negative consequences for job satisfaction that derives from the inability to provide proper care because of the numbers of patients waiting (Van Eyck 2004: 18). Wider access to health care and uneven distribution of human resources has resulted in similar workload concerns in South Africa (Dumont and Meyer 2004: 129).

There is also increased willingness to acknowledge that poorly designed and operated human resource management systems reinforce low morale, foster out-migration and make it difficult for returnees. The lack of opportunities for further education and development in conjunction with traditional and dated teaching methods are often mentioned as symptomatic of poorly specified human resources systems (Padarath *et al.* 2003: 21). The lack of recognition of international experience, arising from promotion systems based on length of experience in the home country, has served to discourage returnees (Martineau *et al.* 2004: 7). The positive impact of schemes such as the Additional Duty Hours Allowance (ADHA) in Ghana that substantially boosted takehome pay for health professionals has been undermined by poor governance. Arbitrary local decision-making led to grievances amongst nurses provoking a 10-day countrywide strike in September 2004 (Mensah *et al.* 2005: 23). Poor human resource management practices therefore remain a powerful constraint on the effectiveness of health sector effectiveness, contributing to out-migration (Bach 2003).

Staff shortages and relaxation of immigration rules

The renewed interest in the mobility of health professionals since the late 1990s has been viewed as 'primarily demand led with workforce shortages in some destination countries (such as the US and UK in particular) triggering active overseas recruitment strategies' (Stillwell *et al.* 2004: 597). The dominant dynamic in recent years has therefore been the *pull* factor of targeted international recruitment which helps to account for why policy attention has focused on the ethical responsibilities of employers (Buchan 2004: 15). Due to a changing demographic profile—an ageing population (including an ageing health workforce), increased demand for health care, increased expectations of patients, and difficulties in recruiting and retaining nurses, both the US, the UK, and Canada have recruited actively on an international basis. These strategies aim to overcome workforce shortages and the uneven distribution of the health professionals in terms of geographical location, specialty and grade. The labour market for physicians is distinctive but many of the same difficulties arise, especially in rural areas and less attractive specialties.

A variety of immigration regimes exist that enable health professionals to gain temporary or more permanent residency. In the case of the UK, applicants from outside the EU have to apply for a work permit before being allowed to take up UK employment. A visa is issued for a limited period of time, frequently two years in the first instance. The US has a more diverse and complex system. International medical

graduates in the US can gain three year H-1B visas for a pre-arranged job, usually renewable for one three year period. An exchange visitor visa (J-1) is commonly used for graduates of overseas medical schools to gain access to medical education, usually residency programmes, with a requirement that they return to the home country for two years. The only exception to the two-year home residency rule is when a waiver visa is received (J-1 waiver programme), which requires sponsorship by a government agency. In return for a service commitment in a rural area, permanent residency may be gained. The overall trend within OECD countries has been towards the relaxation of quotas and other mechanisms to attract highly skilled labour in shortage occupations whilst restricting entry amongst low skilled workers.

The opportunity for health professionals to be more mobile has been facilitated by the growth of more formalized channels of recruitment, with increased awareness of the role of commercial recruitment agencies and an increasingly important role for the internet. It is important, however, not to lose sight of the significance of social networks drawn upon by newly arriving migrants in reducing the costs and risks associated with migration (Massey *et al.* 1993). This implies that once migration pathways are established this will stimulate further migration. This is an important issue that is rarely acknowledged in the analysis of health professionals' migration. The growth of overseas nurse associations and other support networks in the destination country, for example, of Filipino, Guyanan, Jamaican, Nigerian, and South African nurses in the UK, comprise an important element in networks that foster further migration. A very high proportion of the doctors interviewed in New Delhi reported the existence of overseas friends as a key source of inspiration for out-migration (Khadria 2004: 20).

There has been increased awareness of the key role that recruitment agencies play in facilitating international recruitment, but it differs between occupations and countries. In a highly centralized health system like the UK, the recruitment of doctors is centrally co-ordinated by the Department of Health that facilitates entry to NHS posts. Recruitment specialists therefore play a limited role not least because many doctors continue to draw on personal contacts and the examination and registration process is clearly defined and transparent. For nurses a more devolved system exists in which NHS employers (termed NHS trusts) or the independent sector have recruited groups of nurses, drawing on the specialist advice within the Department of Health and often using the services of recruitment agencies.

In source countries, nurses frequently respond to advertisements by recruitment agencies and register with the NMC. The recruitment agency assists the nurse to gain a work permit and to find a placement (which can be very difficult) to undertake their period of supervised practice, which they have to complete before they are able to work as a registered nurse. This places many nurses in a highly dependent position, for example their accommodation is provided by their employer, making them vulnerable to exploitation. The fees charged by recruitment agents are substantial. In Ghana, agents charge about £2500-£3500 to assist nurses moving to the UK which excludes accommodation, visa fees and air fares (Mensah *et al.* 2005: 17-18). In the US employers typically pay recruitment agencies US\$5000-10,000 per nurse recruited (PHR 2004: 55). Consequently the recruitment of nurses has become more formalized and commercialized, but although the direct costs of out-migration have increased substantially this has not discouraged it. Out-migration remains a highly attractive option and only systematic policy responses to tackle push and pull factors in source and destination countries are likely to influence patterns of international mobility.

Impact on health systems

There has been a shift of emphasis in the analysis of health professionals' mobility from a concern to quantify the flows of migrants and to assess the reasons for these movements towards a preoccupation with the consequences of these flows and the measures that can be taken to manage migration more effectively. There is increased awareness and political sensitivity about the degree to which it is ethical to recruit internationally substantial numbers of health professionals; weakening health systems in these source countries. There has been a noticeably more critical stance adopted by the WHO and the resolution passed at the 2004 World Health Assembly raised the issue of receiving countries examining methods to 'offset the loss of health workers, such as investing in training of health professionals' which some commentators interpreted as shifting debate from *whether* reimbursement to source countries was appropriate to a question of *how* it should be accomplished (PHR 2004: 61). Other signs of an altered climate include the UK government's revised and more restrictive code on ethical recruitment issued in December 2004 (Department of Health 2004a).

The working conditions of internationally recruited nurses and physicians, their career development, and the degree to which they confront discrimination at work has attracted some attention. A common experience amongst overseas nurses has been the lack of recognition of their skills and previous experience, leading to a feeling that their competence as a nurse is being questioned (RCN 2003). Overseas nurses in Canada often perceived that they were treated very differently with more intensive controlling supervision exercised over them than their colleagues (Hagey *et al.* 2001). The working lives of health professionals, although a prominent concern of professional associations and trade unions, has been less prominent than more macro-level debate about the efficacy and ethics of internal recruitment, centred around the consequences for the source country.

Implications for the source country

The mobility of highly skilled labour is associated with a number of positive feedback effects as skilled emigrants continue to affect the economy of their origin country. The main benefits are associated with the remittance of income, the knowledge and skills acquired by returnees, and spill over effects when migration increases the incentives to obtain higher education, increasing the stock of education in the source country, with only a proportion of this accumulation of skills 'lost' to out-migration (see Mountford 1997). An illustration of these spill over effects is the degree to which the educational level of applicants to nursing schools in Ghana has risen to the equivalent of university entrance level and the number of applicants has also risen sharply, as applicants start to view a nursing qualification as an investment in leaving the country (Mensah *et al.* 2005: 19).

Much attention has focused on remittances. It is difficult to estimate the scale of remittances because of the often informal manner in which they are returned but there is little doubt of their contribution to the national income of many countries. India (US\$11.5 billion), Mexico (US\$6.5 billion) and Egypt (US\$3.5 billion) received the largest share of remittances (IOM 2003: 2). There are few studies of remittances specifically related to the health sector. An exception is a study of Filipino physicians practising overseas in which it is suggested that the volume of remittances was

sufficient to compensate for the associated economic losses of emigration (Goldfarb *et al.* 1984). Nonetheless the study is far from conclusive because as the authors acknowledge their analysis is weakened by data limitations and the questionable assumptions incorporated into their model. A number of caveats have been raised about their impact because remittances benefit the families of migrant health professionals rather than the health systems that they leave behind and are therefore used to boost private consumption rather than investment (ICFTU 2004: 2).

A number of factors influence the consequences for source countries. A first consideration relates to the degree to which education and training of health professionals is funded by the state or by private funds. For example, in the Philippines the nursing colleges are predominantly private establishments. Nonetheless the state still provides the resources to fund primary and secondary education and loses the tax revenue that would have accrued from these earnings streams in the Philippines. There is a requirement in many countries, for doctors to undertake a period of community service, often in rural areas, before being allowed to work in other parts of the country or abroad, but as discussed below there are many difficulties associated with these type of mandatory schemes.

A second issue relates to the employment situation within the source country and the degree to which health professionals would have been gainfully employed in their home country. This is crucially dependent on the degree to which individual states have planned their workforce requirements effectively. Poor workforce planning has regularly created imbalances in the health sector workforce with many countries confronting shortages of health sector personnel (see Zurn *et al.* 2002). International mobility has therefore been viewed as exacerbating shortages in source countries. It cannot be assumed, however, that health professionals would have been retained within the public health sector in their own country. Shortages may co-exist with underemployment because of budgetary restrictions or complex administrative requirements which lead to long delays before vacancies can be filled, as reported in parts of the Caribbean (Van Eyck 2004: 30-1). In addition to poor working conditions, exit of doctors to an expanding private sector has been noted in many countries including Angola, South Africa, and Thailand (Wibulpolprasert 1999).

A third issue relates to the impact on the health sector of international mobility in terms of the impact on workers that remain and also for other stakeholders. Some of the most visible negative impact relates to these questions. Nurses in many countries including South Africa have expressed their frustration and envy of those going overseas because they are confronted with increased stress to cover for staff that have left (Xaba and Phillips 2001: 6). There is also the knock on effect of the erosion of a country's human resources capacity in terms of its ability to plan and deliver education and training for its health workforce. Paradoxically it may make sending countries more reliant on the inflow of specialist workers. In countries in which health professionals are explicitly trained for employment overseas there may be a mismatch between the training priorities of the source country's health service (e.g. orientated to primary health care), compared to the competencies needed to work in a more technologically intensive model of care.

Policy responses to the international mobility of health professionals

The increased levels of nurse and physician migration are symptomatic of deep-rooted structural shortcomings in the planning and management of health professionals in source and destination countries. Increased attention has been directed at the policy options to address workforce shortages and working conditions that promote migration. Three policy areas have been highlighted as mechanisms to influence health professional mobility:

- Measures designed to improve the pay, working conditions and career prospects of health professionals in source countries to stem out-migration and to address related concerns about supply and retention issues in destination countries, to reduce the need for international recruitment.
- Reforms to the structure and training of health professionals in source countries, to include establishing new roles and altering the skill-mix.
- Initiatives to manage migration more actively shifting from a unilateral to a bilateral approach that ensures the costs and benefits of mobility are more evenly spread between source and destination countries. A variety of policy instruments have been promoted that include: the establishment of codes of practice; bilateral agreements; forms of compensation and incentives to encourage return.

Pay and working conditions

There has been a legacy of under-investment in health services in many source countries, but as health systems have deteriorated, exacerbating out-migration, there are signs of more concerted attempts to address workforce problems. Salary levels have been increased using a variety of incentive schemes and allowances (e.g. South Africa, see Dumont and Meyer 2004: 134). One of the most well-known schemes, established by Ghana at the end of 1999, is the ADHA which provides additional pay to health professionals exceeding normal working hours (160 hours per month). This measure initially slowed out-migration, but its effectiveness has been eroded by poor governance (Mensah *et al.* 2005: 23). Evidence from other countries, is also equivocal with increased salaries for nurses in Botswana having limited effect on retention (Dovlo 2003: 6). The difficulty is that many source countries have very limited scope for manoeuvre in raising salaries in a fiscal context of severe budgetary constraints and donor reluctance to sanction increases in salaries for health professionals (PHR 2004: 39). Overall, raising salary levels is a necessary but not a sufficient condition in the absence of other improvements in working conditions to stem out-migration.

Many countries as well as experimenting with positive incentives to retain staff also use financial penalties to deter health professionals from out-migration. A contentious measure relates to forms of bonding. This requires graduates to post a bond of variable amounts which health professionals forfeit if they leave the country before a certain number of years have elapsed. Alternatively they may be required to pay back their training costs if they depart. Trinidad and Tobago, for example, has established a three year requirement for nurses (Commonwealth Secretariat 2003: 11). This restrictive policy has been subject to considerable criticism. It has been argued, using Ghana as an example, that bonding policies in the absence of widespread legitimacy encourage evasion strategies, and have proved ineffective because of poor enforcement and

monitoring. Bonding policies may also serve to discourage return (Mensah *et al.* 2005: 21). More effective measures might include the imposition of a tax on those that leave and co-opting destination country employers or registration authorities to monitor the repayment of bonds (PHR 2004: 105). It seems improbable, however, whether employers or authorities in destination countries would be willing to undertake such a role. In general, restrictive measures to inhibit mobility have only limited effects or support, directing attention towards issues of recruitment and retention.

In focusing attention on retention policies in source countries it is important not to ignore attempts by policy makers to improve recruitment and retention of health professionals in destination countries that do not rely on international recruitment. An important consideration, however, is that employers in the UK have indicated that international recruitment is a relatively straightforward and cost-effective method to address their staffing requirements compared to other recruitment and retention methods (Buchan 2003: 22). Nonetheless government action can influence the acceptability and attractiveness of international recruitment as a primary method to address staffing difficulties. In the US, for example, the 2003 Nurse Reinvestment Act, authorized funds for a variety of nurse retention efforts and US\$142 million was made available for the programme in 2004 (PHR 2004: 54). In the UK, the Labour government has assigned a high priority to making the NHS, an 'employer of choice' and a wide range of measures including reforms of pay and grading structures, boosting the numbers of health care assistants entering nurse training, and improving the working lives of health service staff have started to remedy difficulties in recruiting and retaining health professionals (see Bach 2004).

Source countries are also examining more systematically issues of recruitment and retention. In the Philippines, the Department of Health has established a pool of doctors, nurses, midwives and other key health professionals which are deployed in depressed areas. There are also wide-ranging consultations occurring on workforce planning to gauge the country's need for nurses more effectively and to set up mechanisms to enable nurses to pursue professional development within the Philippines (PSLINK 2003: 19). Another mechanism to expand the workforce relates to the removal of compulsory retirement ages, enabling health professionals to extend their working lives from 60 to 65 (Dovlo 2003: 6).

Curriculum reform and skill substitution

Altering the curriculum and reducing the length of the training period required for nurses and doctors has been viewed as a mechanism to hasten entry into the workforce and deter out-migration. In South Africa active consideration has been given to reducing the degree of specialization of nursing and medical training thereby decreasing nurse training from four to three years. It is anticipated also that such measures would also reduce the attractiveness of South African health professionals to other OECD countries and place limits on the transferability of their skills. Predictably, such proposals have met with a hostile response from health professionals (Dumont and Meyer 2004: 133-4).

Professional strategies of occupational closure are being challenged by the development of workforce strategies that involve the substitution and delegation of workforce responsibilities to other occupational groups. This approach alters the skill-mix of the workforce and is designed to compensate for out-migration, establish occupational

groups with less transferable skills, and ensure that the scarce skills of nurses and doctors are used effectively. A variety of such roles have been established. Malawi makes use of health surveillance assistants that require six weeks training, Mozambique utilises a variety of surgical and medical technicians, Zimbabwe has introduced state-enrolled nurses requiring two rather than three years of training and a variety of other assistant roles have been established. Complementary to these initiatives, are measures that extend the role of nurses, enabling advance practice nurses in some countries to prescribe medications and perform some invasive procedures (Dovlo 2004; PHR 2004: 70).

Managed migration

With increased recognition that international mobility of health professionals is an inescapable feature of the health sector, policy responses have shifted from a reactive approach that focuses on stemming migration, towards a more ambitious and active agenda of managed migration. The aim is to regulate the flows of health professionals to benefit source and destination countries. Most attention has focused on the establishment of codes of practice and policy guidance that seek to influence the international recruitment of health professionals. The Commonwealth, at its meeting of Health Ministers in May 2003, endorsed a code of practice and associated companion guide on international recruitment which can establish a climate of international opinion. At national level the UK government has proceeded further, regulating international recruitment in a series of step-by-step measures.

In reaction to criticism of its international recruitment activities, in 1999 the Department of Health issued guidelines requiring NHS employers not to recruit actively from South Africa and the Caribbean (Department of Health 1999). In September 2001 a more detailed code of practice was issued which reiterated that NHS trusts should not target recruitment at developing countries unless the Department of Health had a formal agreement with a particular country. During 2004, the Department of Health further strengthened the code of practice.

The experience with the code has been subject to fierce debate that relate to its scope and effectiveness. As Table 3 indicates in recent years there have been continuing inflows of nurses from many countries that are prohibited by the code with substantial numbers of nurses from some of the poorest countries in sub-Saharan Africa—Botswana, Malawi, and Swaziland. This does not in itself indicate that the code is being broken to but does raise questions about its narrow *scope*. The code only applies to *active* recruitment by NHS trusts and does not cover individual health professionals who on an individual basis 'may be considered for employment' (Department of Health 2004a: 7). The 2001 code did not apply to the private sector, to recruitment agencies, and did not cover the employment of temporary staff.

In relation to NHS employers in England, centralized systems of financing and provision ensure that the Department of Health exercises tight central control over the international recruitment practices of NHS trusts with international recruitment coordinators playing a key monitoring role. During 2003 the Department of Health intervened when several NHS trusts were found to be recruiting directly from South Africa. To put it another way, because the Department of Health views international recruitment as so pivotal to its human resources policies for the NHS, it has a strong

incentive to ensure that international recruitment is carried out in an ethical manner to deflect potential criticism of international recruitment polices. In many other countries, however, in which the state has less control over the actions of health care providers and health services are less politically sensitive, the impact of ethical codes of practice, if instituted, would almost certainly, mostly, prove to be less effective.

A major limitation in the effectiveness of the code relates to the regulation of the independent sector. There is strong anecdotal evidence that many nurses and midwives recruited to the private sector later move to the NHS for better pay and working conditions, a situation that allows NHS employers to argue that they are in compliance with government guidelines. In the 2001 code, private sector recruitment agencies were invited to sign up to the code of practice and by 2004, 178 agencies had signed up to the code (Department of Health 2004b) but major questions arise about the adherence of all these agencies to the code, especially when recruiting health professionals to the independent sector.

In the light of these concerns the Department of Health issued a significantly strengthened code at the end of 2004 (Department of Health 2004a). This went further than the 2001 code because it required NHS trusts to only use recruitment agencies that complied with the code and it also partially incorporated the independent sector by making compliance with the code a contractual requirement of independent providers that supply [patient] services to the NHS. However, this still excludes the bulk of independent sector care which constitutes long-term nursing and social care. It is too early to assess the impact of the revised code but doubts remain about whether codes of practice are the most effective form of managed migration. There is a concern that prohibiting active recruitment from certain countries is discriminatory because it restricts the freedom of movement of health professionals from certain countries whilst allowing it to continue in others (Rowson 2004: 22). This might be prevented by an international code at global level, instigated by the WHO, but enforcing such a code would be very difficult.

An additional dilemma is that strengthening codes of practice can alienate key stakeholders. This has been the experience of the Commonwealth code of practice with its emphasis on mutuality of benefits for source and destination countries including compensation. According to the Commonwealth Companion Document (Commonwealth Secretariat 2003: 7):

Many developing Commonwealth countries have expressed the view that recruiting developed countries should in some way compensate source countries for the loss of personnel trained at great expense. Compensation may be in a variety of ways such as building capacity in training institutions

This proved to be a step too far for Australia, Canada, and the UK that declined to sign the code because of the inclusion of the phrases on compensation.

The development of codes of practice can serve an important function in publicising good practice for employers on issues such as induction and training and in influencing the climate in which international recruitment occurs. They also signal that recipient countries recognise that their actions impact on source countries. Nonetheless voluntary codes of practice remain relatively weak regulatory mechanisms because they have no

legal basis. However, they are likely to remain an attractive option for governments concerned to highlight the ethical character of their international recruitment activity and because there are few costs associated with them.

Bilateral agreements

A second key strand of managed migration concerns the development of bi-lateral agreements with particular countries. The Department of Health in England, for example, has a variety of accords with countries that extends beyond international recruitment to include co-operation on health systems development. In Egypt there is a programme to improve the care of the elderly, pathology and mental health services as well as a fellowship programme for Egyptian doctors to come to the UK to gain additional experience (Amos 2001: 20). Most attention has focused on the recruitment agreements signed with the Philippines, Spain, and India.

The agreement with the Philippines signed in 2002 nominates the Philippine Overseas Employment Administration (POEA) to undertake the pre-recruitment with NHS employers interviewing the candidates in the Philippines. The agreement sets out in detail the requirements placed on the POEA and the NHS, designed to ensure transparency and eliminate potential for abuse. For example, it is stated that the NHS employer will pay the cost of initial application to the NMC (£70), entry visa application cost (£70) and the cost of initial airfare to the UK provided they remain in post for 12 months. Employers are also required to pay the POEA a processing fee per successful application of £140, £17 as contribution to the Worker's Welfare Fund and £35 as a contribution to the Employee's Guarantee Trust Fund administered by the POEA. These charges must not be passed on to the selected applicant. The agreement also includes requirements related to induction and other forms of good practice.

Bilateral agreements have a number of potential advantages compared to the code of practice route. First, it reduces the need to utilize commercial recruitment agencies. There are many well managed and responsible agencies but their image is tarnished by the poor practice of others. As noted earlier much of the abuse associated with migration stems from the activities of these agencies. They facilitate unmanaged migration, often charging high fees and misleading applicants about their final employment destination and job. The bilateral agreement approach ensures a more predictable and transparent process for both parties. It also has the important effect of shifting the cost of migration from the individual migrant to the final client. Second, these agreements are flexible tools that can incorporate a variety of provisions. For a start they can include best practice guidance related to induction, training, etc.

Policies of return

Finally policies of return focus on attracting the temporary or permanent returns of health workers from abroad. Policies of return are difficult to manage effectively and the costs of assisted return programs need to be considered in conjunction with investment in retention, which may be more cost effective. Incentive mechanisms are often used to encourage return, but difficulties often arise subsequently which leads to high levels of attrition. A key human resources challenge is ensuring that the returning health worker is placed in a job that uses the skills that they have acquired effectively.

This is not straightforward because their skills-set does not match the conditions under which they are working. The IOM has highlighted other difficulties of facilitating return in relation to African professionals abroad. The challenges they highlight included prolonged job search arising from cumbersome recruitment processes, lack of trust in African governments amongst the diaspora, and weak recipient government ownership (IOM cited in WHO/World Bank 2002: 13).

Conclusion

There have been very significant changes in the scale and consequences of professional health worker mobility in recent years. The higher profile attached to human resource issues within the health sector and the specific challenges of addressing staff shortages whilst not exacerbating problems of brain drain has ensured that the issue of health worker migration has rapidly climbed the health policy agenda. Although knowledge about stocks and flows of health workers remains uneven, there is broad consensus that the mobility of health professionals has increased and that migration is frequently a symptom rather than a cause of the human resource difficulties that confront many health systems in source and destination countries.

This paper has suggested, however, that due to the importance of effective health provision for economic development it may be necessary to consider health professionals as a special case. In particular arguments about the positive feedback effects of mobility and related arguments about brain circulation may be less relevant for the case of health professional mobility. On the other hand there are opportunities within a highly regulated and high profile sector like health to actively manage patterns of mobility in a way that is less applicable to other sectors. In particular, a relatively small number of nation states have a disproportionate impact on the global movement of health professionals because of their resources and the manner in which they have actively promoted the international recruitment of health workers.

This paper has shown that governments and employers have a key role in the mobility of health workers. In all countries a higher profile for human resource management issues in the health sector would alleviate some of the 'push' factors that encourage health worker migration and stem shortages of health professionals in many industrialized countries that has fostered increased international recruitment. Health worker migration is an inescapable feature of the health sector. Policy responses appear to be shifting from a reactive agenda that focuses on stemming migration, towards a more ambitious and active agenda of managed migration that brings some benefits to source countries as well as destination countries. A central component of any such agenda is an enhanced recognition of the importance of improved working conditions and more effective human resources practice to encourage retention of health workers in both source and destination countries.

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