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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Planning and costing human resources for health
Amanda Glassman, Loren Becker, Marty Makinen, David de Ferranti

Human resources are crucial for the provision of health care and represent the largest single use of public spending on health in developing countries. 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 gap 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 health care. Inspired by the global HRH movement, some countries, mostly in Africa, have undertaken strategic planning exercises to estimate their HRH needs. 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, 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.

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 non-wage benefits, and other rules that govern hiring and wage decisions. These might include retirement policies, growth of non-wage benefits, and other rules that govern hiring and wage decisions.

sector, and capacity and cost of scaling up preservice training. The presence of professional unions and practices related to the negotiation of labour contracts with the different institutional actors also affects the characteristics of the demand for HRH, as well as other political, economic, and social variables. Understanding and analysing the demand function for HRH will help to build more realistic and effective HRH-strengthening schemes. For example, country planners ignoring demand and institutional factors might try to retain more health workers by simply raising wages across the board. The results might be that competition with private employment opportunities cause private wages to rise, eroding the expected retention effect and having little effect on productivity unless the wage increases were related to performance. Similar disappointments could result from disregard of other demand and institutional factors.

On the supply side, instead of norms of provider–population ratios and provider stocks extrapolated on the basis of the pool of graduates from professional programmes, important factors such as migration and other provider behaviours must be taken into account. Although well deserved attention has been directed at the role of the education sector in the production of HRH supply, increasing the emphasis on labour market dynamics that affect the choices that qualified professionals make to work in general and the choice to work in the health-care labour force in particular will improve the relevance and feasibility of plans. Decisions on labour force participation are in turn governed by prevailing wages in the public and private sectors, working conditions, age, gender, household structure, and presence of other income earners, among others, that should also be analysed and taken into account to estimate the effect that a given policy or scale-up will have on productivity, quality, hours worked, public–private mix, and geographical distribution.

Planners should also move beyond the assumption that existing health-care delivery systems are efficient. A study of time use in Zanzibar, Tanzania, found that on average only 61% of providers’ time was spent productively; other studies find substantially lower productivity rates. The task mix itself—generated by a de facto poor skills mix at different levels of the health system—generates inefficiency. The use and targeting of payments, subsidies, and tax breaks, in combination with greater attention to non-financing incentives and investment in supervision and capacity building, can potentially help to increase worker productivity. To implement such strategies, trends in provider productivity must be measured and managed. The substantial variations in provider quality must also be addressed head-on to reduce the potential for inappropriate care and ineffective use of resources.

There are good examples of more careful planning of HRH scale-up that can make a difference to the effectiveness of these investments and the success of policy makers in attracting additional resources. Malawi’s government, backed by the UK Department for International Development, is in the midst of a 6-year plan to increase salaries in the health sector by 50% on average. This policy, which is part of an emergency human resources plan, was developed only after a careful analysis of the health labour market found a mismatch between high government demand for HRH and a large available pool of skilled workers in the private sector who were unwilling to work for the public-sector salaries offered. The analyses undertaken in support of the plan looked at vacancy rates in the public sector and within a major non-governmental provider, reasons for health workforce outflow, an examination of wage rates in the public and private sectors in Malawi and in neighbouring countries, the number of health professionals employed in other sectors, and out-migration patterns, as well as budget envelopes and other variables related to fiscal effort and priority given to the sector. Although the quality of the data and rigour of the analysis is not optimal given data limitations, the effort made to consider the entire HRH labour market, from both the demand and supply sides, makes a convincing case that increasing wages will result in better attraction and retention of HRH in both sectors.

Thailand’s experience over the past 40 years provides an example of how several types of financial incentive can be used to influence the performance and distribution of health workers. The government provides special allowances to public-sector doctors and other health workers on the basis of the remoteness of the district in which they work. Another special allowance provides a
financial incentive for doctors to refrain from practising privately during off-duty hours. In addition, Thailand provides very low-cost education and training for medical students in exchange for a requirement that the students work in the public sector for 3 years. Students who breach their compulsory service contracts are required to pay a fine, although the value of this penalty has gone down in recent years owing to inflation, which has led to shorter public-sector stays. However, it should be recognised that part of the success of this scheme is related to the overall economic situation in Thailand after the Asian financial crisis that led to a marked reduction in private-sector health care, particularly in Bangkok, and a resulting excess supply of HRH that was amenable to the terms offered for public-sector service.11

Although there are many challenges associated with poor quality data on labour markets and limited capacity in HRH planning departments, these examples suggest that effective HRH policymaking is possible when countries have the tools—or the technical support—needed to ensure technically sound planning activities.

To improve the effectiveness of HRH financing policies in developing countries, the Global Health Workforce Alliance is convening a Task Force on HRH Financing that will develop and test approaches to strengthening the analysis of HRH financing and labour market issues. Besides helping clarify the core concerns broadly, this Task Force will examine options for practical assessment tools that could be used at the country level and in the preparation of national HRH strategic plans. The Task Force will draw on work already under development by the World Bank, WHO, and USAID, and will seek to raise awareness of the issues internationally. Illustrative analyses in HRH crisis countries are being considered, as well as consultations with various stakeholders. The goal is to help facilitate more accurate costing, financing, and impact estimates for participating countries.

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