

Global action on health systems: a proposal for the Toyako G8 summit

Michael R Reich, Keizo Takemi, Marc J Roberts, William C Hsiao

The G8 summit in Toyako offers Japan, as the host government, a special opportunity to influence collective action on global health. At the last G8 summit held in Japan, the Japanese government launched an effort to address critical infectious diseases, from which a series of disease-specific programmes emerged. This year's summit provides another chance to catalyse global action on health, this time with a focus on health systems.

Global efforts to improve health conditions in poor countries have embraced two different strategies in recent decades, one focusing on health systems, the other on specific diseases. The interactions of these two strategies have shaped where we stand today.

The first strategy has emphasised systemic approaches to health improvement. In the late 1970s, the world embarked on a major effort to strengthen health systems from the bottom up, through the primary health-care movement. WHO and UNICEF launched this movement at the Alma Ata conference in 1978, which was attended by nearly all their member countries.¹ The movement used an integrated multisectoral approach to health development, with special attention to disadvantaged populations in each country. This became known as a horizontal approach.

This approach confronted many challenges. The problems were particularly severe in sub-Saharan Africa, because of "low financing of health systems, bad governance, the human resources for health crisis, the high level of poverty of the people, the debt burden, the emergence of new diseases and the deterioration of the social system in many countries."² Today, with the 30th anniversary of the Alma Ata Declaration in 2008, calls have arisen for renewed attention to primary health care. Indeed, WHO's annual report in 2008 focuses on primary health care and its role in strengthening health systems.

The second strategy emphasised disease-specific approaches to health improvement. The last decade of the 20th century witnessed a rise in many different single-disease control programmes. The Okinawa Infectious Disease Initiative, announced by Japan at the G8 summit in 2000, led to strengthened global efforts on several diseases, in particular HIV/AIDS, tuberculosis, and malaria, but also poliomyelitis, parasitic diseases, and other neglected tropical diseases. These efforts contributed to the establishment of the Global Fund to Fight AIDS, Tuberculosis and Malaria, as well as other single-disease control programmes, ushering in a new era in global health cooperation. These programmes represent the vertical approach to health improvement.

The disease-specific strategy has attracted substantial support in recent years and produced major results. Donors believe that this approach creates tangible products that can yield measurable improvements in health status. Development assistance for health is estimated to have grown from about \$6 billion in 2000 to \$14 billion in 2005. In addition to the Global Fund, collective efforts to improve global health have included the GAVI Alliance, the Global Polio Eradication Initiative, the global health activities of the Bill & Melinda Gates Foundation and other private foundations, and various initiatives to develop new treatments for neglected tropical diseases. Various assessments suggest that these disease-specific partnerships have contributed to improvements in health conditions in poor countries around the world.

However, the surge of disease-specific efforts has also generated concerns about the unintended consequences of creating a fragmented array of uncoordinated programmes supported by multiple donors that recipient countries must struggle to manage. By focusing on specific performance measures, these programmes have sometimes not fully dealt with broader system failures. Yet such failures seem to lie behind the inadequate progress many countries have made on several key targets of the Millennium Development Goals (MDGs) for health—those related to child mortality (MDG 4), maternal mortality (MDG 5), and the prevention of HIV/AIDS, malaria, and other diseases (MDG 6). Progress on these and other health improvements that depend on health system performance has been disappointing, especially when we consider the health status of poor and marginalised groups, for whom health status indicators (eg, infant mortality and maternal mortality rates) can be 50–100% higher than those of more advantaged population groups.

The world is also facing the impending health threats of climate change. The potential consequences include enlargement of the geographical range of tropical diseases and massive flooding of low-lying inhabited areas, both of which would pose major challenges for health systems and disease control programmes in poor countries. Climate change could thus trigger negative interactions between poverty and health around the world, especially in poor countries.

Addressing the health problems of poor countries can only move forward with a more balanced approach between specific-disease focus and system-based solutions; like weaving a piece of cloth, we need both the vertical and the horizontal threads to form strong fabric. Input-oriented approaches to health improvement (eg,

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Department of Population and International Health (Prof M R Reich PhD), Department of Health Policy and Management (Prof M J Roberts PhD, Prof W C Hsiao PhD), Harvard School of Public Health, Boston, MA, USA; and Research Institute of Science and Technology, Tokai University, Tokyo, Japan (Prof K Takemi MA)

Correspondence to: Prof Michael R Reich, Department of Population and International Health, Harvard School of Public Health, 677 Huntington Avenue, Boston, MA 02115, USA
michael_reich@harvard.edu

approaches that emphasise financing or human resources) are not sufficient to attack the complex roots of health problems. Many developing countries have acquired more technology and expanded spending in recent years without these increased resources producing adequate or effective services. In response, bilateral and multilateral donors are increasingly calling for more system-oriented approaches—eg, the UK's International Health Partnership, the World Bank's Healthy Development strategy, Canada's Catalytic Initiative to Save a Million Lives, and Norway's Global Business Plan for Maternal, Newborn and Child Health. In short, consensus is growing about the need for greater global action on health systems, representing a new phase in global health policy: to restore an appropriate balance between system strengthening and disease-specific actions.

The Japanese government is seeking to transform this growing consensus on the importance of health systems into concrete action. Japan's Minister of Foreign Affairs recently spoke about how the G8 summit could advance the health systems agenda in global health.³ The goal is not to recommend new policies for any one G8 government to consider or implement. Nor is the objective to produce a new global fund on health systems. Rather the goal is to assist G8 policy makers to identify joint actions that contribute, in the words of Japan's Prime Minister, to "the advancement of comprehensive cooperation in global health."⁴ Effective global action by the G8 can strengthen health systems at the national level and advance the wellbeing of communities and individuals.

To explain what a health system is and does is not easy. Some observers have suggested that this notion is too abstract to attract the attention and support of policy makers. We believe otherwise. The institutions and individuals that deliver both preventative and curative health-care services have to be organised to function efficiently and effectively. Supplies have to arrive, equipment has to be maintained, staff have to be present at their posts and appropriately trained to perform their functions. Finance, budgetary, and payment systems have to generate the proper incentives, and regulatory activities have to function with integrity. Competent managers and appropriate reporting systems are needed. Scientific evidence to support these assertions exists in many academic publications; consensus among experts is shifting to support these ideas.

One way to think about the role of a nation's health system is through a simple metaphor. A health system supports specific activities in much the same way that a computer's basic hardware and software support the ability to run specific programs. Before you can do word processing or email, your computer has to have a keyboard, screen, and memory as well as an underlying operating system. Similarly, for a health system, the hardware alone (ie, the buildings, equipment, pharmaceuticals, people, etc) has a limited effect on the public's health without functioning basic software (ie, financing

and payment systems, organisational and managerial structures, regulatory controls, etc). Once a computer (or a health system) is up and running, you can then successfully install and operate individual software programs (or specific single-disease control programmes). We do not want to push this metaphor too far. But sometimes advocates for disease control lose sight of the fact that they will be able to function effectively in a particular country only if the surrounding health system—the relevant hardware and software—is on hand and working well.

Thus, a health system is a complex social-economic structure (established by specific public policies) that provides both prevention and curative services for people. The system includes institutions that provide inputs (money, people, and drugs), those that regulate private activities in the market, and others at which services are provided to patients. A health system's performance should be judged by its results: by changes in health status, by patients' protection from the financial consequences of ill health, and by public satisfaction with the system.⁵ Investment in research on health systems can expand our knowledge and sharpen our strategies for the delivery of care, with payoffs in improved performance.

What can be done when a health system is broken—ie, when a health system is unable to deliver its services effectively, or efficiently, or fairly? Governments around the world (in both rich and poor countries) have struggled with this question for decades. One conclusion is clear: there are no easy solutions to the problems that arise in health systems. National efforts aimed at reforming such systems have achieved mixed results. Many countries have adopted broad reforms of their health systems (eg, Ghana, Colombia, Mexico, China, Thailand, and eastern European nations). Others have pursued more narrow agendas like reforming social insurance systems (Taiwan) or changing hospital payment systems (Kyrgyzstan). Rich countries have also struggled with new strategies to improve the performance of their national health systems. All these countries have encountered difficulties: an inability to secure political support for the needed reforms (as in the USA), or uncertainty about the likely consequences of alternative policies in a nation's particular context, or problems in effectively implementing a reform once adopted.

Despite these problems, the reform effort is clearly worthwhile. National experience shows that when a health system works well, it produces good results. Japan, for example, has achieved the world's highest health standards, with extremely low infant mortality rates and very long average life expectancy. These achievements are partly due to Japan's well-functioning health system. Japan built up its destroyed health system after 1945 through national policies that focused on specific diseases (eg, tuberculosis) while it mobilised health workers in communities and supported community-based volunteers. Mothers received a mother and child health

handbook (*Boshi Kenko Techo*) to follow the growth and health of their new babies; this approach gave mothers control over the health and health care of their children. Japan's positive experiences with its own health system motivate its convictions that developing countries today can do more to improve their own health systems, and that the G8 has both the capacity and the obligation to assist this process.

One major lesson from recent efforts to improve health systems in developing countries is that expansion of inputs alone does not necessarily lead to improved health outcomes. Egypt, for example, has increased its production of physicians to the extent that it now graduates more doctors per head than the USA. However, rural areas still lack physicians and functioning health facilities and have much lower health status; by contrast, in the cities, many doctors are not working as physicians. Similarly, in the early 1990s, China decided to train many more village health workers (ie, village doctors), in the hope of improving the health system in villages. The result was an oversupply of village health workers who rely on over-prescribing and selling pharmaceuticals for a living; many cannot find employment and have turned to other occupations.⁶ Thus, the expansion of inputs does not necessarily lead to better performance of the health system, especially for the poor and underserved.

A similar lesson has been learned about the construction of health facilities and the provision of medical equipment. Much development assistance has supported the construction of health centres in rural areas or tertiary hospitals in national capitals, as well as the acquisition of equipment like X-ray machines. But these health facilities have often lacked adequate operating budgets for maintenance and supplies, or effective management structures to ensure that doctors actually take up their posts. The facilities also may not have running water or electricity or sanitation. Providing inputs can be an effective strategy for donors to disburse funds with apparently tangible results, but it does not necessarily result in better health system performance. The effective use of new inputs depends on good functioning of the health system—both its hardware and software components.

One reason for the limited effect of increasing inputs is that the health system's operating systems are not simultaneously adjusted to ensure that new inputs are used properly—in part because of political resistance to make such changes. We are also hampered by our patchy knowledge about what makes a health system work well. We understand a lot about certain structures of health systems (eg, financing and incentives), but know much less about how to use different kinds of organisation (eg, direct government provision, market competition, contracting, and the mix and retention of human resources). We know less about how to integrate organisation, incentives, and regulation, and how to effectively implement health policies and programmes.

This understanding needs to be conveyed to national decision makers so that they can tailor health reforms to the resources, culture, priorities, and administrative realities of their particular context. In this way, increased resources for national health systems can be transformed into effective and efficient services. Otherwise, additional inputs of human and financial resources and technology might not bring much benefit to poor nations.

Another lesson learned is that health systems need good governance. Good governance is difficult to define briefly with precision, especially across national and cultural boundaries. But we believe that the processes for making critical decisions in a health system should reflect the core values of a nation's citizens and should proceed in ways that are transparent, non-corrupt, and accountable. The allocation of resources in a health system inevitably confronts trade-offs, since it is not possible to treat all health problems completely. In short, resources in a health system are limited, especially in poor countries. In that situation, how should you decide what to do? Which diseases should receive priority? Which geographical regions should receive health facilities first? Which patient (if anyone) should have access to the most expensive care (eg, a liver transplant) and which not? These difficult decisions pervade health systems and cannot be avoided; however, they can be addressed with differing degrees of fairness, transparency, and accountability. No one answer exists to improving the quality of governance; rather it requires attention to both ethical and political processes within the specific cultural context of a health system.⁷ We do not believe in a single universal approach for producing good governance. But we do believe that efforts should be made to improve the governance of health systems around the world.

Lastly, we believe that interventions to improve health systems should be assessed by their effects on performance.⁵ How do interventions change the outcomes of health systems? The empirical analysis of specific interventions has a critical role in identifying what works and what does not. Health system reformers need to promote honest assessments of current situations and attempted innovations. The interventions need to be directed at specific performance measures for a health system, such as improving health status, raising patient satisfaction, or protecting against the financial risks of illness. Particular care must be taken on whether the policy focus is on average measures of performance or on the distributional consequences for particular groups (eg, income or ethnic origin).

The 2008 G8 summit, to be held in Japan, provides a unique opportunity for more effective action on health systems to advance the health-related MDGs. Here we propose three principles that could provide a basis for global action on health systems.

First, health system improvements need to provide increased protection for individuals, but in ways that

empower the recipients. Effective health system strengthening requires local ownership, local diagnosis, and local capacity building. Japan's own successful health development in the period since World War 2 involved this two-sided strategy—strengthening the state's capacity to deliver prevention and curative health services, while mobilising community-based health workers, volunteers, and mothers. There is growing recognition that health improvement requires both a top-down state-sponsored approach as well as a bottom-up community-oriented strategy. Neither one on its own is sufficient or sustainable.

The community-based approach creates major roles for the people who benefit from a programme in setting policies and managing implementation. This approach provides choice, participation, and responsibility to the beneficiaries of health system improvements. To be successful, it requires building the capacity for democratic participation among marginalised groups and strengthening local and community institutions to hold health system providers accountable for their performance. The approach also gives higher priority to public satisfaction about how the health system is functioning. Creating mechanisms for genuine public participation inevitably requires sensitivity to political and cultural concerns. Effective action in this area also fosters good governance of the health system, with advances in fair processes, transparency, and anti-corruption. Attention to empowerment in health systems would give real support to concerns about human security. Such attention has been the focus of a major international commission⁸ and has been a core principle of Japan's foreign policy over the past decade. The G8 summit provides an opportunity to articulate an explicit commitment by national leaders to the core principles of empowerment and protection for strengthening health systems, and propose explicit strategies and processes for implementing these principles within poor countries.

The second principle that could enhance the commitment to improving health systems in poor countries, without creating a new fund, is to allocate funds for this purpose within existing organisations, to balance the disease-specific approach and the system-oriented approach. Several global initiatives have announced efforts at creating balance. The Global Fund, for example, has sought for some years to develop policies for health system strengthening along with its focus on the three diseases.⁹ At its last meeting, the Global Fund board reached a major decision to support system strengthening if such an approach improves efforts to control the three diseases. This has been labelled a diagonal approach, rather than horizontal or vertical.¹⁰ The next round of funding will allow innovative approaches on health system strengthening in proposals submitted to the Global Fund.

The GAVI Alliance has similarly sought to balance its focus on childhood immunisation with health system

strengthening, first offering funding for this area in 2001. In December, 2005, the GAVI board approved an investment of \$500 million for health system strengthening for 2006–10. The Alliance has articulated ten guiding principles for grants on health system strengthening, and created a task force with broad representation to oversee these activities.¹¹ The GAVI Alliance's experiences to date show both the great needs and the great challenges to finding the right balance in improving health systems while implementing immunisation.

The experiences of these partnerships show the potential for other existing organisations to strengthen health systems, as well as the operational hurdles they face in implementation. A major challenge in allocating funds for health systems within organisations focused on disease-specific objectives is assuring that the funds are spent appropriately, that health systems are strengthened, and that broader lessons are learned. Non-governmental organisations could help by providing guidance, oversight, and audits for these procedures. The G8 summit provides an opportunity to review the experiences of the global health partnerships in strengthening health systems, and propose explicit principles, targets, and guidelines for expanding these efforts in the future.

Lastly, we must encourage enhanced learning about health systems. There is no doubt that the global community will now expend more resources on strengthening national health systems in poor countries. The momentum for action is growing across international agencies, global partnerships, non-governmental organisations, and official development assistance agencies. The systemic problems are widely recognised, and a tide of ideas is rising to tackle these problems, especially for the health-related MDGs in the world's poorest countries.¹² A series of experimental interventions are now underway, financed by many different sources and unfolding in countries around the world.^{13,14} However, what is missing is a concerted effort to learn from these experiments. The interventions to improve health systems require a learning initiative anchored at the country level and directed at policy makers and practitioners. The goal should be to produce actionable learning that national leaders can use to improve health systems in resource-poor settings.

We support a recent call for expansion of the knowledge base about how to improve health systems.¹⁵ We believe, however, that this effort should be based on an institutional arrangement that assures the knowledge generated will be useful at the country level and connected to a network of similar countries. Health system improvement involves more than metrics; it requires attention to the political economy, values, and cultural dimensions of how health systems work. It requires an interest in and expertise about the details of system structuring (in finance, payment, regulation, and organisation management), as

well as a commitment to reject a one-size-fits-all approach in favour of conditional guidance adapted to each country's specific situation. A responsible, independent, international research organisation is needed to coordinate the country-level efforts, with accountability to the global community and rigorous reviews and transparent methods for assessment—something like a Cochrane Collaboration for health system improvement.

To advance this goal of enhanced learning, we believe that global health partnerships should agree to allocate a set portion of their funding for operational research and knowledge discovery in health systems. These funds would support efforts to improve the performance of health systems—by gathering together experiences around the world, assessing successes and failures, doing well-designed pilot projects, and assuring the dissemination of knowledge. The G8 summit provides an opportunity to articulate a global commitment to learning about strategies for strengthening health systems, and to propose explicit institutions and financing for enhancing shared learning in the future.

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