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Part I
The Global Health Arena

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1

Global Health: Getting it Right

Laurie Garrett and Kammerle Schneider

Over the last decade, humanitarian attention to the health of the world's poor, security concerns over the spread of pandemic diseases, and the recognition that health is a key determinant of economic growth, labor force productivity, and poverty reduction have propelled global health to the forefront of the international development agenda. Correspondingly, since the start of the twenty-first century we have seen the global health landscape transformed by a sixfold increase in foreign aid and private spending (United Nations Secretary-General Ban Ki-Moon 2007).[1]

There has been a massive increase in the number of nonprofit organizations, faith-based groups, and private actors vying to implement programs with this windfall. This is a fantastic moment for global health; but without mechanisms to harmonize efforts, track the commitments made and the dollars spent, and evaluate the impacts on local communities – this boon could simply add to the chaos, even undermining basic health achievements.

From the World Economic Forum in Davos to the TED conference in Monterey, from U2 rock concerts in London to the annual Clinton Global Initiative in New York – the surge is on. Money is showering down on health programs like never before. But with investment comes expectations. In the past, too many UN targets or G8 commitments have fallen short, deeply disappointing people in need. At the level of developing countries, where these activities are targeted, hundreds of foreign entities, both large and small, are competing for the attention of local governments, civil society interest, and the desperately short supply of trained healthcare workers. Ministers of Health say that their days are overwhelmed by long lines of NGOs and bilateral program contractors, each demanding their attention. And all too often, these entities have come to *impose their programs* on the country – not to genuinely work *with the country* to meet its needs.

However, we have nearly the perfect storm for true change: inspired new global health leadership, political commitment, and the financial resources necessary to find innovative ways to save millions of people every year that now perish needlessly from preventable diseases and find new tools to save

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still more lives. If we fail to take proper advantage of this moment – instead simply proceeding along paths of action laid out in the 1990s, albeit today with better funding – we risk donor fatigue, wasted resources, and millions of lives lost to preventable disease. Failure to slow the spread of HIV, curtail XDR-TB, close life expectancy gaps, or improve maternal health can no longer be blamed on a lack of commitment or political will. The challenge, therefore for Global Health advocates, is to prove that all this new money is actually making a meaningful difference to those who need it most.

60 years of global health

Global health has made astonishing achievements since the signing of the constitution of the World Health Organization (WHO) in 1948, which ambitiously defined health as 'a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity' (World Health Organization 1948). Over the last 60 years, we have seen average life expectancy for humanity, as a whole, skyrocket a full 40 per cent, smallpox successfully eradicated, and under-five child mortality rates cut to the lowest in history. These global health gains have overwhelmingly been due to a combination of public health infrastructural interventions and rising personal wealth and education.

But the achievements have not been felt uniformly, either across the community of nations, or within countries. Secretary-General Ban Ki-moon, for example, was born in Korea in 1944 when the average male life expectancy at birth was merely 42 years (Eberstadt and Banister 1992). Today boys born in South Korea have a statistical probability of living 75 years (United Nations 2007). That phenomenal improvement has not been mirrored in Deputy Secretary-General Asha-Rose Migiro's country of Tanzania, where male life expectancy in the same time period was about 37 years (Egerö and Henin 1973; Henin et al. 1979; Kamuzora and Komba 1991). Today it is merely 51 years (United Nations 2007). This gap, symbolized by the very leadership of the United Nations, is the paramount challenge for global health leaders today.

When the Bretton Woods institutions and UN system were created in the mid-twentieth century, the world was divided deeply along the Iron Curtain, in a Cold War pitting the Soviet Union and its allies against NATO and its supporters. WHO, like all of the new international institutions of the day, had to walk a fine line between the ideologically, militarily and economically divided forces. For the first thirty years, these institutions focused their attention on the reconstruction of Europe and Japan, both of which had been devastated by World War II, with most other ventures in the rest of the world receiving only minimal fiscal support.

When Robert McNamara took the reins of the World Bank in the mid-1970s, he tried to refocus the institution's resources to addressing Africa, and

the most impoverished parts of south Asia and Latin America. And the Bank's efforts might have made a difference, except lurking undetected at that time was a new virus. By the end of the 1980s that virus, HIV, had swept over the planet, virtually unchecked.

The HIV/AIDS epidemic dramatically changed the way the world looked at global health. It shook health leaders out of a long period of smug arrogance, in which the developed countries imagined that all the microbes could easily be conquered and health was simply a corollary of economic development. It brought a new, powerful civil society activism to global health. The political zeal and advocacy efforts generated by the AIDS pandemic, amid economic globalization and the end of the Cold War, put health at the top of the international aid and development agenda.

Building on the heightened notoriety of global health, during the 1990s the international community created the Millennium Development Goals (MDGs), a set of targets to reach by 2015 in an effort to reduce global poverty and improve the health of the world's poor. Three of the eight MDGs relate directly to health; and the others address the interconnected nature of poverty, education, and sanitation with health outcomes. As the world confronted the HIV/AIDS pandemic and strove to meet the MDGs, there was a growing sentiment that the traditional system of bilateral agencies and international organizations serving as the primary actors in global health was insufficient.

In the past decade, there has been an explosion of new global health players. Private foundations, such as the Bill & Melinda Gates Foundation, innovative global funds, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria (GFATM), the GAVI Alliance (formerly the Global Alliance for Vaccines and Immunizations), and various corporate actors have transformed the global health landscape with large amounts of money and through their ability to respond more immediately to the perceived needs on the ground. A host of disease-specific initiatives such as the Joint United Nations Programme on HIV/AIDS (1996), Roll Back Malaria (1998), and the Stop TB Partnership (1999) have also joined the scene over the last decade, drawing increased attention and funding to specific diseases. The largest increases in global health spending have come from these new partnerships and bilateral donors, while contributions from the multilateral development banks and specialized UN agencies have remained relatively flat (Schieber et al. 2007). Spending on health has also dramatically increased at the country level, in part due to donor forgiveness of long-standing national debts. (According to the World Bank Africa Development Indicators 2007, however, rising GDPs in sub-Saharan Africa, now topping 5 per cent annually, have not resulted in significant improvements in population health. Indeed, some African nations have simultaneously seen their GDPs grow, while life expectancies shrank) (World Bank 2007).

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Global health today

Unfortunately, the impact of the increased number of national and institutional players, resources, and political support on global health has yet to provide tangible change in health outcomes for all populations. Although some health indicators have improved among certain groups, we have seen increases in gaps in health outcomes for women, children, and marginalized populations – especially in the poorest pockets of humanity – where people are locked in what Harvard's David Bloom calls 'mortality traps' (Bloom and Canning 2007). Despite the great efforts of WHO, UNICEF, UNFPA and the World Bank, to name a few, life expectancy has barely budged in these populations, even as it has soared in nations that once were desperate, like China and India. Today, the life expectancy gap is the widest in human history, with a disparity of five full decades. Each day around 28,000 children under five die from largely preventable causes and 1,400 women die of pregnancy-related complications. In addition, each year, there are 350 to 500 million cases of clinical malaria, and 4 million and nine million people newly infected with HIV and TB, respectively (UNICEF 2007). These diseases and failures in public health continue to disproportionately afflict the poor. In many cases, we do not lack the tools to defeat or curtail disease, but we lack the commitment to think beyond short term wins, and donors' priorities, politics, and values.

Even in parts of the world we have credited as economic success stories – where the Asian Tigers roar, and the Latin miracle twinkles – health remains a striking challenge. The world nervously watches the spread of H5N1 influenza, or bird flu, in Asia, largely in the same locations that featured SARS in 2003. Yellow fever, dengue, and malaria have all returned to Latin America. In additional to infectious diseases, middle-income countries are now burdened by increases in diseases of 'affluence,' such as cancer, heart disease and stroke. Maternal health is going backwards in much of the poor world – women are dying in childbirth in many of these countries at a far greater rate than they were half a century ago. Recent United Nations findings on maternal mortality show that a woman living in Afghanistan or Sierra Leone has a one in eight chance of dying in pregnancy or childbirth. This compares with a one in 4,800 risk for a woman in the United States, and a more than one in 17,400 risk for a mother in Sweden (World Health Organization 2007). This logarithmic differential in maternal survival represents the most striking, even egregious, health disparity in the twenty-first-century world.

Every effort to improve global health – from bird flu to HIV – comes up against the same set of problems: We simply have not invested the necessary money or technical assistance in health *infrastructure*: clinics, roads, clean water, sanitation, medical supplies, and the training and management of skilled medical personnel, whether they be doctors, nurses, lab technicians, dentists, pharmacists, midwives or community health workers.

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Medicalization versus public health

Far and away the majority of new global health money has been committed to one single disease; HIV/AIDS – a once-paltry million dollar effort – is now a billion dollar enterprise. While the share of global health aid devoted to HIV/AIDS more than doubled between 2000 and 2004 – reflecting the global response to an important need – the share devoted to primary care dropped by almost half during the same time period (World Bank 2006).

With increased funding, the world has made progress towards the goal of universal access to HIV/AIDS treatment. The number of people on antiretroviral therapy (ARVs) has increased from 2 per cent to 28 per cent between 2003 and 2006 (World Health Organization et al. 2007). For international donors, making a commitment to provide treatment comes with a great deal of responsibility and a huge price tag. As the number of infected people grows, the number of people that require second line, more expensive, drugs swells. But treatment alone will not end the AIDS pandemic. For every HIV+ individual that went on ARVs in 2006, six more people contracted the virus (UNAIDS 2006; World Health Organization et al. 2007). The current focus on ARVs risks creating a medicine-dominated response to HIV/AIDS, and diverting attention and funds away from the more fundamental political, social, and economic determinants of poverty and the spread of infectious disease. We keep trying to build dams – pharmaceutical dams to hold back the pandemic – but behind those dams the body count of the infected keeps rising, threatening to flood over the top and drown all of our best efforts.

Even the Bush Administration's laudable PEPFAR program, which started out with a fairly minimal mission of providing prevention, care and treatment for a single disease, now finds itself forced to build entire medical delivery systems simply to get anti-HIV drugs to the patients who need them.

Further exacerbating the difficulties of treating HIV and scaling up prevention efforts is the current state of health systems and capacity in those countries hardest hit by the pandemic. Decades of neglect have rendered hospitals, clinics, laboratories and health care workers dangerously deficient. Imagine being the health minister of Papua New Guinea, a poor country confronting one of the fastest-growing HIV/AIDS epidemics, with fewer than 300 doctors in the entire nation. Substantial funds have been sent to your country to fight the disease, but you don't have enough health workers or adequate health facilities to absorb the funding and implement new programs to fight the growing epidemic as well as improve maternal heath, child survival, and fight a host of other less noted public health emergencies.

Further compounding the problem, local doctors and nurses often grow so exasperated and demoralized by their dysfunctional health systems that they apply for higher-paying jobs abroad, thus accelerating a 'brain drain' at home. There is also an internal brain drain within countries as doctors

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and nurses leave public hospitals and health centers lured by more lucrative jobs in clinics run by foreign NGOs, bilateral donors, and faith-based organizations.

Health worker shortage

The world is desperately short of health professionals, and the severity of that gap promises to increase sharply in coming years. According to the WHO's World Health Report 2006, there is a shortage of more than four million healthcare workers in 57 developing countries. One-quarter of physicians and one in 20 of the nurses trained in Africa currently work in the 30 industrialized countries in the Organization for Economic Cooperation and Development. Although sub-Saharan Africa has 24 per cent of the global disease burden, it has only 3 per cent of the healthcare workforce worldwide and accounts for less than one per cent of global healthcare spending. This is in contrast to the Americas where there is 10 per cent of the global disease burden, 37 per cent of the healthcare workforce and more than half of global healthcare spending (World Health Organization 2006b).

This dire situation will only continue to deteriorate as the wealthy world ages, and more health attention is thus needed. At the same time, wealthy nations are trying to reduce rapidly inflating health costs by holding down salaries and increasing workloads, making the practices of nursing and medicine less attractive to domestic candidates. Unless radical changes are made swiftly in the United States and other wealthy nations, the gap will soon become catastrophic. Studies show that in 13 years the US will face a shortage of 800,000 nurses and 200,000 doctors (Chen and Boufford 2005).

To fill this growing gap, the United States and other wealthy nations are siphoning off doctors and nurses from the developing countries. Rich countries are guilty of bolstering their own healthcare systems by weakening those of poorer nations.

For example, due to healthcare worker shortages, 43 per cent of Ghana's hospitals and clinics are unable to provide child immunizations and 77 per cent cannot provide 24-hour obstetric services for women in labor. As a consequence, the children die of common diseases such as measles, and the mothers die in childbirth. In all of Ghana, there are only 2,500 physicians. Meanwhile, in New York City, alone, there are 600 licensed Ghanaian physicians (World Health Organization 2006a).

Health systems building

Investment in strong health systems is the key to improving healthcare worker morale and retention, curtailing the spread of infectious disease and improving the overall health of individuals in any country. The construction of strong health systems requires years of long-term investment. Success is

measured by the number of infections prevented and the number of lives saved. Because infections prevented and lives saved are difficult for donors to quantify and report to constituents, foreign aid giving has been focused on easily measurable advances in specific diseases, such as the number of people provided with AIDS treatment.

There are great dangers in funding only disease-specific initiatives and not integrating them into wider public health programs. For example, Rwanda is a country with a relatively low rate of HIV/AIDS (about 3.1 per cent), but with high infant and child mortality rates. Yet, in 2005, almost three-quarters of all donor assistance for health was for HIV/AIDS, while only 2 per cent of the aid was dedicated for healthcare services for child illness. In addition, more than half of the donor-funded health projects in Rwanda are funded for less than 12 months (Republic of Rwanda et al. 2006). Child survival rates in many countries are now decreasing as highly coveted health funding is dedicated to HIV/AIDS, regardless of epidemiological data.

Foreign aid spending tends to reflect the priorities of the donor country. On a global basis, recent estimates reveal that AIDS accounts for less than 4 per cent of deaths of children ages zero to 14, while diarrheal diseases, malaria, measles, whooping cough and tetanus account for close to 60 per cent of deaths in the same age group (Mathers and Loncar 2006). Effective and relatively inexpensive preventive measures and/or treatments are available for these infectious diseases. The decision to provide funding to save children suffering from whooping cough versus providing treatment for someone dying of AIDS should not be an either–or proposition. Rich countries have enough money to fund both – what is required now is political commitment and prioritization so that health dollars can be spent most efficiently to upgrade the overall health and wellbeing of societies.

Global health aid is often earmarked to be spent for specific purposes: Indeed, WHO's core budget is trivial compared to the donor funds earmarked for targeted programs. Many countries report difficulties in obtaining sustained, flexible funding that can be used to support building of health systems, including support for training and management of medical personnel and physical infrastructure. Systems and infrastructure are not sexy, they cannot be built in short funding cycles, and they provide little to brag about to constituents. But without viable systems of medical delivery and public health infrastructures, all donors can hope to accomplish, despite spending billions of dollars and euros, is to save some lives at the expense of others; achieve short-term targets without leaving anything in place that allows nations ultimate dignity and self-reliance.

Failures in global health architecture

There is a strong, nearly universal sense among health leaders that too many international agencies, bilateral donors, nongovernmental organizations,

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and private players are charging forward with uncoordinated efforts, both on the global stage and inside developing countries. Overlapping and imprecise mandates fuel competition for funds, fame, credit and achievement. All too often organizations have set goals for health that are either contradictory to one another or a duplication of efforts. At the country level, this has created a bewildering array of 'recommendations' and 'guidance' for resource-hungry Ministries of Health. Cambodia, for example, receives around $60 million in foreign aid from 14 bilateral donors and five multilateral agencies and has over 100 NGOs working on the ground. Not surprisingly, much of the Cambodian Minister of Health's time is taken up with meetings from over 400 visiting donor missions each year (Lane and Glassman 2007).

Harmonizing aid flows at the country level is a major challenge for recipient countries. Donor targets, reporting requirements, and the oversight and evaluation of multiple small-scale projects impose enormous transaction costs on already resource-stretched countries, where trained staff are limited. Tanzania has 18 bilateral donors and more than 2,000 individual projects in all sectors, many less of budgets of less than US$1 million. Switzerland and Ireland both give Tanzania approximately $30 million in total aid; however, the former had five projects, while the latter has 404 (Anonymous 2006).

Stand-alone programs risk draining necessary human and financial resources from general healthcare. On the other hand, aligning health programs with national health plans, in support of the overall public health and medical treatment infrastructures of nations, will allow a maximum return on investments.

There is also a general consensus among the global health community that there is a dire lack of accountability attached to global health money. Much of the global health effort, at all tiers of engagement, remains cloaked in confusion, opaque financing and accounting, and grandstanding. On the donor side, commitments that are publicly proclaimed often fail to materialize fully. On the recipient country side there continue to be vast gaps in accountability and reporting, to both donors and to citizenry. Many countries fail to provide clearly delineated national health budgets, or financial data that allows citizens and donors a roadmap for fiscal spending. Transparency is often lacking entirely for private foundations, nongovernmental organizations, and faith-based groups. Some recipient countries have recently instituted systems where donors are required to sign 'compacts' to ensure mutual accountability to guarantee countries receive the promised aid through the agreed-upon mechanisms, in an effort to reduce transaction costs and uncertainty. The 2005 Paris Declaration on Aid Effectiveness calls for the donors, governments, and the UN system to move into a new era of absolute accountability and transparency in all development activities. Results to date for the Paris Declaration are mixed. Although more countries have signed onto it, virtually no NGOs, faith-based organizations or private sector elements are on board. Further, an OECD assessment of country and donor adherence in 2006 to

the Declaration offers few real rays of hope, as the only enforcement mechanism for assuring achievement of the harmonization and alignment targets is moral suasion (OECD 2005).

Investments in health

It is a general truism worldwide that the poor pay the greatest percentage of their wealth for health. Illness is an event that often bankrupts poor families, even though the same ailment may represent only a trivial cost to the rich. In many low-income settings, 70 per cent of total health spending is out of pocket, while in high-income settings only 15 per cent of health expenditures are paid out of the pockets of individuals. In Africa, out of pocket spending accounts for almost 50 per cent of total health spending on average, and in 31 African countries, accounts for 30 per cent or more of total health spending (World Health Organization 2006b). In Cambodia and India, families typically pay 80 per cent of their health care costs as out of pocket expenses (World Health Organization 2000).

Despite this demonstrated willingness to spend for health, and to embrace entrepreneurial models of delivery, the primary methods for disbursement of funds to poor countries continue to follow the age old charity model. Foreign contractors and NGOs are given the lion's share of the funds with which they hire personnel and manage projects in local communities. Health is still not fundamentally viewed as an investment, where funding is infused into local economies to create indigenous businesses and eventual local profit centers. For aid to function as a true investment in health systems, it would have well defined exit strategies and would focus on building local technical capacities and systems within the country, rather than creating an artificial superstructure of imported international workers and academic advisors to implement initiatives.

Nearly every aspect of health delivery in the developed world involves profit making, in one form or another. Sustainable profit making ventures for health supplies, medicines, delivery chains, and insurance inside poor countries could be owned and operated by indigenous companies with profits forming the basis of taxable revenue growth for the countries. Yet, inserting capitalist principles into health programs in poor countries is viewed as distasteful – by donors and activists. These contradictory views of health spending, with profit making the norm throughout the wealthy world, while it is considered distasteful for the poor, derive from a paternalistic charity model that entraps poor countries in cycles of dependence on the rich world for continual funding of a health programs, rather than creating sustainable health systems. 'The new challenge for the international community goes beyond how to contribute to pilot programs in health that provide drugs, vaccines and preventive or health care services to how to do so in a way that engages the local and national populations and enables the programs to

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expand to a nationwide scale that is sustainable over time,' explains Dr Barry R. Bloom, Dean of the Harvard School of Public Health (Bloom and Canning 2007).

Besides the charity paradigm, another model that has increasingly gained traction in recent years, links social entrepreneurship with the provision of health services. The Scojo Foundation, for example, utilizes a market-based approach to train community members, primarily women, to become 'vision entrepreneurs' and sell eye care products within their own communities. Scojo sells glasses to vision entrepreneurs for around two dollars, and vision entrepreneurs in turn sell the glasses to customers for between $3 and $5 depending on location. 'Glasses have to be approached by a market based perspective – they are a classic example of a product that millions of people need, are affordable, we can deliver, and unless we tap into the power of the market – we will never be able to create a sustainable system,' said Scojo cofounder and president, Dr. Jordan Kassalow.

In most developing countries, the private sector already plays a substantial role in both the financing and delivery of healthcare services (Council on Health Research for Development 2006). But corporate players are often absent from the policy debate. International agencies and global health organizations are currently working to create stronger partnerships with corporate actors. In addition to providing funds the private sector can offer valuable technical expertise to make management of personnel, inventory, supply, procurement, distribution and upkeep more efficient.

Measurement of success

No health indicator more clearly illustrates the stark disparities in global health outcomes than maternal mortality. Maternal health is a good measure of the effectiveness and performance capacity of overall health systems. Pregnant women survive childbirth where they have access to skilled medical personnel and safe, clean, and well-supplied health facilities. If mothers and infants thrive, health systems are working, and the opposite also hold true. Improvements in maternal mortality require upgrading the entire health infrastructure.

According to WHO, '[t]here is a direct relationship between the ratio of health workers to population and survival of women during childbirth and children in early infancy. As the number of health workers declines, survival declines proportionately' (World Health Organization 2006a).

Promising future

We are in a moment ripe for historic changes in global health. Committed agency leaders, NGOs, faith-based groups, and corporate actors are working collectively to think about new ways to break out of patterns of charitable

giving and move towards real sustainable investments in health utilizing the wealth of resources and technical expertise available both on the ground and within international agencies. A number of promising initiatives, declarations and programs are beginning to emerge in an effort to improve global health-funding efficacy through longer-term commitments, more coordinated accountability measures, and collaboration at the highest levels.

Inside the UN system, efforts are underway to improve relations between health-related UN agencies, the Global Fund to Fight AIDS, Tuberculosis and Malaria, the GAVI Alliance and the Bill & Melinda Gates Foundation. Calling itself the H-8 (Health-8: WHO, UNICEF, UNAIDS, UNFPA, World Bank, Global Fund, GAVI and Gates), this loose alliance has set its top management tiers to the task of talking to one another to clarify the core responsibilities of each agency, and bring coherence and alignment to their activities to eliminate duplication of efforts and competition for funding. The H-8 process is still quite new, and its future is uncertain. Nevertheless, within UN agencies the process has been received enthusiastically.

Within the HIV/AIDS community, UNAIDS, together with the Global Fund, bilateral donors, and other international institutions, have similarly committed to the harmonization and alignment of global HIV/AIDS efforts through the concept of the Three Ones: one agreed HIV/AIDS action framework for coordinating the work of all partners; one national HIV/AIDS coordinating authority with a broad based multisectoral mandate; and one agreed country level system for monitoring and evaluation.

At the donor country level, many wealthy governments have embarked upon new initiatives to make aid more effective. The Norwegian government has recently created the Global Campaign for the Health MDGs and committed to funding $10 billion over the next ten years to meet the goals of reducing child mortality, improving maternal health and combating HIV/AIDS, malaria and other infectious diseases. In September 2007, a consortium of wealthy governments and private donors announced the creation of the International Health Partnership (IHP). The IHP seeks to recreate the entire relationship between donors and recipient nations, vastly improving transparency, accountability and mutualism in the programs executed by typically rival agencies. If the IHP succeeds, country governments will have much more control over what outsiders do with and for their people, and will in return radically improve all aspects of strategic planning, civil society engagement and financial processing. The IHP promises very long-term financial commitments – up to a full decade – in exchange for genuine accountability for every dime or euro spent at the country level. The goal is to vastly improve the kinds of strategic developments that poor countries most desperately need – physical infrastructures of health provision, water filtration systems, health human resources training and support, microfinance schemes that set realistic long term goals for individual and community health progress.

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Yet, as Harvard health economist William Hsiao has said, 'more money for health spending does not necessarily mean better health outcomes' (Hsiao 2007). As a global health community we must stand back and objectively evaluate how we can most effectively take advantage of this moment of extraordinary generosity from the wealthy world and translate it into long-term, sustainable health improvements for all. On the donor side, commitments must become far longer term, transparent, and fully realized within predictable timetables. Donors should not put health programs – whether vertical, horizontal or 'diagonal' – in competition with one another. Nor should they solely fund projects based on domestic constituent interest. For recipient countries the greatest challenges are in management: juggling precious human resources, external funds and programs, rural versus urban needs and donor demands. The management balancing act is hard enough on a day-to-day basis, but must expand to encompass strategic goals for health infrastructure and private sector growth that function on decades-long timetables. Achieving such long-range strategic targets will require great wisdom from national leaders, and the full cooperation of donors, NGOs and private philanthropies.

Note

1. National budget funding in 29 reporting countries has reached over $750 million in 2006. Global funding has grown by more than 2,000 per cent since the start of the twenty-first century.

References

Anonymous (2006) 'Public Health Infrastructure And Capacity', *Health Affairs*, 25(4): 899.

Bloom, D.E. and D. Canning (2005) 'Mortality Traps and the Dynamics of Health Transitions', *Proceedings of the National Academy of Sciences*, 104(41): 16044–9.

Chen, L.C. and J.I. Boufford (2005) 'Fatal Flows – Doctors on the Move', *New England Journal of Medicine*, 353(17): 1850–2.

Council on Health Research for Development (2006) *Human Resources for Health Research: an African Perspective* (Geneva: Council on Health Research for Development).

Eberstadt, N. and J. Banister (1992) 'Divided Korea: Demographic and Socioeconomic Issues for Reunification', *Population and Development Review*, 18(3): 505–31.

Egerö, B. and R.A. Henin (1973) 'Mortality', in *The Population of Tanzania: An Analysis of the 1967 Population Census*, edited by E. Bertil and R.A. Henin (Dar es Salaam: BRALUP and Central Statistical Bureau. Dar es Salaam, Tanzania).

Henin, R.A. et al. (eds) (1979) *The Demography of Tanzania: An Analysis of the 1973 National Demographic Survey of Tanzania. Volume VI* (Dar es Saleem: Bureau of Statistics (United Republic of Tanzania) and Bureau of Resource Assessment and Land Use Planning (University of Dar es Salaam)).

PROOF

Hsiao, W.C. (2007) 'Why Is A Systemic View Of Health Financing Necessary?', *Health Affairs*, 26(4): 950–61.

Kamuzora, C.L. and A.S. Komba (1991) 'Demographic Trends', in *Health and Diseases in Tanzania*, edited by G. M. P. Mwaluko et al. (London: Harper Collins Academic), pp. 279–88.

Lane, C. and A. Glassman (2007) 'Bigger and Better? Scaling Up and Innovation in Health Aid', *Health Affairs*, 26(4): 935–48.

Mathers, C. D. and D. Loncar (2006) 'Projections of Global Mortality and Burden of Disease from 2002 to 2030', *PLoS Medicine*, 3(11): 2011–30.

OECD (2005) 'Paris Declaration on Aid Effectiveness. Ownership, Harmonisation, Alignment, Reults and Mutual Accountability', available at http://www.oecd.org/dataoecd/11/41/34428351.pdf.

Republic of Rwanda et al. (2006) *Scaling Up to Achieve the Health MDGs in Rwanda: A Background Study for the High-Level Forum Meeting in Tunis June 2006*.

Schieber, G.J. et al. (2007) 'Financing Global Health: Mission Unaccomplished', *Health Affairs*, 26(4): 921–34.

UNAIDS (2006) *AIDS Epidemic Update* (Geneva: World Health Organization).

UNICEF (2007) 'Informal Meeting of Global Health Leader, July 19, 2007', available at http://www.unicef.org/health/files/Meeting_of_Global_Health_Leaders_-_Final_Summary.pdf.

United Nations (2007)*World Population Prospects: 2006 Revision* (New York: United Nations).

United Nations Secretary-General Ban Ki-Moon (2007) *Declaration of Commitment on HIV/AIDS and Political Declaration on HIV/AIDS: Focus on Progress Over the Past 12 Months* (United Nations General Assembly, 61st session, A/61/816).

World Bank (2006) *Global Monitoring Report 2006: Strengthening Mutual Accountability — Aid, Trade, and Governance* (Washington, DC: World Bank).

World Bank (2007) 'Africa Development Indicators (ADI) 2007', available at *http://siteresources.worldbank.org/INTSTATINAFR/Resources/adi2007_final.pdf*.

World Health Organization (1948) *Constitution (Preamble)*.

World Health Organization (2000) *World Health Report 2000 – Health Systems: Improving Performance* (Geneva: World Health Organization).

World Health Organization (2006) 'The Global Shortage of Health Workers and its Impact, Fact Sheet No. 302, April 2006', available at http://www.who.int/mediacentre/factsheets/fs302/en/index.html.

World Health Organization (2006) 'High Level Ministerial Meeting on Health Research for Developing Countries, Accra, from 14–17 June 2006, Health Ministers From Developing Countries Call for More Support for Health Research (Press Release)', available at http://cdrwww.who.int/countries/gha/news/2006/health_research/en/index.html.

World Health Organization (2007) *Maternal Mortality in 2005: Estimates developed by WHO, UNICEF, UNFPA, and The World Bank* (Geneva: World Health Organization).

World Health Organization et al. (2007) *Towards Universal Access: Scaling Up Priority HIV/AIDS Interventions in the Health Sector: Progress Report, April 2007* (Geneva: World Health Organization).

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