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References

- Anand S, Bärnighausen T. Human resources and health outcomes: cross-country econometric study Lancet 2004; 364: 1603–09.
- Anand S, Bärnighausen T. Health workers and vaccination coverage in developing countries: an econometric analysis. *Lancet* 2007; 369: 1277–85.
- 3 Dreesch N, Dolea C, Dal Poz M, et al. An approach to estimating human resource requirements to achieve the Millennium Development Goals. Health Policy Plan 2005; 20: 267–76.

- 4 Haines A, Sanders D, Lehmann U, et al. Achieving child survival goals: potential contribution of community health workers. *Lancet* 2007: 369: 2121–31.
- 5 Bergstrom S. Who will do the caesareans when there is no doctor? Finding creative solutions to the human resource crisis. BIOG 2005; 112: 1168–69.
- 6 WHO. World Health Report 2006: working together for health. Geneva: World Health Organization, 2006.
- 7 African Union. Africa Health Strategy, 2007–2015. Third session of the African Union Conference of Ministers of Health. Johannesburg, South Africa, April 9–13, 2007. http://www.africa-union.org/root/UA/ Conferences/2007/avril/SA/9-13%20avr/doc/en/SA/AFRICA_ HEALTH_STRATEGY_FINAL.doc (accessed Feb 4, 2008).
- 8 Commission on Macroeconomics and Health. Macroeconomics and health: investing in health for economic development. Geneva: World Health Organization, 2001.
- 9 Lugina H. Human resources for health: situation analysis in seven ECSA countries. Arusha: Health Community Human Resources Development and Capacity Building, 2006.

Forging solutions to health worker migration

Mary Robinson, Peggy Clark

All over the world, increased demand from wealthier countries resulting from ageing populations and medical advances has pulled large numbers of health workers from some of the world's poorest countries—many of whom are left with acute shortages of health workers of their own. Africa carries 25% of the world's disease burden yet has only 3% of the world's health workers and 1% of the world's economic resources to meet that challenge. Migration, together with other factors in many source countries such as insufficient health systems, low wages, and poor working conditions, are key factors determining low health-worker density in countries with the lowest health indicators, In Zambia, for example, there are fewer than 0.12 physicians for every 1000 people, whereas Italy enjoys 4.2 physicians for every 1000 people.1 Between 1993 and 2002, Ghana lost 604 trained doctors; roughly half of all doctors and a third of nurses leave the country after training.² Globally, WHO estimates that 4.3 million more health workers are required to achieve the health-related Millennium Development Goals and has identified 57 countries with critical shortages of health workers—36 of these countries are in Africa.

The challenge of international health-worker migration seems insurmountable given its scope and reach. Health workers have a clear human right to emigrate in search of a better life. Yet people in source countries hard hit by an exodus of health workers also have the right to health in their own countries. The space between these two fundamental rights is the area where the Health Worker Migration Global Policy Advisory Council is looking to gather best practice, assess efforts to date, and identify and debate key elements of solution-oriented policies to frame efforts by both source and destination countries. Under the umbrella of the Global Health Workforce Alliance, and

in partnership with WHO and Realizing Rights, which serves as its secretariat, the Health Worker Migration Global Policy Advisory Council and Technical Working Group will make recommendations to WHO and member states to guide new discussions and policies between source and destination countries, with the aim of developing a framework for a Global Code of Practice for Health Worker Migration.

To date, however, there are few rigorous data on the outcomes of new policies such as those shown in the panel. It is widely agreed that the complexity and scope of the challenge has meant that efforts to date have had unclear, and perhaps minimal, effects as well as some unintended consequences—such as continued unethical recruitment on the part of private sector agencies who operate outside of the scope of an agreement, a perception that some wealthier countries are restricting free access to foreign nurses in a way that discriminates against them on the basis of their country of origin, and other critiques. Some agreements have been criticised for being impossible to implement given their aspirational nature and requirements for "compensation" to source countries, which has proven to be extremely problematic to operationalise.

Agreement will never be reached on the relative success of the array of new policy instruments as long as we are unclear about what constitutes their success. If success is defined as halting or significantly slowing out-migration from poorer countries, it is clear we will never succeed, and we might, in fact, be missing the more important objective of new policy efforts—that is, to recognise the right to emigrate and its inevitability, to mobilise source and destination countries to work together to improve health outcomes in poor countries, and to substantially increase health-worker production everywhere to meet global needs. The guiding question

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Panel: Policies, codes, and agreements on responsible practices related to health-worker migration

UK-South Africa Memorandum of Understanding (MOU)

Signed in 2003, the UK-South Africa MOU is an attempt to support strengthening of the South African health system, to stem the unchecked flow of South African health workers to the UK and to link with efforts to increase UK health worker self-sufficiency and ethical recruitment. Its objectives are: to share information and expertise, to provide technical assistance and collaboration between institutions, to provide the opportunity for time-limited placements between countries, to support ethical recruitment between the two countries, and to find new ways to manage health-worker flows bilaterally over time.

Caribbean Community (CARICOM) Single Market and Economy Agreement (CSME)

The CSME was launched in 1989 to improve living standards and promote sustained economic development in the Caribbean region by allowing goods and services, people, capital, and technology to circulate freely between the 16 CARICOM member countries. The CSME, in relation to health, focuses on integration, collaboration, and harmonisation between CARICOM member countries, via several programmes, including: the Caribbean Association of Medical Councils, a common registration mechanism for CARICOM countries; the Regional Nursing Registration programme, which allows nurses to work in any CARICOM country after passing one exam; and the Caribbean Health Education Accreditation Board, which monitors every health training institution and programme in all 16 CARICOM countries. Every government in the Caribbean uses the same type of information technology monitoring software which contains 12 indicators for human resources.

Norway's new health-worker recruitment policy

In this policy, under development since April, 2007, Norway committed to reducing its contribution to the "pull" of health workers from their home countries by pursuing a policy of self-sufficiency for its own needs while also helping to reduce "push" factors through development assistance to support the strengthening of low-income countries' health systems. Recognising that no one government sector could develop such a policy alone, Norway further committed to policy coherence across the sectors of health, labour, education, development, and foreign policy in this new strategy.

Pacific Code of Practice for the Recruitment of Health Workers in the Pacific Region

Adopted by the Ministers of Health for Pacific Island Countries in March, 2007, this non-binding document provides guidelines for the ethical recruitment of health workers abroad. The Pacific Code is unique in its emphasis on accounting for the impact of health worker recruitment on the health services of source countries. Its guiding principles attempt to strike a balance between the rights, obligations, and expectations of source countries, recruiting countries, and recruits; to promote transparency regarding the nature and requirements of jobs; to ensure fair contractual requirements; and to emphasise the rights of recruits. The Code also includes suggested strategies to promote the retention of health workers in source countries, including creation of an enabling environment for health workers, providing monetary and non-monetary incentives, and budgeting for capacity building.

should not be "has migration stopped from lower income countries?" but rather "are we finding ways to help lower income countries strengthen and increase their health workforce, and are we finding ways to guide higher income countries to recruit ethically and take responsibility to increase their own health worker training and placement?"

A significant constraint on policy innovation has been the fact that basic data on migration in the health sector are thin and patchy. New research by the Organisation for Economic Co-operation and Development (OECD)3 will go a long way towards addressing the need for evidence to underpin policy. A preliminary assessment of policy efforts to date concludes that the most promising are time-specific and place-specific bilateral agreements that go beyond limiting recruitment from select countries.4 Such policies include development assistance and support for the strengthening of source-country health systems and workforces in such areas as technical assistance and capacity building; "circular" and temporary migration whereby medical diaspora can return temporarily to train and teach; ethical recruitment guidelines; and information sharing and partnership arrangements, such as hospital "twinning".

Examples of bilateral agreements that take a dynamic, flexible approach—with regular communication, continuous assessment, and adjustments by both source and destination countries—are the UK-South Africa Memorandum of Understanding (MOU) and regional agreements such as the Pacific Code and the Caribbean Community (CARICOM) agreement (panel). Although there has been no rigorous assessment of the UK-South Africa MOU to date, registrations of South African nurses and midwives in the UK as a proportion of non-EU registrations dropped from a high of 24.6% to 4.4% between 2000 and 2006.5 The UK-South Africa MOU might have been one factor contributing to this result, together with the implementation of the UK's comprehensive workforce strategy and ethical recruitment strategies and codes of practice. On the South African side of the agreement, administrators report that hospital twinning and capacity-building efforts are showing results in the strengthening of hospitals and health-worker skills in targeted hospitals and medical schools in South Africa. Some criticism of the UK-South Africa MOU has come from health workers who believe it is limiting employment opportunities in the UK for South African emigrants in particular, although the UK health service has stated that this is not their intent.

Importantly, bilaterals such as the UK-South Africa agreement do not exist in a vacuum—they are but one part of the larger global workforce market. Decreases in health-worker flows from one country will lead to flows from another country in a cascading effect. For example, the OECD study³ suggests a large emigration of Canadian health workers to the USA. Canada, in turn, employs a high number of South African health workers: as of 1999, 17% of physicians in Saskatchewan had received their first medical degree in South Africa.⁶ In turn, South Africa's shortage of health workers has been to some extent filled by health workers from other African countries—which many see as South Africa "poaching" from countries with greater health workforce needs than their own.

All of these MOUs, codes, and agreements set forth principles and suggested elements of responsible practice related to health-worker migration and the underlying factors that propel these labour flows. Some of the key challenges to be addressed with all of these codes include the need to develop incentives and enforcement mechanisms given their voluntary nature, the need to engage the private sector in efforts, and the crucial need to establish systems to monitor and assess their effects nationally, regionally, and globally since changes in any two countries will affect labour flows in other countries as a consequence.

Even in full consideration of the challenges ahead in assessing efforts underway and developing guidelines, new policy efforts to craft mutually responsible health-worker migration policies between sending and receiving countries are urgently needed. They point the way to a new approach to addressing the challenges of migration that rests on the critical premise of informed dialogue between countries where mutual benefit and mutual responsibility are the starting point for practical policy action. These steps move us towards a future

where basic access to health care, with a robust health workforce as its anchor, becomes a recognised global human right.

Conflict of interest statement

We declare that we have no conflict of interest.

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References

- WHO. Working together for health: the world health report 2006. Geneva: World Health Organization, 2006: 192–98.
- 2 Realizing Rights. Ghana health worker migration and the need to strengthen local health systems: summary report, Washington, DC: Realizing Rights, 2006.
- 3 Dumont JC, Zurn. Immigrant health workers in OECD countries in the broader context of highly skilled migration. In: International migration outlook Sopemi 2007 edn. Paris: OECD, 2007: 161–200.
- 4 Connell J. Review of practice and Memoranda of Understanding on the international rRole of skilled health workers: draft report. Geneva: WHO/HSS/HRH, 2007.
- 5 UK Nursing and Midwifery Council. Annual statistics, 2000–06. http://www.nmc-uk.org (accessed Feb 12, 2008).
- 6 Sullivan P. Canada a prime destination as MDs flee South Africa. CMAI 1999: 160: 1615–16.

Planning and costing human resources for health

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Human resources are crucial for the provision of health care and represent the largest single use of public spending on health in developing countries.¹ Yet countries face an ongoing challenge when it comes to financing human resources for health (HRH) sufficiently to sustain an adequate supply of health workers and stimulate greater productivity and more effective health care.

Several papers prepared for the 2006 World Health Report and the Global Health Workforce Alliance describe the HRH financing gap²⁻⁴ and the variables such as economic growth, government revenues, aid, fiscal sustainability targets, and priority-setting practices that affect the ability of governments and donors to increase spending on this input.³

Inspired by the global HRH movement, some countries, mostly in Africa, have undertaken strategic planning exercises to estimate their HRH needs.⁵ But these plans rarely include a reliable analysis of the financing needs or structures required to achieve the desired levels of care. When they do address costs, they typically use provider-population ratios to estimate the number of additional staff needed in each cadre, then multiply those numbers by current public-sector salaries and allowances (or some assumed salary increment). Shortfalls are determined by comparing this figure with current and projected health-sector budgets. Resource mobilisation options via aid and public-sector priority-setting are then discussed.

Although these efforts represent an important first step, country policy makers and international agencies need to give greater attention to the economics governing HRH labour markets and the implications for the financing of HRH plans. Otherwise, estimates of HRH shortages, productivity, quality, skill mismatches, and distribution problems can be misleading. These issues are not new,⁶⁷ but deserve greater prominence.

What does this mean, in practice? First, because the market for HRH, like any other labour market, involves the interaction between demand for and supply of workers, effective solutions to HRH problems need to consider the many factors affecting both sides of the market. This approach will take planning exercises beyond the ratio-based and service-target-based models on which current efforts seem to place most emphasis.8

On the demand side, HRH plans should distinguish between population health needs and institutional demands for HRH hiring. Public and private institutions that pay for HRH, such as ministries of health, ministries of defence, social security agencies, non-governmental organisations, private insurers, and community-based insurance funds, among others, each have their own wage rates, budget envelopes, provider payment practices, civil service or labour regulations, and other rules that govern hiring and wage decisions. These might include retirement policies, growth of alternative employment opportunities in the private

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