

Executive Summary

After a century of the most spectacular health advances in human history, we confront unprecedented and interlocking health crises. Some of the world's poorest countries face rising death rates and plummeting life expectancy, even as global pandemics threaten us all. Human survival gains are being lost because of feeble national health systems. On the frontline of human survival, we see overburdened and overstressed health workers—too few in number, without the support they so badly need—losing the fight. Many are collapsing under the strain. Many are dying, especially from AIDS. And many are seeking a better life and more rewarding work by departing for richer countries.

Today's dramatic health reversals risk more than human survival in the poorest countries—they threaten health, development, and security in an interdependent world. How the world community responds to these challenges will shape the course of global health for the entire 21st century.

The global health crisis occurs against a backdrop of mass poverty, uneven economic growth, and political instability. The vicious spiral of paralytic responses to threatening diseases is accelerated by three major forces assailing health workers.

- First is the devastation of HIV/AIDS—increasing workloads on health workers, exposing them to infection, and testing their morale. Many are becoming terminal care providers, not healers. Hardest hit are societies in sub-Saharan Africa, but the virus is also spreading rapidly from hot spots in Asia, the Americas, and eastern Europe.
- Second is accelerating labor migration, causing losses of nurses and doctors from countries that can least afford the “brain drain.”
- Third is the legacy of chronic underinvestment in human resources. Two decades of economic and sectoral reform capped expenditures, froze recruitment and salaries, and restricted public budgets, depleting work environments of basic supplies, drugs, and facilities.

These forces have hit economically struggling and politically fragile countries the hardest.

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The power of the health worker

Even so, dedicated health workers across the world demonstrate commitment and purpose far beyond the call of duty. And their steadfast motivation is finally being matched by new political priorities and greater financial allocations for health—with the AIDS epidemic fueling public concern and social activism. Money—though still far from adequate—is beginning to flow, and some life-prolonging drugs are now far cheaper and more widely available than just a few years ago.

Accompanying these dynamics is the broader development compact forged by the United Nations (UN) to reach the Millennium Development Goals (MDGs) by 2015. These global goals, prominently featuring health, have become a focal point for rallying international cooperation to achieve time-bound targets. Emerging are many new programs, mechanisms, financing strategies, and actors.

To take advantage of these opportunities, a strong and vibrant health system is essential. Yet such systems are impossible without health workers who are the ultimate resource of health systems. Yes, money and drugs are needed, but these inputs demand an effective workforce. For it is people, not just vaccines and drugs, who prevent disease and administer cures. Workers are active, not passive, agents of health change. With their salaries often commanding two-thirds of health budgets, they weave together the many parts of health systems to spearhead the production of health.

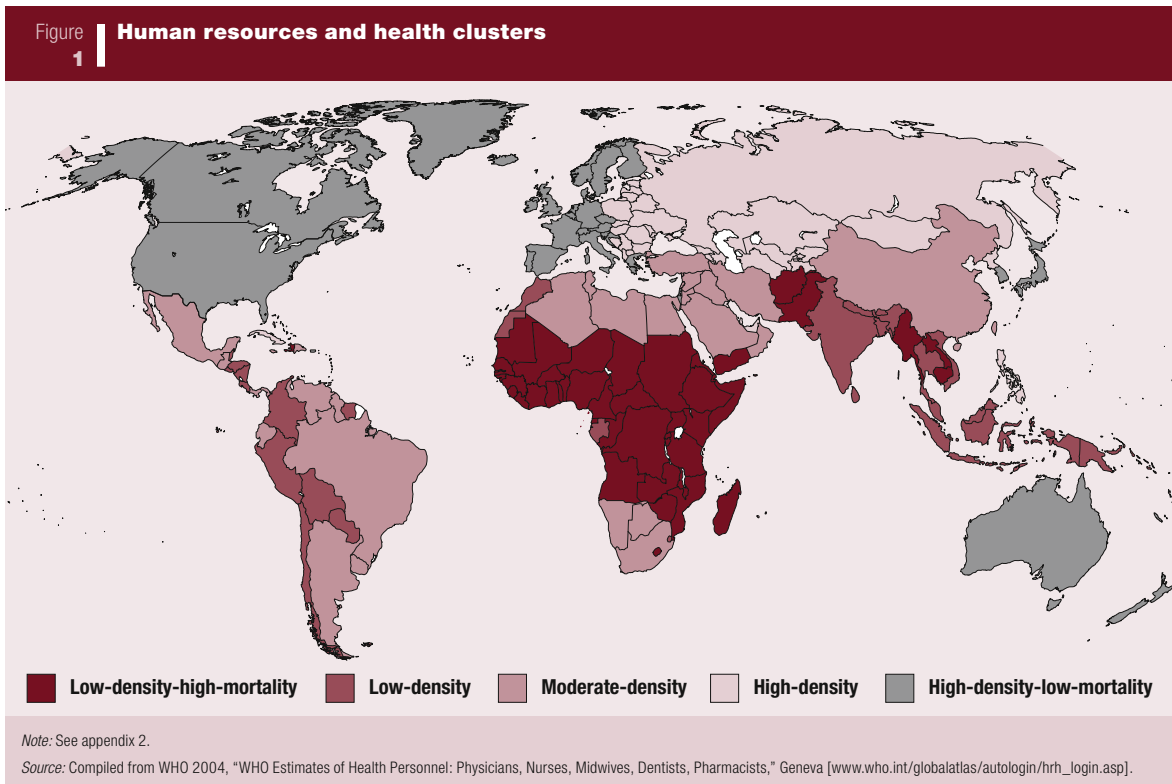
Throughout history, periods of acceleration in health have been sparked by popular mobilization of workers in society. Higher worker density and better work quality—joining such social determinants of health as education, gender equality, and

higher income—improve population-based health and human survival. The density of workers in a population can make an enormous difference in the effectiveness of MDG interventions to reach the MDGs. For example, the prospects for achieving 80 percent coverage of measles immunization and skilled attendants at birth are greatly enhanced where worker density exceeds 2.5 workers per 1,000 population. Seventy-five countries with 2.5 billion people are below this minimum threshold.

We estimate the global health workforce to be more than 100 million people. Added to the 24 million doctors, nurses, and midwives who are routinely enumerated are at least three times more uncounted informal, traditional, community, and allied workers. Those enumerated professionals are severely maldistributed. Sub-Saharan Africa has a tenth the nurses and doctors for its population that Europe has. Ethiopia has a fiftieth of the professionals for its population that Italy does.

With such wide variation, every country must devise a workforce strategy suited to its health needs and human assets. Here, we assign 186 countries to low, medium, and high worker density clusters (below 2.5, between 2.5 and 5.0, and above 5.0 workers per 1,000 population, respectively), with the low and high density clusters further sub-divided according to high and low under-five mortality. Among low-density countries, 45 are in the low-density-high-mortality cluster; these are predominantly sub-Saharan countries experiencing the double crisis of rising death rates and weak health systems. The remaining 30 low-density countries are mostly in Asia and Latin America, the predominant regions for the 42 moderate density countries. Among high-density countries, 34 are in the high-density-low-mortality

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cluster, all wealthy countries, mostly members of the Organisation for Economic Co-operation and Development (OECD). The remaining 35 high-density countries are transitional economies or exporters of medical personnel.

All these countries, rich and poor, suffer from numeric, skill, and geographic imbalances in their workforce. And all countries can accelerate health gains by investing in and managing their health workforce more strategically. While maintaining a global perspective, we focus on low-density-high-mortality countries because of their dire health situations. For all countries, we conclude that our outstanding global challenges are:

Global shortages. There is a massive global shortage of health workers. Although imprecise quantitatively, we estimate the global shortage at more than four million workers. Sub-Saharan countries must nearly triple their current numbers of workers by adding the equivalent of one million workers through retention, recruitment, and training if they are to come close to approaching the MDGs for health.

Skill imbalances. Nearly all countries suffer from skill imbalances, creating huge inefficiencies. In some, the skill mix depends too much on doctors and specialists. In most, population-based public health is neglected. Many

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countries must revamp their health plans toward a workforce that more closely reflects the health needs of their populations, especially by deploying auxiliary and community workers.

Maldistributions. Nearly all countries have maldistribution, which is worsened by unplanned migration. The urban concentration of workers is a problem everywhere. Improving within-country equity requires attracting health workers to rural and marginal communities—and retaining them. There is also a maldistribution between public and private sectors in many countries. And international equity is worsened by unplanned international migration, with the loss of nurses and doctors crippling health systems in many poor sending countries.

Poor work environments. Nearly all countries must improve work environments by scaling up good practices to strengthen the management of existing resources, assure adequate supplies and facilities, and create monetary and nonfinancial incentives to retain and motivate health workers. The voices of workers need to be heard.

Weak knowledge. The weak knowledge base on the health workforce hampers planning, policy development, and program operations. Information is sparse, data fragmentary, and research limited—deficiencies that must be remedied.

Workforce strategies

Evidence confirms that effective workforce strategies enhance the performance of health systems, even under difficult circumstances. Indeed, the only route to reaching the health MDGs

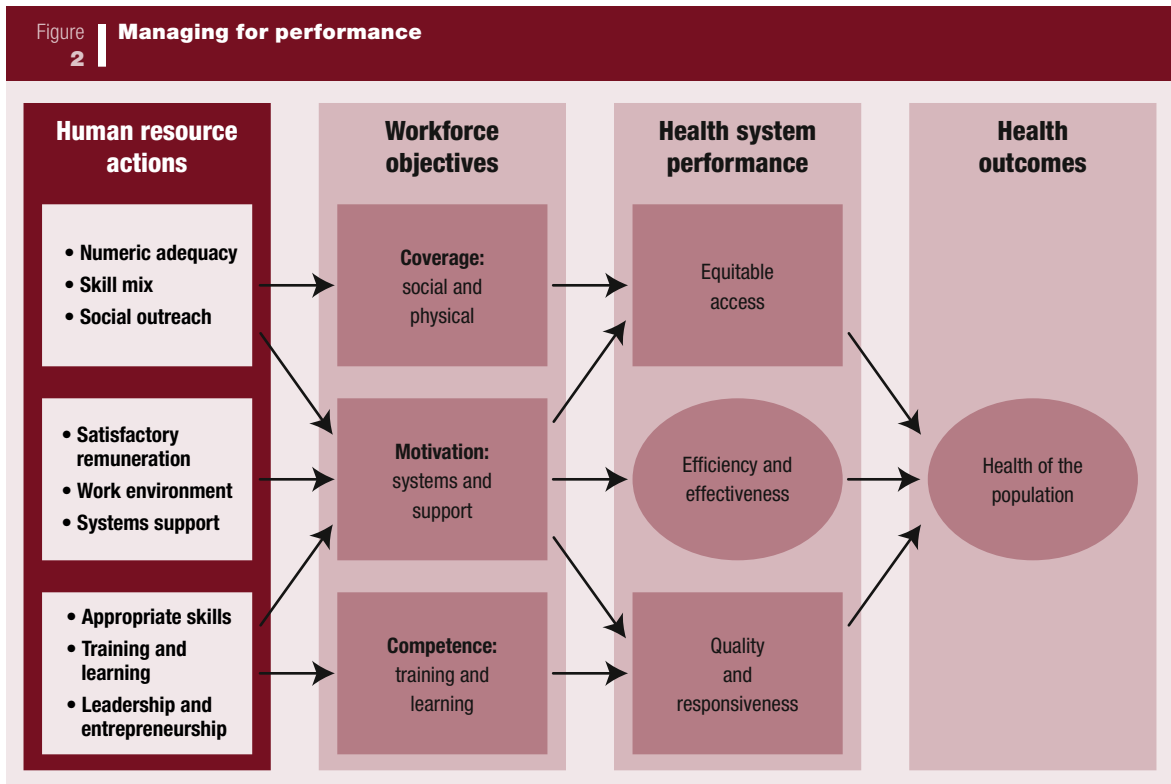
is through the worker; there are no short-cuts. Workers, of course, are not panaceas. Building a high performance workforce demands hard, consistent, and sustained effort. For workers to be effective, they must have drugs and supplies. And for them to use these inputs efficiently, they must be motivated, skilled, and supported.

Appropriate workforce strategies can generate enormous efficiency gains. Successful strategies must be country-based and country-led, focusing on the frontlines in communities, backed by appropriate international reinforcement.

Community action, the focus of all strategies, should ensure access for every family to a motivated, skilled, and supported health worker. The base of the worker system consists of family members, relatives, and friends—an “invisible workforce,” mostly female. They are backed by diverse informal and traditional healers, and in many settings by formal community workers. Beyond these frontline providers are doctors, nurses, midwives, professional associates, and nonmedical managers and workers who support effective practice. Although the national pattern of workers demonstrates extraordinary diversity, all strategies should seek to promote community engagement in recruiting and retaining workers and accounting for worker performance.

Country leadership and strategies are the leverage points for workforce development because governments set policies, secure financing, support education, operate the public sector, and regulate the private sector. Diverse national circumstances also mean that solutions must be crafted to unique country challenges.

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But all country strategies should have five key dimensions—engaging leaders and stakeholders, planning human investments, managing for performance, developing enabling policies, and building capacity while monitoring results.

Workforce development is not merely a technical process—it is also political. It demands building a strong action coalition across all stakeholders with diverse interests. Health workers must be at the center, but collaboration must reach beyond the health sector to finance, education, and other ministries and beyond government to academic leaders, professional associations, labor unions, educational institutions, and nongovernmental

organizations. All must be involved in setting national goals, designing strategies, drawing up plans, and implementing policies and programs. Good data, invariably scarce where needed most, are essential to inform and guide such efforts.

Management of the workforce for better performance brings together the health and educational sectors to achieve three core objectives—coverage, motivation, and competence. Coverage strategies promote numeric adequacy, appropriate skill mixes, and outreach to vulnerable populations. Motivation strategies focus on adequate remuneration, a positive work environment, opportunities for career development, and supportive

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health systems. Competencies are advanced through educating for appropriate attitudes and skills, creating conditions for continuous learning, and cultivating leadership, entrepreneurship, and innovation. All these efforts should be oriented toward building national capacity. Progress and setbacks should be monitored for mid-course corrections.

Global responsibility must be shared because no country is an island in workforce development. Transnational flows of labor, knowledge, and financing imply that successful country strategies depend on appropriate international reinforcement. Some cross-border flows, left unattended, may generate negative health consequences—the “brain drain” from sending countries, for example. But properly harnessed, these flows have great potential—scaling up best practices and using foreign aid more efficiently are examples.

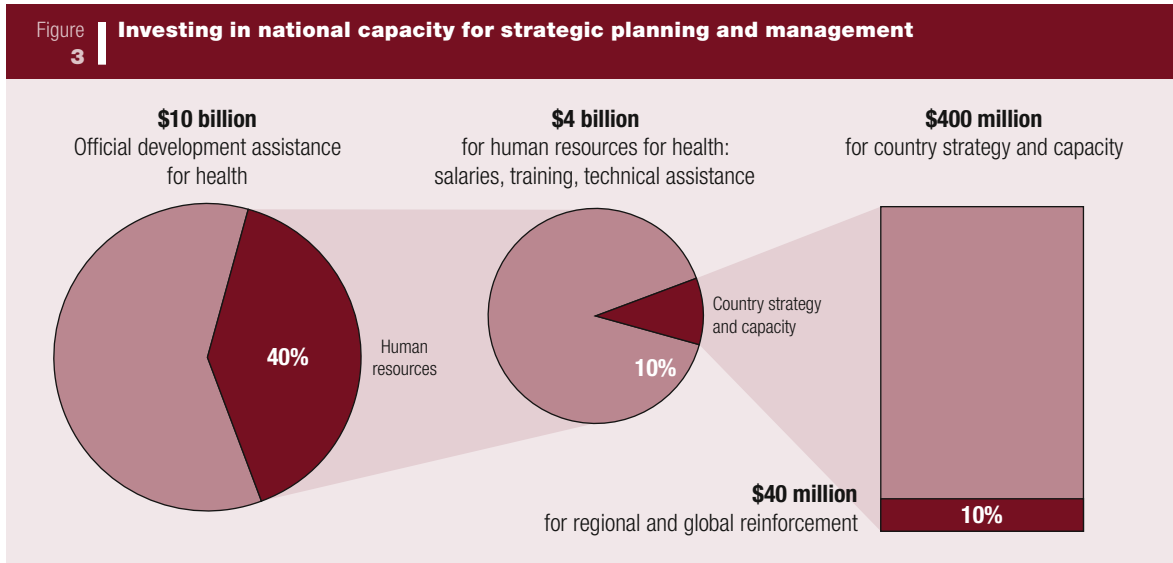
Critical is improving the management of transnational flows of highly skilled medical professionals. The migration of doctors and nurses resembles a “carousel” of multiple entry and exit paths—from low- to high-income regions. These migratory flows can produce many benefits—and generate much harm. Because blocking the movement of people violates human rights and is generally impossible to enforce, the global management of medical migration should seek to protect both health and human rights—dampening “push” forces by retaining talent in sending countries and reducing “pull” forces by aiming for educational self-sufficiency in destination countries. Global opportunities should be expanded by massively increasing educational investments in source countries and accelerating appropriate “reverse flows” of workers from better endowed to deficit countries.

The great potential for harnessing the transnational flow of knowledge for workforce development remains largely untapped. The diffusion of knowledge accounts for much of the spectacular health advances of the past century. Yet workforce data and research are sparse. Strategies must focus on bridging the knowledge-action gap, promoting the sharing of information, and strengthening the knowledge base. Especially important is inculcating a culture of research and promoting the diffusion of innovation among all countries.

After a decade of stagnation, official development assistance (ODA), another transnational flow of high potential, is finally turning around. We estimate that of a 2002 total ODA of \$57 billion, 13 percent is directed at health—now increasing to about \$10 billion. Most new funds are targeted at HIV/AIDS in sub-Saharan Africa. We also estimate that 30–50 percent, or about \$4 billion of development assistance for health, is devoted to human resources—salaries, allowances, training, education, technical assistance, and capacity building. Applying \$400 million of that to country strategies and capacities would reap enormous payoffs.

Current spending patterns on human resources are fragmented and inefficient. To invest more strategically, donor and policy coherence must be dramatically improved—changing attitudes about health workers as a crucial investment, harmonizing the workforce across competing categorical programs, and ensuring fiscal policies that support workforce improvements. For countries in a health emergency, international financial institutions must join in lifting public expenditure ceilings to permit donor support of the massive mobilization of the workforce that will be necessary.

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Putting workers first

We call for immediate action to harness the power of health workers for global health equity and development. The imperative for action springs from the urgency of the health crisis, the timeliness of new opportunities, and the prospect that available knowledge, if applied vigorously, could save many lives. The cost of inaction is unmistakable—stark failures to achieve the MDGs, epidemics spiraling out of control, and the unnecessary loss of many lives. At stake is nothing less than the course of global health and development in the 21st century.

Urgency demands an exceptional response from the global community. At its core, the response must be country-based and country-led—because all global initiatives must be implemented, planned, and owned in specific national settings. That response must also be multidimensional. Technical approaches alone will not do, because adequate financing, strong leadership, and political

commitment are necessary. And the response must be inclusive, engaging all relevant stakeholders, including nonhealth and nongovernmental groups. In the poorest countries, that response must also include appropriate behavior by the international community, because external resources are needed to supplement domestic resources.

“Business as usual” will not do. The very credibility of national, regional, and global health institutions is under siege. Health emergencies, collapsing health systems, and crises in human resources cannot be sealed off to only the poorest countries. These global problems are ultimately shared. Strengthening the health workforce is a shared challenge that demands commonly developed solutions—a mutual responsibility of all. The key to unlocking our shared health future is to galvanize action by all actors to strengthen human resources for health—both to combat crises and to build sustainable systems.

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Actions must be pursued over a “decade for human resources for health” (2006–2015) and implemented through action alliances. Crafting a workforce to meet national health needs requires sustained efforts over time—it cannot be a fleeting fad. This timeline also matches the remaining 10 years for achieving the MDGs. All agencies, training institutions, professional associations, nongovernmental bodies, and private initiatives should direct their efforts at a three-part agenda:

- Strengthening sustainable health systems in all countries.
- Mobilizing to combat health emergencies in crisis countries.
- Building the knowledge base for all.

Strengthening sustainable health systems

Every country, poor or rich, should have a national workforce plan shaped to its situation and crafted to address its health needs. These plans should aim to ensure access for every family to a motivated, skilled, and supported health worker. When feasible, that worker should be recruited from, accountable to, and supported to work in the community. Our specific recommendations:

- All countries should develop national workforce strategic plans to guide enhanced investments in human resources as the core component of strengthening national health systems.
- Academic leaders in educational institutions and health leaders in government ministries should engage in policy dialogues to develop an appropriate and effective national workforce, crafting health sector

reform and shaping cadres of workers matched to priority national health needs.

- All countries should examine and increase their investments in appropriate education, deployment, and retention of human resources.
- An international regime should be crafted that recognizes the “exceptionalism” of medical migration, promoting the human right of free movement while protecting the health of vulnerable populations. We support national action in both sending and receiving countries, but not international “compensation” because of its infeasibility. Instead, we urge the launching of a global educational reinvestment fund in Southern countries—and sustainable “reverse flows” of diaspora, volunteers, and exchanges of workers, wherever appropriate.
- Global health and financial policymakers should work together to ensure an enabling fiscal environment for health workforce development. Donors should harmonize their investments to apply at least 10 percent or \$400 million of their estimated \$4 billion spending on human resources to strengthen strategic human capacities within countries. Of these national investments, 10 percent or \$40 million should be earmarked for strengthening technical and policy cooperation on human resources at the regional and global levels.

Mobilizing to combat health emergencies

In countries severely affected by HIV/AIDS, especially those in much of sub-Saharan Africa, popular mobilization to harness workers is urgently required to

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overcome the crisis of human survival. Crisis countries must assess the suitability of their current workforce and mobilize support for appropriate delegation of core health functions to well-trained community-based auxiliary workers. The support of donors, regional bodies, and global organizations is critical for effective implementation. Our specific recommendations:

- Urgently develop strategies to mobilize, retain, and train health workers to combat HIV/AIDS and other priority problems as part of strategies to steadily build primary health care systems. Sub-Saharan African countries should nearly triple the size of their workforces, adding the equivalent of one million workers, operating in work environments that enable them to be productive.
- Bring together country, regional, and global technical expertise on human resources for health through “virtual” and “operational” networks that can disseminate best practices and provide effective technical support to country-based and country-led actions.
- Create an enabling policy and financing environment by specifically ensuring supportive macroeconomic policies and the coherence of categorical funds for HIV/AIDS and other priority problems consistent with national workforce plans. Disease control programs should seek to achieve their priority targets while strengthening, not fragmenting, a sustainable workforce in the overall health system.

Building the knowledge base

Effective action, both urgent and sustained, requires solid information, reliable analyses, and a firm

knowledge base. But data and research on human resources for health are underdeveloped, especially in low-density-high-mortality countries. National and global learning processes must be launched to rapidly build the knowledge base—essential for guiding, accelerating, and improving action. A culture of science-based knowledge building must be infused in the human resources community. Our specific recommendations:

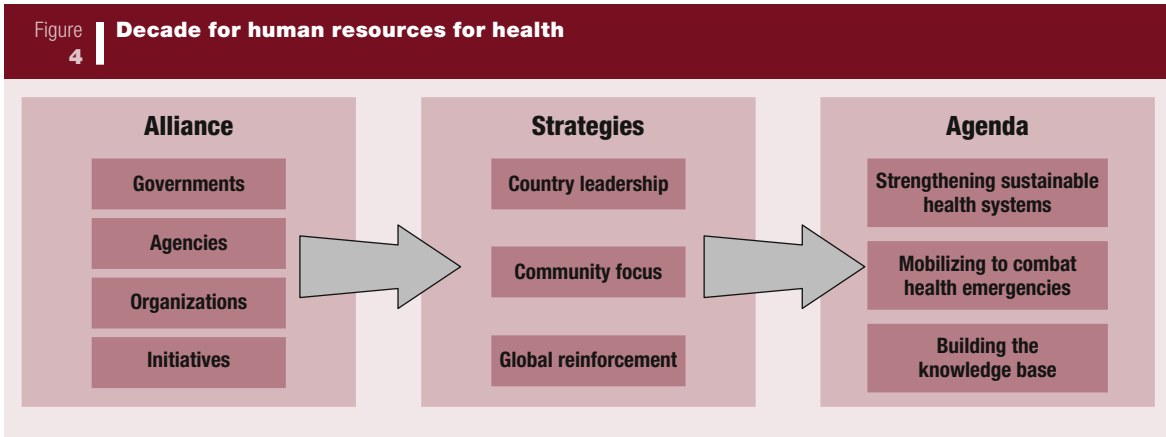
- All countries should strengthen national data, information, analysis, and research in human resources for health. All workers should be counted and their social attributes and work functions should be collated to improve planning, policy, and programs.
- Research on workforce norms, standards, and best practices should be augmented, with the findings rapidly disseminated to improve workforce effectiveness in all countries.
- Funders, both national and international, should significantly enhance their investments in information and knowledge on human resources. In addition to strengthening country actions, these investments would provide a global public good.

Completing an unfinished agenda: Action and learning

Implementing this work agenda demands immediate action backed by simultaneous learning. We must spark a virtuous circle of acting, learning, adjusting, and growing—because we do not have all the answers and yet we must act urgently.

Because the key actions rest with national governments, we call on national leaders to implement these recommendations. We also call

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on international agencies—especially the WHO and the World Bank but also the UNDP, UNESCO, the Global Fund, the Global Alliance on Vaccines and Immunizations, the President’s Emergency Plan for AIDS Relief, and others—to support coherent national action. Through collaborative planning and regular feedback, alliances for action can be systematically strengthened so that international actors play more effective roles in human resources for health at the country and community levels.

We also propose an independent, nongovernmental, five-year Action & Learning Initiative to take up the recommendations of the Joint Learning Initiative in advocacy, promoting shared learning, and monitoring progress. Operating through networks with nodes in the major world regions, the action-learning initiative will catalyze and reinforce global support of county action.

The advantage of an alliance for action is that most critical activities can be conducted by existing organizations without creating yet another cumbersome (and expensive) formal global program

or partnership. Success will depend, however, on how well existing institutions can ratchet up their capabilities and performance. Official agencies are urged to assume leadership roles in their respective areas of strength, while nongovernmental academia, professional associations, and social organizations are encouraged to join in this work, both directly and as facilitated by the Action & Learning Initiative.

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It is impossible to underestimate the importance of a response to this call for action. At stake is nothing less than completing the unfinished agenda of the past century while addressing the unprecedented health challenges of this new century. Millions of people around the world are trapped in a vicious spiral of sickness and death. For them there is no tomorrow without action today. Yet much can be done through rapidly mobilizing the workforce and wisely investing to build a stronger human infrastructure for sustainable health systems. What we do—or fail to do—will shape the course of global health in the 21st century.