People provide health care, design health systems and educate future health workers. People—public health workers, nurses, health aides, village health workers, physicians, lab technicians and managers—are the human resources for health that are the heart of the health system of every country. The numbers, skills and morale of these clinicians, teachers and policymakers largely determine the performance of health systems. Although this is widely recognized, the topic of human resources for health has been largely neglected.

We know that the quality and dedication of health workers are critical to health and development, yet the nature of the work force—skills, motivation, support systems—has received little consistent transnational attention. Unless we focus on the human component of health-systems development, it seems fair to predict that the goals of the global health community—such as more equitable access to life-saving vaccines and treatments, and the larger-scale improvements reflected in the United Nations’ Millennium Development Goals—will not be met. Without a better understanding of the human component of health systems, we risk going forward with health-sector reforms that will be neither effective nor sustainable.

We need to rethink fundamentally the way human resources working in health in the developing world are trained, employed and deployed. The challenges are immediate due to urgent health crises such as HIV/AIDS and long-term because of looming health threats and rapidly growing populations. Investing in human resources today has the potential to yield decades of sustained return.
Rethinking Human Resources for Health

Global Health Challenges

This is an extraordinarily challenging time in global health. New threats of infectious disease are omnipresent including HIV/AIDS, anthrax bioterrorism and SARS. The global receptivity to innovative initiatives to control tuberculosis and tobacco use attests to the fact that many countries and leaders now recognize the importance of a healthy population for economic development and global security. As health rises on the global development agenda unprecedented financial resources are being mobilized, which, coupled with the setting of the time-bound Millennium Development Goals is creating high expectations for results.

The immediate effect of the influx of financial resources has been to illuminate the precarious state of health systems in many developing countries. In the face of new health crises some of these systems are contracting or collapsing. While factors such as physical infrastructure, governance and financing challenge all health systems today, we now recognize that implementation of even the most carefully tailored and tested strategies for health improvement will depend primarily on the work force.

Insufficient Human Capacity

In many low-income countries there is insufficient human capacity to make use of the newly available resources. New opportunities to improve health have been made possible by scientific advances such as vaccines, however their potential impact may not be realized because the work force to implement ambitious programs does not exist. Without a motivated, competent, well-distributed and well-supported work force, the infusion of new money and drugs risks being misused or wasted.

In many low-income countries, the work force has suffered from severe underinvestment. Compounding this underinvestment have been lack of adequate facilities, medications and equipment, and noncompetitive salaries, as well as

“Although we are trained to suture wounds we do not have suturing materials in the clinic. We send people to the hospital … even those we can suture. Also, we do not provide delivery services although we are trained to deliver babies.” — Nurse in South Africa

better economic and professional opportunities. Often called brain drain, this occurs from developing to developed countries, from rural to urban areas, and from the public to the private sector leaving destabilization in its wake. Health workers and health systems are complex and adaptive; to understand these dynamics and to fashion new strategies, we need to draw on related fields, such as labor economics, history and sociology. We also must be prepared to confront rigid mind-sets, institutional inertia and turf protection.

The extent of the thinking needed that is indicated in the graph above shows the human resources vector, stretching from illness care at one end to the promotion of population health at the other. This illustrates that the scope of interventions extends beyond the traditional realm of public health and has multiple targets ranging from the individual to society.

### Botswana: Inadequate Personnel

<table>
<thead>
<tr>
<th>Human resource requirement: Staff position</th>
<th>Current FTEs*</th>
<th>Establishment FTEs**</th>
<th>Present utilization %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doctors</td>
<td>171</td>
<td>218</td>
<td>127</td>
</tr>
<tr>
<td>Nurses</td>
<td>884</td>
<td>1,088</td>
<td>123</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>7</td>
<td>12</td>
<td>171</td>
</tr>
</tbody>
</table>

*Full Time Equivalents **No. of approved posts

(Ensuring the Launch of ARV Therapy in Botswana, African Comprehensive HIV/AIDS Partnerships (ACHAP), Gaborone, Botswana 2001.)

additional workloads, heightened exposure to contagious hazards, illness and premature death due to HIV/AIDS.

The challenges vary greatly both within and between countries, but they are most acute in sub-Saharan Africa. In Botswana, a comparatively rich African country, for example, the government pledged to provide free anti-retroviral therapy to all eligible citizens. This commitment is being frustrated not by lack of financing, but by the dearth of physicians, nurses, pharmacists and counselors. Compounding these deficiencies are morale problems, skill imbalances and geographic maldistribution of the work force.

How can developing countries grapple successfully with health crises if they lack the very foundation of a health system: people?

**Looking for a New Perspective**

Training more workers and professionals and equipping them with new skills may be a necessary step in many settings but it is not a sufficient or complete strategy for developing effective human resources for health. The constant need for workers as well as increased demands generated by hospitals and new technologies often create forces that outstrip the supply of health workers. Local or regional staffing problems are exacerbated by the tendency of health workers to migrate in search of...
The Joint Learning Initiative

A broad group of partners including donors, experts and international organizations is developing a framework for a global rethinking of human resources for health, with the focus on the poorest countries and communities of the world. Beginning in 2003 seven working groups will focus on specific dimensions of the challenge and map the current situation from which subsequent strategy developments will be informed. Three of the groups will focus on a “landscape analysis,” taking stock of where we are in regard to the global health workforce and what dynamics are driving it. Four groups will focus on “strategy development” including both issues of immediate urgency and longer-term policy and planning.

A. Landscape Analysis

Information on the current status of human resources for health in the developing world is incomplete, inconsistent and insufficient for policy-development purposes. Informational gaps about the workforce are far greater than for other health-systems resources in domains such as research or financing of care. This relative poverty of information reflects the lack of a framework for assessing and reporting human resource needs. Traditional data collection at its best gives us the number of specific types of workers (usually doctors or nurses) per 1,000 or 100,000 people, identifying gaps that implicitly call for more training. While these gross ratios have a role, they are insufficient measures for understanding the full dynamics of human resources working in health. We need an analytic framework that encompasses the mechanisms of supply and demand that work beneath the simple ratios.

In addition to quantitative metrics, qualitative insights are necessary to understand the linkages between the workforce and an effective health system. Case studies of exceptionally positive or negative experiences in workforce development with an emphasis on why some organizations or countries perform better or worse than expected could supply such insights. We know some things about the general nature of gaps and biases in the field, but precise information as to extent, trends and underlying determinants is lacking, especially for Africa.

In short, the landscaping component of the JLI is designed to produce a comprehensive mapping of both the current state and future needs for human resources. It also will address the numbers, typology, distribution, supply-and-demand dynamics, and related personal and institutional forces that characterize the health workforce globally and drive the needs and opportunities in health. Three of the Working Groups are operating in these areas.

History Working Group. The JLI takes seriously the importance of understanding the history of modern public health and the social forces that have influenced human resource development. Among the questions that this Group will examine are:

- How have the concepts of public health and related fields evolved over the past century?
- What has been learned from history?
- What has been learned from recent investments?
- What are the roles of the state, the private sector and civil society?

Supply Working Group. This group will study the current modalities of health professional education and develop strategies and recommendations to foster greater relevance,
innovation and equity in the generation and supply of human resources to respond to the population’s health needs.

The group will develop policy recommendations concerning: new competencies needed, alignment of training with national policies, identification of critical new public health competencies, and innovative institutional (formal and informal) arrangements for training the health workforce.

Demand Working Group. This group will focus the factors that create the demand for health workers. They will consider labor markets, professional compensation, career development, quality of work life and other worker incentives. They will consider international health-worker recruitment strategies, as well as the role of intermediary organizations that recruit and retain personnel. They will examine the “push-pull” forces of urban/rural distribution and the transnational flow of professionals (brain drain). In addition to traditional health-sector partners, this Working Group will include the International Labor Organization and the International Organization on Migration. These new collaborators will contribute points of view from which health has previously been relatively isolated.

B. Strategy Development

Four Working Groups are developing strategy recommendations with two different foci. The first focus is on immediate and urgent health challenges and the second is on fundamental rethinking necessary to transform the health workforce system.

IMMEDIATE HUMAN RESOURCE AGENDAS

Africa Working Group. The most immediate of the world’s health challenges are in Africa, and the urgency of these crises makes it imperative to identify ways to address human resources that can make a difference in the very near term. The Africa Working Group will focus on these short-term challenges, not to develop Band-Aids but to articulate options that are both commensurate with the overwhelming needs and compatible with current realities.

Diseases of the Poor Working Group. Complementing the Africa Group, this Working Group will look at current and future human resource needs for fighting selected priority health problems. For example, an enormous number of personnel will be needed to make efficient use of the new...
resources becoming available through the Global Fund for AIDS, TB and Malaria. This and similar efforts provide an excellent opportunity to participate in innovative problem-solving approaches including new models for control within an integrated health system at both the country and regional levels.

**STRATEGIES FOR THE LONGER TERM**

*Innovations Working Group.* Beyond the urgency of immediate human resource challenges, it is important to invest in the future. The rapidly shifting technological and institutional settings in health provide an abundance of possibilities for innovative thinking in regard to human resources. Distance learning and the creative use of nonprofessional cadres performing the traditional tasks of doctors and nurses are prime examples of the new opportunities in the training and deployment of health workers. Systems for managing human resources in other sectors, both public and private, may offer useful lessons for health. Building on such ideas and following the principle that lack of imagination would be a catastrophic moral failure, the Innovations Working Group will focus on ideas, institutions, technologies and practices that might transform the way health systems deal with human-resource challenges in the future.

*Coordination Working Group.* This Group will provide oversight and guidance to the Initiative, facilitating the JLI, looking for synergies and promoting collective efforts among the constituents. It will be attentive to overlap and competition. Among its activities will be to gather crosscutting analyses and statistics in order to develop a Joint Learning Initiative advocacy strategy for the future. This committee will also draft the JLI summary report that will outline an HRH reform program for the next decade.

“...And when I started working somebody said to me, ‘The patient in front of you is definitely not the only patient you’re going to see that day, but, for that patient, you are the only doctor that he or she will see today.’ So, I try to be in the present moment, with this patient, and try and not think about the 20 people sitting outside...” — DOCTOR, SOUTH AFRICA

(Petrida Ijumba, “‘Voices’ of Primary Health Care Facility Workers,” Chapter 10, South African Health Review 2002, Durban: Health Systems Trust, 188.)
Third, history and “success stories” are important to HRH reform. People and health systems have not remained passive in confronting the crisis in human resources. The creative responses of communities, nongovernmental organizations, businesses and governments should be identified, disseminated and replicated.

Fourth, global strategic thinking on HRH reform needs to be stimulated and harmonized, recognizing the key roles of supply, demand and health-worker mobility. In this effort it will be important to link domains of policy and planning that have often been treated separately—training and education, health systems development and labor markets. New strategies will need to be developed with the participation of professional associations, unions and workforce representatives as well as governments. Policies on professional mobility, including ethical recruitment practices and more equitable international ground rules among receiving and sending countries will need to be developed.

The global HRH reform initiative will require the active collaboration of governments, health-worker organizations, health-science faculties and corporations throughout the world. Additionally, the participation and support of nongovernmental stakeholders such as foundations, NGOs, regional health authorities, United Nations organizations and the World Bank will be necessary to achieve reform of substantial scope and durability. Donors can support the initiative by acknowledging the importance of human resources in efforts to achieve equity in health, and by stepping up their investments in HRH reform. The blueprint of the Joint Learning Initiative will specify the case for HRH reform and provide an action proposal for that reform.