World Health Organization

Report on the WHO/PEPFAR consultation on maximizing positive synergies between health systems and Global Health Initiatives through work on building and sustaining health workforce development, Washington DC, 17-18 March 2009

maximizing positive synergies

between health systems and Global Health Initiatives

The work on maximizing positive synergies between health systems and Global Health Initiatives through efforts to build and sustain health workforce development is being undertaken with the financial support of the US President's Emergency Plan for AIDS Relief (PEPFAR).

Background to the consultation

The global deficit of trained health workers is estimated by WHO to be more than four million and 1.5 million new workers must be trained to address the current shortfall in Africa. While the shortage of human resources for health is not new, the crisis has been exacerbated in recent years by an increasing demand for health services. The growth in demand has been generated, in part, by Global Health Initiatives (GHIs) such as the US President's Emergency Plan for AIDS Relief (PEPFAR), The Global Fund to fight AIDS, Tuberculosis and Malaria (Global Fund), and the Global Alliance for Vaccines and Immunization (GAVI), which have invested significant new resources into targeted programmes. These efforts have helped to increase access to services for diseases like HIV, tuberculosis, malaria and vaccine-preventable diseases. They have also stimulated a growth in demand for a wider range of health care services and for more efficient, effective and quality health services.

The GHIs have revealed the importance of strong health systems for the scale up of both disease-specific and other health services and it is now clear that accelerated efforts for health systems strengthening will be essential if the world is to meet the Millennium Development Goals. Moreover, there has been universal agreement that a strong and effective health workforce is a key component of any well-functioning health system and essential in any effort to scale up disease-specific and other health services.

Recognition of the underlying challenges – including health workforce development – that must be overcome in order to improve health outcomes, and to meet specific challenges such as the Millennium Development Goals and universal coverage of HIV services, has led to a variety of related actions by the global public health community.

WHO has embarked on a renewal of primary health care with the conviction that the primary health care values offer the greatest potential for building health systems that can respond better, and faster, to new demands. At the centre of this move towards people-centred care is the need for a robust health workforce.

The International Health Partnership and Related Initiatives (IHP+) and the recently launched Task Force on Innovative Financing are highlighting the importance of investment in human resources for health as a key component of overall health systems strengthening. Donors, including the G8 countries in their 2008 communiqué, have acknowledged the health workforce as a crucial area for engagement. A number of the large Global Health Initiatives have recognized the health workforce as one of the critical limiting factors for the successful implementation of their programmes and are backing their belief in the importance of producing more health workers with significant new investment and technical support on the ground. The PEPFAR reauthorization of July 2008 has as a policy objective to train and support retention of health care professionals, paraprofessionals and community health workers with a target of training at least 140,000 new health care workers by 2013. Both GAVI and the Global Fund are supporting country efforts towards health workforce development through their health systems strengthening windows. Among bilateral donors, the Japanese International Cooperation Agency (JICA) has committed to training 100,000 new health workers in sub-Saharan Africa.

On the same lines, the WHO-led multi-stakeholder effort on maximizing positive synergies between health systems and Global Health Initiatives has identified human resources for health as a critical point of interaction where the impacts of GHIs on health systems, either positive or negative, are most keenly felt.

In sum, the health workforce crisis is higher on the global public health agenda than ever before and there is now an unprecedented convergence of efforts around strengthening this specific component of health systems. These various efforts are all born out of a global consensus that a stronger health workforce is the sine qua non to improve health service delivery and, ultimately, to drive forward improvements in health outcomes.

The purpose of the consultation

The consultation was convened as part of a collaboration between WHO and PEPFAR to share information about the wide range of commitments and investments on human resources for health that are currently being pursued by a broad range of stakeholders. The consultation also represented a rapid response to the renewed endorsement of the centrality of the health workforce in the debate around GHIs and health systems strengthening. It aimed to capitalize on the WHO release of normative guidelines for task shifting and on the current efforts on maximizing positive synergies between health systems and Global Health Initiatives in order to build and sustain the health workforce, particularly through the education and retention of new health care workers.

Specifically, it aimed to lay the foundations of a joint plan of action that will drive the speedy operationalization of coordinated efforts to build and sustain the health workforce after the pre-G8 High Level Dialogue on maximizing positive synergies between health systems and Global Health Initiatives in Venice, June 2009.

Early research findings on maximizing positive synergies

In May 2008, the first expert consultation on maximizing positive synergies between health systems and Global Health Initiatives was held in Geneva. With the endorsement of the meeting, WHO proceeded to engage different groups including academic institutions, civil society, and implementers, to undertake the role of gathering existing evidence and conducting any essential original research to fill the remaining knowledge gaps. The research process continues but early findings are now emerging and these will be reflected in a series of global recommendations that can inform and influence those gathered at the pre-G8 High Level Dialogue on maximizing positive synergies between health systems and Global Health Initiatives. The health workforce represents a key interface between GHIs and country health systems and, as such, has been one focus of the research effort.

A number of key findings have emerged from the research to date:

- GHIs have both positive and negative impacts on the health workforce.
- Health workforce capacity in terms of numbers, skill mix, and distribution is crucial to successful scale up in access to health services, including those targeted by GHIs such as HIV, tuberculosis, malaria or immunization services among others.
- Efforts to scale up specific services have placed an additional burden on already overstretched health workers in low- and middle-income countries.
- GHIs have provided support for in-service, disease-specific training and other measures to strengthen the existing workforce and these investments can have positive spill-over effects for other areas of health service provision.
- GHIs have supported innovative approaches like task shifting and the mobilization and training of informal cadres of community health workers. These have contributed to strengthening existing human resources.
- GHIs have not contributed in a significant way to the production of new health workers who are integrated into national plans and included in the payroll.

- Investment in pre-service education and training for more senior cadres, such as doctors and nurses, has been limited.
- A multi-sectoral approach to building and sustaining the health workforce has generally been lacking.
- In some cases, funding from GHIs to non-state sector service providers has supported the employment of health workers outside the national payroll by offering higher salaries. This has had the effect of driving internal migration of the health workforce away from public sector services.
- There remains an imbalance in the numbers of health workers between rural and urban areas.
- Some GHIs, notably PEPFAR, have attempted to help improve distribution of health workers through support for housing, transportation, hardship and education allowances for senior cadres working in rural areas.
- Investment in training related to specific diseases has the potential to distort the workforce towards certain priorities. However, in many cases, health workers who have been trained to provide HIV care with the support of GHIs are also providing other non-HIV services.
- GHIs have supported targeted efforts to deliver disease-specific services for health workers.
- Occupational safety for health workers is still a major concern.

In sum, GHIs are taking measures to strengthen the health workforce but these measures have, for the most part, been restricted to responses that focus on disease-specific programmes. There is a need for more attention and resources for the production of new health workers, including more highly qualified cadres, and a need for longer term investment in staff development that can help improve staff retention.

Current efforts on human resources for health

Growing awareness of the need for country health systems and GHIs to interact in ways that are mutually reinforcing has prompted a number of efforts by both GHIs and countries to harmonize efforts to strengthen human resources for health. The consultation heard a selection of examples from countries and international partners.

Some examples of what international partners are doing

PEPFAR

PEPFAR originated as an emergency response to the HIV epidemic in a selected number of high burden countries. As the scale-up of HIV services began to expose systemic weaknesses at the country level, PEPFAR adapted to respond better to country needs, particularly in the area of health systems strengthening and human resources for health. PEPFAR is stressing an ethic of partnership and is aiming to go beyond the traditional donor-recipient mentality.

The next phase of PEPFAR will further expand efforts to strengthen health systems and will collaborate more closely with programmes that address health needs beyond HIV. Of particular note is the new goal to support the training and retention of at least 140,000 new health workers in HIV services. A key element of the guiding principles for this next phase will be a greater emphasis on harmonization and responsiveness to country needs and support for policy reform to build a sustainable response to the health workforce crisis.

PEPFAR is involved in various partnerships designed to strengthen human resources for health. The Health Action Framework was developed with the Global Health Workforce Alliance and WHO to assist in workforce planning and development. The Task Shifting collaboration with WHO and UNAIDS resulted in guidelines and recommendations that have been endorsed by governments

and are now being implemented in many PEPFAR countries. In 2008, the President of the U.S. and the Prime Minister of the UK announced an initiative (the Bush/Brown Initiative) through which the two countries are committed to working together to fight diseases and support stronger health systems, public and private-sector institutions and health workers in four countries in Africa – Ethiopia, Kenya, Mozambique and Zambia. The U.S. has committed to investing at least $1.2 million over five years on health workforce development in these four countries.

In 2009, PEPFAR invested over $519 million or 14% of its total budget on supporting and strengthening human resources for health. PEPFAR, in collaboration with ministries of health and other donors, is also supporting a number of innovative efforts to address the health workforce crisis in specific countries. For example, in Zambia, the rural retention scheme provides incentives such as hardship allowances, housing, transportation and educational stipends for children of physicians serving in rural areas and in Tanzania, PEPFAR is piloting a 'retired but not yet tired' program to bring retired health care workers back into the health workforce. In Kenya, PEPFAR has worked with the ministry of health to develop a comprehensive human resources for health information (HRIS) system.

GAVI

GAVI has been quick to express the conviction that new technologies are dependent on strong health systems if they are to prove effective.

In recognition of the interdependence of technologies, such as vaccines, and strong delivery systems GAVI opened a health systems strengthening 'window'. The Board of GAVI has now approved US$800 million for investment 'to achieve and sustain increased immunisation coverage, through strengthening the capacity of the health system to provide immunisation and other health services (with a focus on child and maternal health)'.

The health workforce is one of three non-exclusive themes for the focus of this investment (along with supply, distribution and maintenance; and organisation and management) and country demand for support in this area is clear. Analysis of 49 proposals to GAVI for health systems strengthening found 21% of the activities identified were for human resources and disbursements for human resources represented 27% of the budget allocation (a total of US$149 million).

GAVI is also reorienting its efforts in response to the evolving situation at country level. The alliance is now placing greater emphasis on sustainable interventions and on strengthening support for human resources for health, including contracting and performance related incentives. In particular, GAVI wants to align its support for strengthening the health workforce with the efforts of other agencies at country level.

The International Health Partnership and Related Initiatives, the Bush/Brown Initiative, and the UK Department for International Development

The IHP+ aims to ensure that global commitments towards coordination and health systems strengthening translate into progress in countries through the development of compacts between national and international stakeholders. The IHP+ places strong emphasis on one results-oriented and costed national health plan, which includes human resources for health as one component. A further related effort is the Task Force on Innovative Financing which has reinforced the emphasis of the IHP+ on the importance of strong health systems to achieve the Millennium Development Goals and is focused on addressing the related resource requirements.

The Bush/Brown initiative between the U.S. and the UK, launched in 2008, focuses on strengthening human resources for health in four countries. It aims to identify the comparative advantages of respective aid modalities, to seek out best practice and to promote dialogue and the affirmation of shared objectives – all of which can come together to lever better outcomes through support for comprehensive and costed human resources for health plans. For example, in Mozambique the initiative has resulted in a new, budgeted, health workforce development plan for 2008-2015 which has attracted the support of a wide range of partners.

Some examples of what countries are doing

Malawi

Malawi has been widely recognised for its effective response to a chronic health workforce crisis. A key to success in Malawi has been the country's concerted and strategic effort to roll out three related schemes, each of which have involved partnerships at country level and all of which have been coordinated under one national plan. These three schemes are: the health sector wide approach and joint programme of work (2004-2010); the six-year emergency pre-service training plan launched in 2002; and the emergency human resource programme of 2004 (which was undertaken in partnership with GHIs and other donors). Of particular note is the way in which strong partnership and robust governance enabled Malawi to re-programme Global Fund resources that had been committed for the provision of HIV services. When it became apparent that scale-up of HIV services would be impossible without more health workers, these funds were re-allocated to support the expansion of the health workforce, including through salary support for which country requests to the Global Fund had previously been rejected. Such flexibility on the part of GHIs is rarely explored or exploited by countries in their funding proposals. Also of note is the manner in which the emergency human resource programme, despite being launched in response to the HIV epidemic, has been extended to form part of a strong overall national health plan.

Brazil

The right to health is enshrined in the constitution of Brazil where health is seen as being intrinsic to national development and attracts strong political commitment. The country has made a long-term and sustained investment in the national health system and the current national health service is based on the principles of primary health care – adopting a universal, decentralized, and multi-sectoral approach. With support from the GHIs, national disease-specific programmes for HIV/AIDS and tuberculosis have been integrated within a strong framework for the delivery of a range of primary health care services and the country has achieved the target of universal access to antiretroviral therapy.

Human resource development has been a central platform of development of the Brazilian health system and a major investment has been made in the expansion of family health teams throughout the country. Of particular note is the linkage that Brazil has promoted between the Ministry of Health, the Ministry of Education and the Ministry of Labour for the production, recruitment and retention of health workers. A Secretariat of human resource development was set up at the first level of the Ministry of Health but, in addition, a Presidential decree has established an Inter-ministerial Commission [MOE/MOH] of Management of Education in Health and there is an Inter-ministerial Commission of Management of Labor in Health [MOH/MOLE].

Ethiopia

Ethiopia has responded to acute health workforce shortages through a concerted effort to implement a number of ambitious strategies. These have included large scale community mobilization for the provision of a range of services, including HIV services, through its Health Extension Programme.

More recently, Ethiopia has been working in partnership with GHIs to invest in an accelerated health officers training programme; surgical emergency and obstetrics training through a Masters programme; and medical pre-service education for the production of new health workers.

The defining feature of Ethiopia's approach to its health workforce development in recent years has been strong governance and leadership to support a comprehensive approach to implementation. Each intervention has been fully costed and has been accompanied by the necessary policy and regulatory reforms to enable the strategy to produce the desired results.

The country is also now developing an ambitious human resources development strategy and has launched a concerted policy and legislative response to the health workforce crisis including a Health Service Delivery Proclamation and strengthening of the human resources for health section of the Parliament Draft Professional practice laws.

Key points of consensus

Human resources determine coverage of services and health outcomes

There is now clear evidence of the link between the numbers of health workers and both the coverage of services and health outcomes. However, building and sustaining the health workforce is a complex undertaking in a complex environment.

Human resources for health and the primary health care agenda

The renewed emphasis that is now being placed on primary health care is welcomed by those who are concerned with strengthening the health workforce. The essence of primary health care, which is about people-centred care, equitable access to services, and social justice, speaks to the importance of a strong, motivated and decentralized health workforce. Primary health care will usher in policy and service delivery reforms that rely on expansion of the health workforce for implementation.

Not a quick win but a long term plan

There are many challenges that must be overcome to address the chronic shortages of health workers in low- and middle-income countries. Firstly, political commitment is needed, including the need for strong governance and leadership, collaboration around a country-led health plan, significant policy reform and sustained financial investment. Secondly, there must be commitment to short- and long-term workforce planning, commitment to produce appropriately trained health workers to meet identified needs, and significant expansion of pre-service education and retention measures. Thirdly, an enabling environment is essential, including good information systems for health workforce and education, effective management and leadership, and labour market capacity and policy to absorb and sustain additional health workers.

Pulling in the same direction

If efforts to build and sustain the health workforce are to amount to more than words, it is essential to build a truly global, joint, target-driven initiative that can harmonize the response to the human resources for health crisis. Harmonizing efforts and maximizing synergies will produce a better return on all investments – especially important in view of the global financial crisis. Greater efficiency will also be achieved through a clearer articulation of roles and complementarities. In sum, it is time to put an end to the counter-productive debate that creates a false dichotomy between health systems and GHIs. Complementarity must be the modus operandi going forward.

Capitalize on the current momentum around the effort to maximize positive synergies between health systems and GHIs.

The work on maximizing positive synergies has made it clear that constraints pertaining to the health workforce are critical in determining whether or not GHIs have positive or negative impacts on country health systems. Therefore, efforts to build and sustain the health workforce should be at the centre of the recommendations that are developed in the lead up to the G8 summit.

The global community can help countries meet the challenges

Countries want to work in partnership with the global community to develop: policy options and sound technical advice (e.g. evidence-based recommendations); tools for a correct diagnosis of the situation (e.g. human resources for health action framework and other assessment tools); effective and sustained technical support (most importantly through sustained and predictable financing); and mutual learning and sharing (e.g. documentation of innovations).

The importance of a convener

Reaching agreement on significant donor intervention to build the health workforce will need everyone, including donors, bilateral institutions and others to come to the table. The convening power of WHO puts the organization in a unique position to facilitate the sensitive dialogue.

Convert commitments to policy and policy to action – reduce implementation chain time

In many aspects of global public health, the need to generate political and resource commitments represents a first and major hurdle. However, there can be no doubt that serious commitment already exists to building and sustaining the health workforce. This is also backed by significant financial commitments – although more resources will be needed to sustain progress. These assets must not be wasted but must be converted quickly into clear policies on which all can agree and those policies must then be translated to action. For this, knowledge dissemination strategies and processes of transfer to country level are needed.

Improving the evidence base

In many countries there is still insufficient evidence and analysis of the factors that determine the relative effectiveness of different interventions that aim to address the human resources for health crisis. A wide range of different types of data are needed to construct a robust evidence base that can inform interventions around health workforce development. Such data may include: labour market studies; facility-based studies with spot checks of private clinics; capacity studies of health profession schools; productivity studies (patients/day); and migration studies. Time-in-motion studies may also be helpful.

The role of targets and the importance of indicators

One of the findings from the work on maximizing positive synergies is that target setting and results-based programming have been critical factors in the success of disease-specific efforts of the GHIs. No equivalent targets exist to unify and drive efforts on health systems strengthening. Many of the ongoing efforts on human resources for health have developed targets and indicators but these have not yet earned sufficient recognition or proved successful enough in mobilizing concerted action. The agreement of all stakeholders needs to be reached on clear targets for building and sustaining the health workforce and these targets must be accompanied by a set of accepted indicators for monitoring progress.

Investment in information systems

Without reliable data, an accurate assessment of the health workforce situation and monitoring of changes in the numbers of health workers is not possible. Investment in reliable health information systems must be part and parcel of efforts to scale up the health workforce.

A focus on good governance

The interactions between GHIs and health systems are more likely to produce positive outcomes where there is strong governance and a robust policy framework that can serve to align interests and actions. In the area of health workforce development, strong and creative governance is essential to harmonize diverse efforts and investments at country level and to drive forward the necessary policy changes for effective implementation.

Importance of a multi-sectoral approach

Building and sustaining the health workforce has implications that extend beyond Ministries of Health to other sectors such as education and labour. A multi-sectoral approach will be essential for sustainable success and is likely to necessitate more diverse channelling of funds from international partners.

Action after the High Level Dialogue on maximizing positive synergies

The focus that the pre-G8 High Level Dialogue on maximizing positive synergies between health systems and Global Health Initiatives (Venice, June 2009) brings to these issues represents an opportunity to make a significant stride forward. Agreement on a plan of action that can maintain this momentum is essential.

Agreement on next steps

The meeting reached agreement on the next steps that are needed to accelerate the transition from policy to implementation of coordinated and collaborative action to build and sustain the health workforce.

Firstly, it was agreed that the new health workforce commitments from PEPFAR, from DFID and from other international partners and GHIs will bring both focus and dynamism to the discussion around health systems, including health workforce strengthening. At the same time, the publication of the recommendations around maximizing positive synergies between health systems and Global Health Initiatives, and the related discussions at the pre-G8 High Level Dialogue on maximizing positive synergies need to be quickly followed by action to carry forward the vital human resources for health component of this work.

In response to the recommendations on maximizing positive synergies, WHO will convene relevant partners, including GHIs, programme implementers, and others who drive specific initiatives on human resources for health. Together these partners will define an evidence-based plan to produce, distribute and retain health workers.

Building and implementing the plan will involve three phases: evidence gathering and analysis; development of consensus-based policy guidance on innovative ways to produce and retain health workers; and implementation, including country adaptation of the guidance.

The evidence gathering and analysis phase will involve documentation of specific interventions and practices currently being implemented in countries. It will also require analysis of the impacts of these interventions and practices on the health workforce including any enabling components that help to determine their success.

Development of policy guidance that can harmonize efforts to produce and retain health workers will be linked to the ongoing work on maximizing positive synergies between health systems and Global Health Initiatives and will involve independent technical and scientific consultations to review the findings from the evidence gathering. The resulting recommendations will be developed and refined through a consultative process that can ensure consensus and can command ‘buy-in’ from all stakeholders. The work will be guided by the need to translate findings into recommendations that will be relevant and useful to implementers. Joint advocacy will be needed for the adoption of the guidelines at global level and by countries.

Finally, implementation and country adaptation of guidance will involve working collaboratively with countries to promote adaptation and implementation. This will require the development of operational tools to support implementation, the development of a monitoring and evaluation framework to allow the evaluation to be built in progressively, and a strong commitment to invest in country information systems.

The role of WHO

The work on building and sustaining health workforce development represents one part of the WHO agenda for Primary Health Care and for health systems strengthening and forms an integral part of the current WHO-led work on maximizing positive synergies between health systems and Global Health Initiatives. The role of the Human Resources for Health Department in WHO is to generate and share information from all countries and to develop global norms and standards in the area of health workforce development as well as providing impartial guidance to partners and countries for investment in the health workforce. The department will use its convening power to bring together the knowledge and the individuals and organizations that have a part to play in gathering evidence on building and sustaining health workforce development and translating this into accelerated action on the ground.

The Human Resources for Health department intends to scale up work in this area linking with the Regional Office and working in a complimentary manner with the Global Health Workforce Alliance which has advocacy competencies. In this way, WHO can play an important role in defining the issues, disseminating evidence, providing guidance and thereby helping to operationalize the commitments of many partners. WHO can also facilitate much needed dialogue and help to create knowledge hubs to build evidence to inform policy and implementation.

Specifically, the Human Resources for Health Department in WHO will continue to liaise with the different constituencies to develop a plan for the overall programme of work agreed upon at the consultation. WHO will then progress the research phase as rapidly as possible, and will hold a series of small stock-taking meetings as the evidence gathering unfolds and conclusions begin to take shape.

WHO will work with all interested parties to develop appropriate policy and technical guidance that can command support from all stakeholders to allow a speedy implementation at country level.

Working together for health

The GHIs and other public health actors and advocates agree that a weak health workforce = weak service delivery = wasted health technologies = squandered resources. Similarly, investments that are uncoordinated risk wasting both financial and human resources. The time is right to work together to strengthen and expand the health workforce.

This can be accomplished by establishing a core multi-stakeholder group on human resources for health; driving a rapid process of country analysis followed by technical consultation and negotiation; and reaching agreement on recommendations for building and sustaining health workforce development. This approach represents the direction in which different parties can pull together to achieve the optimal use of all available resources for health workforce strengthening.

Presentations

All the presentations that were made at the consultation are available in electronic format at: http://www.who.int/hrh/events/2009/who_pepfar_consultation

List of participants

Walid Abubaker, WHO Regional Office for the Eastern Mediterraneaon, Cairo, Egypt

Magdalene Awases, WHO Regional Office for Africa, Harare, Zimbabwe

Mary Bassett, Doris Duke Foundation, New York, USA

Brook Baker, North-Eastern University. School of Law, Boston, USA

Smita Baruah, Global Health Council, Washington DC, USA

David Benton, International Council of Nurses, Geneva, Switzerland

Craig Burgess, GAVI, Geneva, Switzerland

James Campbell, ICS INTEGRARE S.l, Barcelona, Spain

Francesca Celletti, WHO, Geneva, Switzerland

Francisco Eduardo de Campos, Ministério da Saude, Brasilia, Brazil

Hilario Chimota, Ministry of Health, Lilongwe, Malawi

Manuel M. Dayrit, WHO, Geneva, Switzerland

Karl Lorenz Dehne, UNAIDS, Geneva, Switzerland

Carmen Dolea, WHO, Geneva, Switzerland

Norbert Dreesch, WHO, Geneva, Switzerland

Andrew Ellner, Harvard University, Boston, USA

Carissa F. Etienne, WHO, Geneva, Switzerland

Seble Lemma Frehywot, George Washington University, Washington DC, USA

Michael Friedman, Centers for Disease Control and Prevention, Atlanta, USA

Socorro Gross-Galiano, WHO Regional Office for the Americas/ Pan American Sanitary Bureau, Washington DC, USA

John D. Hassell, UNAIDS, Geneva, Switzerland

Gottfried Hirnsgchall, WHO Regional Office for the Americas/ Pan American Sanitary Bureau, Washington DC, USA

Joan Parise Holloway, Office of the US Global AIDS Coordinator, Washington DC, USA

Gilbert Kombe, Abt Associates, Bethesda, USA

Wuleta Lemma, Tulane University, New Orleans, USA

Elizabeth McCarthy, The Clinton Foundation HIV/AIDS Initiative (CHAI), Boston, USA

James McCaffery, Capacity Project, Chapel Hill, USA

Hugo Mercer, WHO, Geneva, Switzerland

Fitzhugh Mullan, George Washington University, Washington DC, USA

Joseph Perriens, WHO, Geneva, Switzerland

Pedro Brito Quintana, WHO Regional Office for the Americas/ Pan American Sanitary Bureau, Washington DC, USA

Estelle E. Quain, United States Agency for International Development, Washington DC, USA

Felix Rigoli, WHO Regional Office for the Americas/Pan American Sanitary Bureau, Washington DC, USA

Steve Rosenzweig, Center for Global Development, Washington DC, USA

Badara Samb, WHO, Geneva, Switzerland

Kate Tulenko, World Bank, Washington DC, USA

Wim Van Damme, Institute of Tropical Medicine, Antwerp, Beligium

Gillian Weightman, WHO, Geneva, Switzerland

David Wendt, Center for Global Development, Washington DC, USA

José M. Zuniga, International Association of Physicians in AIDS Care (IAPAC), USA

Additional Information

More information about the work of WHO on maximizing positive synergies between health systems and Global Health Initiatives can be found at: http://www.who.int/healthsystems/GHIsynergies/en/index.html

Design and layout by mccdesign.com

Health Systems and Services (HSS/HRH)
World Health Organization
20, Avenue Appia
1211 Geneva 27
Switzerland

www.who.int/healthsystems

WHO/HRH/HPE/2009.1