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HEALTH SYSTEMS 20/20 FINAL PROJECT REPORT

September 2012

This publication was produced for review by the United States Agency for International Development. It was prepared by the Health Systems 20/20 project.

Health Systems 20/20 is USAID's flagship project for strengthening health systems worldwide. By supporting countries to improve their health financing, governance, operations, and institutional capacities, Health Systems 20/20 helps eliminate barriers to the delivery and use of priority health care, such as HIV/AIDS services, tuberculosis treatment, reproductive health services, and maternal and child health care.

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HEALTH SYSTEMS 20/20
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ACRONYMS

AFENET	African Field Epidemiology Network
ART	Antiretroviral therapy
ARV	Antiretroviral (drugs)
CBHI	Community-based health insurance
CESAG	*Centre Africain d'Etudes Supérieures en Gestion* (African Center for Higher Management Studies)
CPT	cotrimoxazol preventive treatment
DHS	Demographic and Health Surveys
DRC	Democratic Republic of Congo
ECSA	Commonwealth Regional Health Community for East, Central and Southern Africa
EMIS	Expenditure Management Information System
GDP	Gross Domestic Product
GESPER	Personnel Management System
GH/HIDN	Global Health, Office of Health, Infectious Diseases and Nutrition
GIS	Geographic information system
HAPSAT	HIV/AIDS Program Sustainability Analysis Tool
HBC	Home-based care
HCT	HIV counseling and testing
HEARD	Health Economics and HIV/AIDS Research Division
HENNET	Health NGO Network
HEU	Health Economics Unit
HIO	Health Insurance Organization
HIS	Health Information Systems
HIV/AIDS	Human immunodeficiency virus infection/Acquired immunodeficiency syndrome
HMIS	Health Management Information System
HRH	Human Resources for Health
HRIS	Human Resource Information Systems
HSA	Health System Assessment
HSPI	Health Strategy and Policy Institute
ILSP	International Senior Lawyers Project
INFAS	*Institute National de la Formation des Agents de Santé* (National Institute of Health Worker Training)
IR	Intermediate results
IRSP	Regional School of Public Health
ISID	*Institut de Santé et Développement* (Institute for Health and Development)
IT	Information Technology

KSPH	Kinshasa School of Public Health
LGA	Local Government Area
M&E	Monitoring and Evaluation
MCH	Maternal and Child Health
MICS	Multiple Indicator Cluster Survey
MLI	Ministerial Leadership Initiative
MOH	Ministry of Health
MOHP	Ministry of Health and Population
MOHSW	Ministry of Health and Social Welfare
MPH	Master of Public Health
MSHP	Ministry of Health and Public Hygiene
MSP	Ministry of Health and Prevention
NAC	National AIDS Commission
NASA	National AIDS Spending Assessment
NGO	Nongovernmental organization
NHA	National Health Accounts
NTBLTP	National TB and Leprosy Training Program
OBFR	Output-based financial reporting
OECD	Organization for Economic Cooperation and Development
PBI	Performance-based incentives
PBF	Performance-based financing
PEMR	Public Expenditure Management Review
PEPFAR	President's Emergency Plan for AIDS Relief
PHN	Population, Health and Nutrition
PMTCT	Prevention of Mother-to-Child Transmission
QAPC	Quality Assurance Partnership Committee
RBF	Results-based financing
SO	Strategic objectives
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
UTM	*Union de Technique de la Mutualité*
WHO	World Health Organization
WISN	Workload Indicator Staffing Needs

EXECUTIVE SUMMARY

Health Systems 20/20 is the United States Agency for International Development's (USAID) flagship project for strengthening health systems worldwide. Launched in 2006, Health Systems 20/20 has responded to more than 250 activity requests in 51 countries, helping to eliminate barriers to the delivery and use of priority health care, such as HIV/AIDS services, tuberculosis treatment, reproductive health services, and maternal and child health care.

Health Systems 20/20's four intermediate results addressed the financing, governance, operational, and capacity constraints that block access to and use of priority health services. Over the life of the project, eight strategies emerged to address many of these constraints, which undermine the equity, efficiency, quality, and effectiveness of priority health services and ultimately limit service utilization. Health Systems 20/20 worked with USAID clients and country stakeholders to design programs tailored to meet country-specific challenges and health priorities. In addition, the project institutionalized existing tools, such as National Health Accounts (NHA) and the Health System Assessment (HSA), and developed new ones, including the HIV/AIDS Program Sustainability Analysis Tool (HAPSAT), and specific costing methodologies to generate the evidence needed to improve individual health systems.

From the outset, Health Systems 20/20 recognized that applying a one-size-fits-all approach to partner countries would not work. As a largely demand-driven project, it has been essential for Health Systems 20/20 to look at each country individually, applying the appropriate tools and strategies to clarify their health system constraints and bring new solutions into focus based on the starting point in each country. The project team saw repeatedly that the simultaneous, integrated application of several of these strategies achieves stronger results. Looking back on six years of testing and refining approaches to strengthening health systems worldwide, Health Systems 20/20 has distilled 13 lessons to share with the global health community as it plans for the future of health system strengthening.

ACKNOWLEDGMENTS

The significant achievements of the Health Systems 20/20 project would not have been possible without the dedication, expertise, and flexibility of our project partners and the hundreds of local partners with whom we worked in more than 50 countries. Collaboration with our USAID clients, other U.S. government partners, global health partners, other donors, and country stakeholders was essential to shaping the project and moving the field of health systems strengthening forward. We deeply appreciate their guidance and ongoing support in this endeavor. There has never been a more important time to invest in health systems strengthening.

PART I - OVERVIEW OF THE HEALTH SYSTEMS 20/20 PROJECT

PURPOSE

In order to improve the health and well-being of people throughout the world, the United States Agency for International Development (USAID) has prioritized strengthening health systems. As part of that commitment, USAID launched Health Systems 20/20 as the flagship health systems strengthening project for its Bureau of Global Health, Office of Health, Infectious Diseases and Nutrition (GH/HIDN). The project, initiated in October 2006 as a five year cooperative agreement, received a sixth year extension through September 2012.

This final project report summarizes the Health Systems 20/20 project, its accomplishments in key areas, and lessons learned from implementation. Abt Associates Inc. and nine partners implemented the project in partnership with numerous regional and country institutions and dozens of developing country consultants (see Annex A). Health Systems 20/20 nearly reached its contract ceiling of $125 million and served all five of USAID's Strategic Objectives (SO) for health, supporting more than 250 activities in 51 countries (see Annex B). This report is complemented by the project's end of conference report, "New Perspectives on Health Systems Strengthening," and more than 400 publications, which are archived on the project's website (www.healthsystems2020.org).

INTRODUCTION

By launching the Health Systems 20/20 project in 2006, USAID recognized that "Only as we solve systemic challenges can USAID fulfill its mission of saving lives…". Through Health Systems 20/20, USAID complemented its disease- and service-focused investments with technical assistance, capacity building, and global leadership in finance, governance, and operations. As a largely demand-driven project, Health Systems 20/20 responded to over 250 activity requests in 51 countries (see Annex C for locations), nearly reached the project ceiling of $125 million, and leveraged more than $7.7 million in non-U.S. government funding (see Annex D). The widespread demand for this project reflects the heightened recognition that functional health systems are essential to maintaining and extending the U.S. Government's investments in health.

Health Systems 20/20 followed the 2000-2006 Partners for Health Reform*Plus* project ($98 million), USAID's third global project to focus on health financing and policy, which followed the 1995 Partnerships for Health Reform project ($65 million), and the 1989 Health Financing and Sustainability project ($16.5 million). All of the predecessor projects reached their ceilings with significant demand from USAID field missions, reflecting important changes in developing countries' health sectors and a growing recognition that strong health systems are critical to achieving and sustaining USAID's health SOs. Under Health Systems 20/20, Abt Associates led a team of partners that included Aga Khan Foundation, Bitrán y Asociados, BRAC University, Broad Branch Associates, Deloitte Consulting LLP, Forum One Communications, RTI International, Training Resources Group, and Tulane University School of Public Health.

Between 2006 and 2012, the global economic environment changed significantly. The financial crisis began to unfold in 2007, followed by the global recession of 2008-2009. In response, international donors, including the Global Fund to Fight Aids, Tuberculosis and Malaria (Global Fund), scaled back their levels of assistance while increasing their scrutiny of aid efforts, particularly of program effectiveness. At the same time, some middle-income countries began to increase their own funding for the health sector, while also focusing on efficiencies, cost, and value for money. What appeared to be a financial storm for global health instead proved to be an important economic transition that further legitimized investments in health systems strengthening.

When he launched the Global Health Initiative (GHI) in 2009, President Barack Obama acknowledged this new perspective on health systems, saying "We will not be successful in our efforts to end deaths from AIDS, malaria, and tuberculosis unless we do more to improve health systems around the world, focus our efforts on child and maternal health, and ensure that best practices drive the funding for these programs." Health systems strengthening is at the heart of the GHI, and is highlighted in the following principle: Build sustainability through health systems strengthening.

The design of the Health Systems 20/20 project, which was in line with the 2005 Paris Declaration on aid effectiveness, country ownership, harmonization, alignment, results, and mutual accountability, provided the basis for the project to work flexibly and responsively with USAID missions and stakeholders to make significant progress in strengthening country health systems and advancing global thinking.

Addressing Health Systems' Constraints

To navigate the uncertain economic climate, Health Systems 20/20 explored multiple strategies to best meet the project's four intermediate results (IRs). The IRs called for addressing the *financing, governance, operational,* and *capacity* constraints that block vulnerable populations' access to and use of priority

health services. Designed as a demand-driven project, Health Systems 20/20 responded to USAID clients and country stakeholders in 51 countries to develop programs tailored to address country-specific challenges and health priorities. The project's technical approach recognized that these four areas overlap and that country-level assistance should be integrated whenever possible. For example, the project team understood that the use of expenditure data from National Health Accounts (NHA), initially thought of as a financing concern, became in fact a governance intervention because NHA requires transparency and engagement of stakeholders in assimilating the findings.

At the end of the third year, the Health Systems 20/20 team reconceptualized the project's overall approach by identifying eight specific strategies to strengthen health systems. These strategies address the constraints that undermine the equity, efficiency, quality, and effectiveness of priority health services and, ultimately, limit service utilization.

Together, the eight strategies guided and helped to prioritize project activities worldwide. As the project progressed, the strategies evolved, becoming more robust methodologically and increasingly locally owned. These eight strategies, which are discussed in the following chapters, were designed to respond to and meet specific IRs (see Table 1). They are:

1. Financial risk protection;
2. Resource tracking;
3. Performance-based incentives;
4. Health governance;
5. Costing and sustainability;
6. Human resources for health;
7. Capacity building; and
8. Measuring and monitoring of health system performance.

TABLE 1. STRATEGIES LINKED TO INTERMEDIATE RESULTS

Intermediate Result	Project Strategies
IR 1: Improved financing for PHN priority services	Financial Risk Protection
	Resource tracking
	Performance-based incentives
IR 2: Effective health governance	Health governance
	Costing and sustainability
	Measuring and monitoring health systems performance
IR 3: Health system budgets and implements priority programs more effectively	Human resources for health
IR 4: Skills, knowledge, and tools in health finance, governance, and operations support disease control efforts	Capacity Building

By the end of the project, the project team's thinking evolved in understanding the importance of distinguishing activities that provide input to *support* the health system from those that alleviate constraints to *strengthen* the health system (Chee et al. 2012). Based on the project's experience, s*upporting* the health system can include any activity that improves services, from upgrading facilities and equipment to distributing mosquito nets. In contrast, s*trengthening* the health system is accomplished by more comprehensive changes to policies and regulations, financing mechanisms, organizational structures, and relationships across health system building blocks that allow more effective use of resources to improve multiple health services (WHO 2007). Efforts to both support and strengthen health systems are important and necessary, and the balance between them should be driven by a country's context and priorities.

Organization of this report

The remainder of this report consists of three main sections: strategy chapters, which highlight illustrative activities and specific lessons learned in the eight strategies; global lessons learned, which offer new perspectives on the field of health systems strengthening; and seven annexes, including summary tables of project funding and project outreach via the website and social media (see Annexes D and E).

PART 2 – STRATEGY CHAPTERS

1. FINANCIAL RISK PROTECTION

"The successful adoption of the national community-based health insurance (CBHI) strategy has provided a harmonized platform to expand health care coverage in Mali. Involvement and leadership from the government was critical in the successful adoption of the new national strategy."

– Mr. Luc Togo, National Director of Social Protection, Ministry of Social Development, Mali

1.1 OVERVIEW

Having a "public" health system does not mean that health care is free. In many low- and middle-income countries, health systems rely heavily on revenue from user fees charged at health facilities. Where public health facilities do not exist or are of poor quality, patients may have to seek care from private, fee-charging providers. Frequent facility stock-outs can also force patients to buy their own medicines and other supplies. All of these fees and costs limit access to health care, especially for the poor. An unexpected health problem, such as severe malaria or a complicated delivery, can push a family into poverty or prevent them from seeking the care they need.

There are many ways, however, to protect households from the financial risk of illness – risk pooling (insurance) and prepayment schemes, targeted subsidies, or adequate financing of free priority services – but the mechanisms must be designed and implemented properly. A 2005 World Health Organization (WHO) resolution endorsing universal health coverage accelerated interest in health insurance among developing countries. Health insurance can generate funds for health care while minimizing the need for patients to pay at the time of service, thus improving access to care. By expanding access to care, it can also lead to a healthier population, which is key to economic growth and stability.

As noted, however, insurance schemes must be carefully designed and implemented. Since the 1990s, many groups and even entire countries in sub-Saharan Africa have tried to establish viable community-based or national health insurance schemes. While some have flourished, others have failed for lack of financial management and contracting capacity, a realistic benefits package, quality of care mechanisms, and other constraints. Poorly designed insurance schemes risk bankruptcy and can exacerbate inequities because higher income groups are more likely to be insured and use health care services.

1.2 THE FINANCIAL RISK PROTECTION STRATEGY

To protect families and ensure that they have financial access to the health care they need, Health Systems 20/20 supported governments and other in-country organizations to establish or strengthen financial protection mechanisms to cover health costs. The project evaluated actions countries had already taken, such as the abolition of user fees for certain services or the expansion of health insurance coverage. While these activities focused on the financing of health care, they also served to strengthen

the entire health system as they cut across other health system components and project strategies, such as health governance, capacity building, and health information systems.

Health Systems 20/20's approach to its work in health care financing and risk protection manifested in three types of activities:

- Expand the evidence base and increase understanding among country policymakers, donors, and program implementers of the advantages and disadvantages of different financial protection mechanisms so that countries can lead policy reforms suited to the country context, based on worldwide evidence;
- Provide country-based technical assistance in the design and implementation of these mechanisms; and
- Exercise global leadership by collaborating with international partners to expand understanding and support for enhanced financial protection at the country level.

Table 2 lists selected project activities by each of the above types. Several of the activities listed in the table are discussed later in this chapter.

TABLE 2. SELECTED FINANCIAL RISK-PROTECTION ACTIVITIES

Objective	Activities
Expand the evidence base and increase understanding	• Pre- and post-evaluation of national health insurance scheme implementation (published by the Brookings Institution) in Ghana • Evaluation of fee exemption policy for Caesarean sections in Mali • Review of the inclusion of HIV benefits in insurance in multiple countries • Analysis of feasibility of various health insurance models in Afghanistan • Review and analysis: *Toward Solving Health Financing Challenges in Africa* in several African countries
Provide technical assistance	• Development and scale-up of CBHI in Mali • Capacity building of social health insurance program in medical auditing, case and utilization management, and financial management in Egypt • Support for comprehensive post-conflict health financing and health insurance policy in Liberia • Support for incorporation into health insurance scheme of poor, including people living with HIV, in India
Exercise global leadership	• Two African regional health insurance workshops, including development of health insurance handbook, with several other donors for multiple countries in Anglophone and Francophone Africa • Insurance for the Informal Sector workshop with the Joint Learning Network (global) • Financial Access to Health Services Community of Practice workshop on maternal health fee exemption policies (global) • Evidence Summit on Financial Incentives for Improved Maternal Health Service Use (global)

Expand the evidence base and increase understanding: Reforming health financing and establishing financial risk protection programs is a complex, multi-faceted, often highly politicized process requiring simultaneous attention to technical, governance, and operational challenges. Health Systems 20/20 helped senior health officials and other in-country policymakers and program managers as well as donor organizations to understand the various facets: the pros and cons of different approaches; the technical and operational issues that can make or break a particular approach; and the intense "championing" leadership required to advance new and successful health financing policies. Health Systems 20/20 also contributed cutting-edge evidence for policymakers through evaluation research, advancing the field in topics such as national health insurance and user fee exemptions.

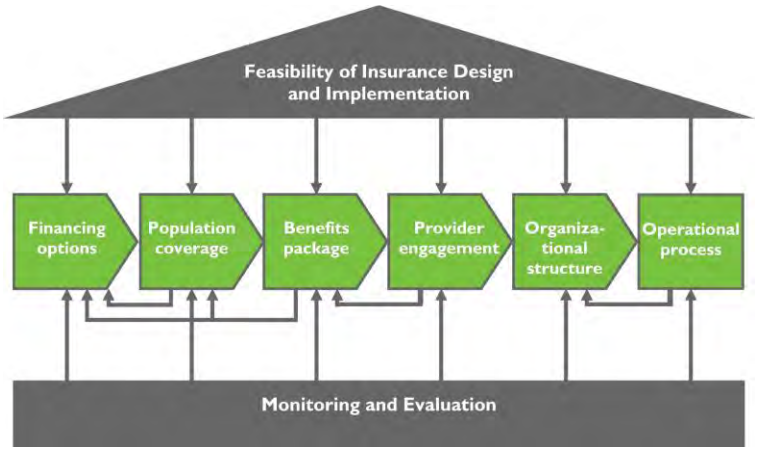
For example, Health Systems 20/20 evaluated Mali's user fee exemption for Caesarean sections. C-section rates more than doubled between 2005 and 2010 after the policy was implemented. However, financial and nonfinancial barriers to facility-based delivery persisted. Needed drugs often still had to be purchased and poor roads made transport difficult, time consuming, and expensive. Strong cultural traditions continue to encourage women to deliver at home. The evaluation indicated that wealthier women were more likely than poor women to receive free C-sections, implying that to be successful, a targeted fee exemption policy should be integrated with other improvements to transport and educate patients.

Provide country-based technical assistance: Health Systems 20/20 worked directly with policymakers and implementers in individual countries to develop and roll out well-crafted overall health financing policies, expand financial protection, and improve insurance scheme operations. Three examples of technical assistance that the project provided in Mali, Egypt, and sub-Saharan Africa are described later in this chapter.

Exercise global leadership: As a worldwide project, Health Systems 20/20 was able to use its relationships with leading regional and global development agencies and technical institutions to advance progress toward universal health coverage. The project facilitated collaboration among USAID, the World Bank, and WHO on health insurance through meetings of senior officials and in-country coordination of technical staff, and continued alignment of the project's technical assistance with the Community of Practice started by the World Bank. Building these relationships accelerated and expanded Health Systems 20/20's technical impact, enhanced project and USAID credibility, and leveraged funding.

For example, Health Systems 20/20, in collaboration with more than a half dozen international partners, designed and led two regional workshops on expanding health insurance in low-income countries for health policymakers and health insurance designers from 18 countries in sub-Saharan Africa. The workshop format used an innovative approach, walking participants through the elements that go into the design of a strong health insurance program (Figure 1) and then helping the country teams develop a blueprint for their health insurance programs.

FIGURE 1. DESIGN ELEMENTS OF A HEALTH INSURANCE SCHEME



1.3 ILLUSTRATIVE ACTIVITIES

This section highlights Health Systems 20/20's work expanding CBHI in Mali, providing training in medical audit and case and utilization management to strengthen social health insurance in Egypt, and implementing health insurance workshops for 18 sub-Saharan African countries.

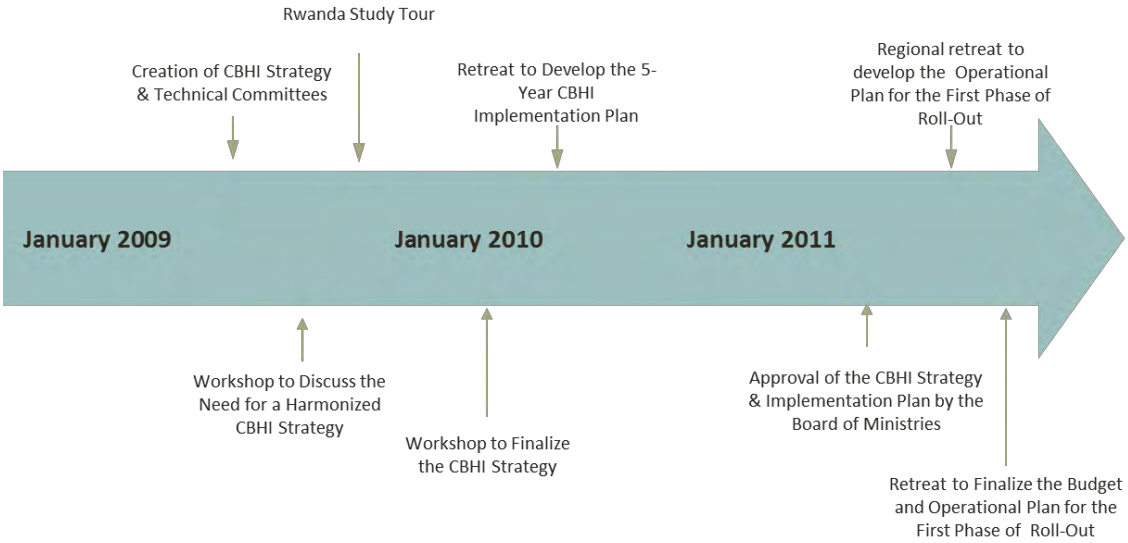
1.3.1 MALI: STRENGTHENING INSTITUTIONAL INFRASTRUCTURE TO EXPAND CBHI COVERAGE

Mali offers programs that provide insurance to government and formal sector workers and indigent groups, but together those schemes cover less than one-quarter of the population. Mali has a tradition of CBHI schemes, especially in the country's informal sector and rural areas (also among some employer-based organizations), but the schemes are small and cover only a small percentage of the informal sector, and many lack the skills needed to be successful.

Intervention and Results

When the government of Mali decided to expand insurance coverage to the informal and rural sector, Health Systems 20/20 partnered with the World Bank and the Ministerial Leadership Initiative (MLI) to assist the Ministry of Health and Social Welfare (MOHSW) in developing a national CBHI strategy and an operational plan. The strategy was developed over a two-year period (Figure 2), which saw the creation of CBHI committees, workshops, and retreats with a wide range of stakeholders, and a study tour to Rwanda. Rwanda is the African country with the broadest CBHI coverage. In addition, the government agreed to subsidize premiums to make health insurance available to lower-income households and expand their benefits package – making Mali only the third country in Africa to subsidize CBHI.

FIGURE 2. TIMELINE OF THE DEVELOPMENT OF THE NATIONAL CBHI STRATEGY



The first phase of the CBHI roll-out was intended to start in 2012 and cover three regions and about 1.2 million people, or about 40 percent of the targeted population. During this three-year first phase, the goal is to establish 150 schemes in 21 districts. Twelve districts will create CBHI networks. Based on lessons learned from this phase, CBHI will then be rolled out in Mali's other five regions. Because of the political unrest in Mali, the roll-out was still on hold as of the writing of this report.

Health Systems 20/20 provided technical assistance to Mali's CBHI steering committee and a technical committee composed of MOHSW staff and representatives from civil society organizations and other local advocacy groups. Project staff also worked closely with the *Union de Technique de la Mutualité* (UTM), an association of CBHI schemes that provides technical assistance and advocacy, which organized the policy development workshops. UTM will provide technical support for the implementation of the CBHI strategy beyond the life of Health Systems 20/20.

Achievements

- Broadly accepted strategy that expands CBHI coverage, especially to people in the informal sector and rural areas, and thus improved equity in access to health care.
- Improved government stewardship of the health sector.
- Expanded institutional capacity in the managerial skills needed for successful CBHI.
- Leveraged sources of support through collaboration of government and multiple external partners.
- Increased transparency through participation of multiple in-country stakeholders, especially of civil society groups.

1.3.2 EGYPT: SUPPORTING THE HEALTH INSURANCE ORGANIZATION'S TRANSITION TO BECOMING AN EFFECTIVE HEALTH INSURANCE ENTERPRISE

Despite its name, Egypt's Health Insurance Organization (HIO) is a provider of health care as well as a payer. Established in 1964, this social health insurance scheme became responsible for providing health care to an increasing number of Egyptians (formal sector workers, widows, and other vulnerable groups, such as schoolchildren and infants), eventually serving nearly half of the population. Over the years, the HIO's dual provider and payer role made it less efficient and more costly.

In the past decade, the HIO has worked to improve its efficiency and productivity. Ultimately, the HIO aims to cease the direct provision of services and become a "pure" insurance company, pooling funds and purchasing services only. To succeed, it must be able to design, price, negotiate, contract, and pay for services covered under Egypt's social health insurance scheme.

Intervention and Results

To assist the HIO in its transition and strengthen its financial sustainability, Health Systems 20/20 built HIO capacity in medical and financial management. Starting in mid-2009, Health Systems 20/20 helped the HIO develop two systems that are essential to the effective purchasing of health care services: a medical audit system and a utilization management and case management system. Combined, these new systems allow the HIO to audit the compliance of contracted facilities with contract requirements and ensure that care is medically necessary and appropriate.

The first step in building these systems was to develop medical necessity guidelines (*HIO Medical Audit Guidelines for Primary Health Care Clinics and Hospitals)* to advise doctors on what procedures are necessary for the medical conditions commonly presented. Health Systems 20/20 then trained 88 HIO medical staff from throughout Egypt to conduct medical audits. The months-long training included classroom courses, observations of "mock" audits in three HIO hospitals, and practical training under the observation of an experienced international audit expert.

After completing the training, participants took a written exam to become certified as auditors. In all, 15 participants were certified as trainers, and they will help to ensure the sustainability and expansion of the program to all HIO hospitals. The project also developed several utilization and case management manuals (for primary care centers and hospitals) and trained 100 HIO staff to review medical records to ensure that the care HIO pays for is actually medically necessary, appropriate, high quality, safe, and efficient.

Once staff were trained, Health Systems 20/20 worked with the HIO to implement these systems in 20 pilot hospitals and establish case management offices at all levels of the HIO, including HIO headquarters in Cairo, five of its regional branches, and 14 of its hospitals (approximately 37 percent of HIO hospitals). By 2012, many HIO facilities had made positive

strides with regard to the program's five indicators of quality of care and cost, namely reductions in: (1) cost of service; (2) postponed surgical cases; (3) use of IV antibiotic in major surgeries; (4) readmission rates; and (5) length of stay. For example, in one hospital, the length of stay of patients who underwent joint replacement surgery decreased by 50 percent because of improved case management. Several hospitals decreased unnecessary delays in treatment, reduced readmissions, and reduced the use of antibiotics. In 2010, the Gharbia governorate measured a 36 percent decline in spending on medication and a 24 percent reduction in payments to hospitals subcontracted by HIO compared with the previous year.

Health Systems 20/20 also built the capacity of HIO accountants and mid- and senior-level managers in financial management, focusing on four areas – basic financial management, costing, cost control, and forecasting and budget planning. Forty accountants and 40 mid-level managers from all 21 HIO branches received classroom and on-the-job training.

Achievements

- As many as 85 HIO health professionals were trained in medical audit and case and utilization management; 15 participants were certified as trainers.
- By 2012, HIO experienced efficiency gains and savings at pilot hospitals. These included decreases in unnecessary delays in treatment, reduced readmissions, and reduced use of antibiotics.

1.3.3 SUB-SAHARAN AFRICA: DESIGNING A BLUEPRINT FOR SUCCESSFUL HEALTH INSURANCE

Improving morbidity and mortality indicators in Africa is severely hampered by a lack of financial access to medical care. As noted earlier, countries are increasingly looking to risk-sharing mechanisms, such as insurance, to reduce patients' out-of-pocket payments when they need to seek health care. However, careful attention to numerous design and implementation challenges is critical for a country to successfully introduce or scale up insurance coverage.

Intervention and Results

Health Systems 20/20, with the collaboration of eight international partners (USAID's Africa Bureau, World Bank, WHO/Geneva, WHO/Africa, International Labor Organization, Results for Development Institute, African Development Bank, and the MLI) held two regional "how-to" workshops in 2010 on expanding financial protection in low-income countries. The first workshop took place in Accra, Ghana, in 2009 with 75 participants from Ethiopia, Kenya, Liberia, Nigeria, Sierra Leone, Tanzania, Uganda, and Zambia. In May 2010, the Francophone workshop in Kigali, Rwanda, gathered 79 participants from Benin, Burkina Faso, Cameroon, Cape Verde Guinea Bissau, Mali, Mauritania, and Senegal. Each team included members of the government, public, and nonprofit sectors.

Health Systems 20/20 designed and delivered the innovative five-day workshop format, which took country representatives through the many considerations and tasks that must be part of the design of a sustainable health insurance program. The project then worked with the country teams to develop realistic blueprints with concrete action plans for moving their health systems toward universal coverage. For the workshops, Health Systems 20/20 developed the step-by-step *Health Insurance Handbook: How to Make it Work*. The handbook provides practical, action-oriented support that deepens users' understanding of health insurance concepts, helps them identify design and implementation challenges, and defines realistic steps for the development and scale-up of equitable, efficient, and sustainable health insurance schemes. Based on the endorsement of workshop participants, the World Bank reissued the handbook in 2012.

Achievements

- Following the workshops, several countries leveraged their learning to achieve significant advances in implementing their health insurance blueprints. Below are three examples:
    - In Mali, advocacy efforts in 2011 contributed to the adoption of the CBHI policy and the decision to implement a pilot in three regions.
    - In Senegal, the government and its partners decided to implement pilot activities in 45 counties in the next three years, and the Ministry of Health (MOH) drafted a law on the creation of a Solidarity Fund to subsidize the premiums; it will be submitted to the Parliament in the coming months.
    - In Benin, the president and cabinet approved an action plan and a budget to move toward nationwide health insurance coverage, the government created an agency dedicated to health insurance and appointed a high-level MOH staff person as director, several workshops were organized with various stakeholders, and the main features of the health insurance policy were designed.
- The collaborative work between Health Systems 20/20 and the World Bank's "Health Systems for Outcomes" program led to greater project coordination with Harmonization in Health for Africa and the Health Financing Community of Practice. Joint follow-up activities included a regional health insurance workshop in West Africa and the aforementioned technical assistance and political advocacy for CBHI expansion in Mali.

1.4 STRATEGY ACHIEVEMENTS

As these examples show, Health Systems 20/20 contributed to the field of financial risk protection, and specifically health insurance, through making sure that country policymakers and donor organizations better understand the pros, cons, and challenges of designing risk protection mechanisms. It also helped individual countries establish or strengthen their programs. For example, the strategy resulted in policymakers increasing budget allocations for risk protection mechanisms, such as Mali's CBHI scheme. Evidence generated and synthesized through the project's evaluation research and literature reviews contributed to informed policy making for health financing, especially in the area of insurance provision. See Annex G for progress made toward meeting the project's monitoring and evaluation (M&E) indicators through specific activities.

1.5 LESSONS LEARNED

Several key lessons emerged from Health Systems 20/20's global work on financial risk protection, highlighting the importance of political and governance links, country ownership, and beneficiary issues that will continue to benefit from more focused research.

Policy and governance

- Countries need substantial, continuous support on the political and governance sides of the insurance development process, not just on the "technical" or design issues.
- Common obstacles to scaling up health insurance in the Africa region include lack of political will and weak organizational capacity. To address these challenges, knowledge sharing and training on health insurance should include senior-level individuals who are champions of and experienced in efforts to improve financial accessibility to care. The presence of high-level representatives from partner organizations also inspires further dialogue and effective action among country groups and the agencies active in those countries.

Country ownership

- Scaling up CBHI coverage requires leadership and government commitment at the national level.
- Health financing and insurance policy development depends on strong country ownership, and successful health insurance development requires sustained multi-sectoral commitment.
- International sources of technical assistance in the process are necessary, but will only be successful if the country plays a leadership role.
- The design and implementation of financial risk protection strategies should involve stakeholders from across the government as well as donors, nongovernmental organizations (NGOs), and the private sector in order to build the necessary consensus to ensure any insurance plan can become operational.

Beneficiary issues

- Financial risk protection interventions, such as health insurance and fee exemptions, should be carefully targeted to ensure that they result in increased equity and coverage for poor and vulnerable groups.
- The easiest groups to cover with insurance are those working in the formal sector, living in urban areas, and having higher income and education. The costs of reaching the poor can be significant. Countries often face challenging trade-offs as they expand coverage: should the country cover as many people as quickly as possible or cover those with greatest financial or health needs first?
- Similarly, those who benefit most from fee exemptions are not always the poorest of the poor.
- Additional research is needed to identify factors that facilitate vulnerable populations' uptake of insurance and other financial risk protection mechanisms to ensure that resources allocated to financial risk protection do not result in increasing inequitable service utilization.

Operational issues regarding fee exemptions

- User fee exemptions can stimulate the use of priority health services, if carefully designed, consistently implemented, and adequately funded. However, few fee exemption policies meet these three criteria.
- Well-crafted and comprehensive user fee exemption policies should ensure that: materials, drugs, and human resources are available and deployed to meet the anticipated increase in demand for services; proper reimbursement mechanisms are established; a clear communication plan related to exemption policies is developed; and an M&E system is established to track progress and evaluate impact.

1.6 CONSIDERATIONS FOR FUTURE WORK IN THIS AREA

Going forward, Health Systems 20/20's financial risk protection team suggests the following areas and suggestions be considered:

- Continue to invest in operational research on how best to reach the poorest of the poor with financial risk protection mechanisms. Further practical evidence is needed on how to most efficiently identify, target, and subsidize vulnerable groups.
- Assist countries (even low-income countries) to proactively plan for rising health care costs and cost control under insurance schemes. This is especially urgent given the growing prevalence of chronic and noncommunicable diseases, and the need for chronic management of HIV and AIDS. Poorly designed or implemented insurance schemes can quickly become nonsustainable; cost control mechanisms should be incorporated from the beginning.
- Continue to build capacity for the myriad operational challenges associated with insurance systems, such as claims processing, efficient premium collection, transparent and accountable financial management, patient utilization management, and quality assurance.
- Focus technical assistance on the governance aspects of insurance development, not just the "technical" or design issues. For example, build political comment, build institutional capacity, establish coordination mechanisms because insurance cuts across several national agencies, and develop country-level health insurance expertise to provide technical assistance.

2. RESOURCE TRACKING

"Now that we have disseminated the DRC's first NHA report, partners and stakeholders in the health sector health are beginning to see the value of the NHA results. They appreciated the level of detail on health spending related to specific health accounts, such as child health, reproductive health, and HIV/AIDS. Also, the government is actively involved in supporting, through the promotion of the institutionalization of national health accounts, regular production of the NHA."

Gérard Eloko, Director of the National Health Accounts (NHA) Program, Ministry of Health, Democratic Republic of Congo.

2.1 OVERVIEW

Governments and their development partners in low- and middle-income countries increasingly use health expenditure data to develop health budgets and make strategic planning decisions, to monitor the performance of health policies and programs, to exercise stewardship of the health sector, and to maximize the value they get from finite resources. Civil society organizations also demand financial data so they can better advocate for the health care needs of citizens and more closely monitor government spending. Health resource tracking – the process of measuring health spending and tracking the flow of financial resources among health sector actors – is a necessary component to health systems strengthening.

Health resource tracking comprises a range of methodologies and tools. NHA is an internationally recognized and widely used resource tracking framework, which measures the total public, private, and donor health spending in a country over a defined period of time. Other methodologies, such as the National AIDS Spending Assessment (NASA) and the NHA subaccounts on HIV/AIDS, malaria, tuberculosis (TB), reproductive health, and child health, provide more detailed spending assessments for specific diseases or health intervention areas. Public expenditure reviews focus on government budgets and expenditures, while public expenditure tracking surveys track the flow of public funds from central ministries of finance through the levels of government to the ultimate facility-level user. The Public Expenditure Management Review (PEMR) examines public health expenditure management by studying how resources are used and the process by which the resources are allocated. (See Annex F for a list by country of tools Health Systems 20/20 used.)

Although the value of health resource tracking information is now widely recognized, obstacles to its regular production and use remain. Some countries lack the capacity to carry out tracking exercises and estimations; others produce information that is never used in high-level decision making. Many countries cannot afford the staff time and other costs of carrying out numerous and overlapping methodologies. In other situations, tracking often is done only with donor funding and technical assistance, and on the

donor's schedule, which can yield results that are uncoordinated, mistimed, and of little use from a country perspective, and therefore unlikely to become a sustained country activity.

2.2 THE RESOURCE TRACKING STRATEGY

Demand for assistance with resource tracking was high throughout the life of the project. Resource tracking developed as a stand-alone strategy in response to meeting the needs of IR1 – improved financing for PHN priority services. Health Systems 20/20's focus was to help countries "institutionalize" resource tracking (i.e., routinely produce and use health expenditure data) by promoting routine and country-led production of health resource tracking data and ensuring frequent, widespread, and meaningful use of the data, whether for policy making and planning, program implementation and performance management, or increasing accountability among health sector stakeholders. Table 3 summarizes the project's activities in 17 countries.

TABLE 3. SELECTED RESOURCE TRACKING ACTIVITIES

Objective	Activities
Implement resource tracking studies	Conducted NHA estimations and institutionalization in 18 countries in Africa and Asia Conducted PEMR in Nigeria (three state-level studies)
Institutionalize production and use of resource tracking	Participated in the World Bank's NHA global institutionalization initiative Organized NHA communications/advocacy workshops in Botswana, Kenya, and Namibia Conducted trainings in 21 countries of in-country technical staff, either in conjunction with NHA estimation or through separate institutionalization activities Incorporated health financing curricula, including NHA, into graduate program at University of Nairobi (Kenya)
Create efficiencies in study methodology to encourage implementation and institutionalization	Developed Health Resource Tracker and used in Rwanda to harmonize reporting by donors, NGOs, and government units Developed NHA Production Tool and trained in-country staff in Botswana, Ethiopia, Liberia, Malawi, and St. Kitts & Nevis Created NHA-NASA Crosswalk in collaboration with UNAIDS and applied in Namibia, Rwanda, and Vietnam Collaborated with MEASURE Demographic Health Surveys (DHS) project to incorporate health expenditure questions into the Rwanda DHS 2010; they will be available for inclusion in all future DHS Collaborated with United Nations Children's Fund (UNICEF) in DRC to incorporate health expenditure questions into Multiple Indicator Cluster Survey (MICS)

Objective	Activities
Build organizational capacity in resource tracking	Conducted training and capacity-building of technical staff at ministries of health and of other key stakeholders in all 18 countries where NHA was conducted Developed an Expenditure Management Information System (EMIS) in Afghanistan Developed regional institutions as technical resource for NHA expertise at Center for Higher Management Studies (CESAG) (Senegal) and Commonwealth Regional health Community for East, Central and Southern Africa (ECSA) (Tanzania)
Expand knowledge/use of resource tracking	Collaborated with WHO to develop and expand: • NHA Global Health Expenditure Database to facilitate cross-country and time series analysis of country NHA data • Training materials for new System of Health Accounts 2011 methodology issued by OECD and WHO, and contributed to four regional trainings

To achieve institutionalization, Health Systems 20/20 used an approach unique in several ways. First, eschewing the short-term expediency of having external consultants do all the work, the project instead incorporated country capacity building into its technical assistance on both the production and use of resource tracking data. It also developed analytical and training capacity in the methods at local and regional institutions, and designed guidelines and analysis tools that simplified technical aspects of resource tracking.

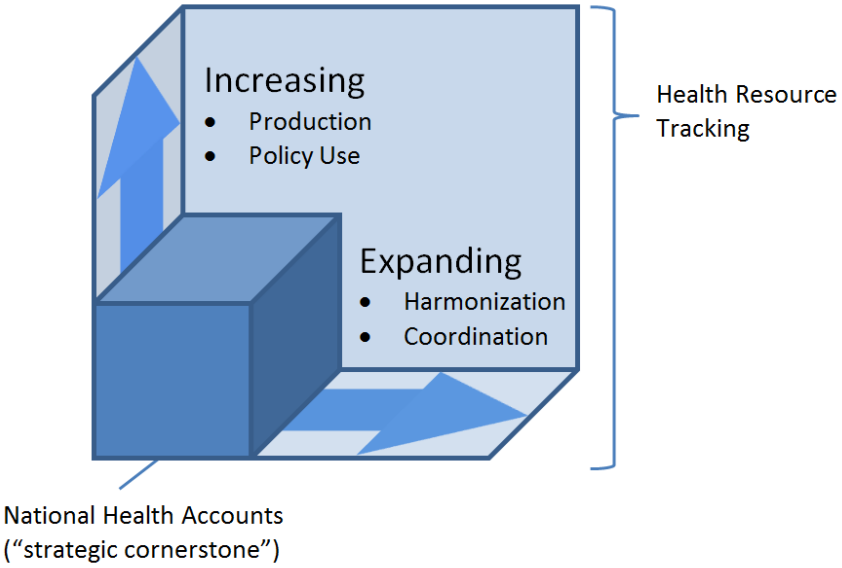
Second, Health Systems 20/20 increased country ownership through extensive stakeholder engagement. The project used steering committees or other governance bodies of country stakeholders to coordinate and guide resource tracking activities. Opportunities were created for stakeholders to identify issues of interest and ensure that activity findings would reach policymakers and health sector planners in a usable way, making the impact and sustainability of the activity more likely.

Third, Health Systems 20/20 shifted the focus from individual resource tracking tools, such as NHA or NASA, to harmonized resource tracking. Although each methodology yields important information, linking them expedites data collection, increases the utility of the information, and reduces the cumulative costs. See Figure 3.

The project's NHA activities reflect this three-part strategy. Applying the strategy to NHA was especially important because of the synergies between NHA and other resource tracking methodologies and NHA's widespread use. According to World Bank estimates, more than 130 countries have conducted at least one NHA and more than 40 countries produce NHA on a regular basis, but few have truly institutionalized NHA and conducted it independent of donors.

In terms of the first part of the strategy, capacity building, Health Systems 20/20 closely involved country stakeholders and select technical experts in NHA estimations. It also trained and mentored two sub-Saharan African training institutions (ECSA in Tanzania and CESAG in Senegal) to become regional bases for NHA expertise and technical assistance. In Kenya, Health Systems 20/20 worked with stakeholders to incorporate an NHA course into the university public health curriculum, an example which has since become a model for other African university graduate programs looking to do the same thing (e.g., Rwanda).

FIGURE 3. NHA: CORNERSTONE OF HEALTH SYSTEMS 20/20 STRATEGY FOR INSTITUTIONALIZING HEALTH RESOURCE TRACKING



To enhance the uptake of NHA data, the project helped countries develop a communication strategy, which included the production of policy-focused briefs that distilled results into actionable findings for non-NHA experts. In Namibia, Kenya, and Botswana, for example, after assisting ministry-led teams to complete their NHA estimation, the project did hands-on training in using the data to analyze policy issues of interest and communicate the findings to diverse audiences.

To make it easier for countries to produce NHA and increase stakeholder demand for NHA results, Health Systems 20/20 also developed tools such as the NHA Production Tool, the Resource Tracker, and the NHA-NASA Crosswalk to simplify and harmonize planning and data collection and analysis for NHA, NASA, and other resource tracking activities. This saved staff time and financial resources and reduced the need for technical assistance. For example, the NHA Production Tool is expected to reduce by one-third (30 percent) or more the cost of doing an NHA estimation, thanks to a faster, easier process and reduced need for external assistance. The Resource Tracker has already obviated the need for independent data collection efforts for development partners, NGOs, and government entities and their associated costs.

Finally, the project supported USAID's role as a global thought leader and knowledge manager in the area of resource tracking. It drew insights from its extensive field experience to shape discussions about resource tracking in the global arena. It documented innovations and best practices from several countries, and served as a conduit for learning. For example, it created the interactive NHA Policy Impact database, which allows countries to upload their own NHA policy impact stories. The database contains some 50 stories from over 25 countries. With WHO, it created the NHA Global Health Expenditure Database, the first central, web-based repository of NHA country-level data that will allow for making cross-country comparisons, developing or evaluating health policy, and looking at historical trends within a country. The database facilitates learning among countries undertaking resource tracking activities.

2.3 ILLUSTRATIVE ACTIVITIES

2.3.1 INCORPORATING HEALTH EXPENDITURE QUESTIONS INTO MAJOR HOUSEHOLD SURVEYS WORLDWIDE

Estimates of out-of-pocket expenditures by households are critical for guiding and monitoring a variety of health policy issues, including equity, financial risk protection, and effective program targeting. Unfortunately, generating accurate estimates often relies on nationally representative household surveys, which are expensive and time-consuming to conduct. Many of the major household surveys done in developing countries, such as the Living Standards Measurement Study, MICS, and others, do not include sufficiently detailed expenditure questions for an NHA estimation, which forces country NHA teams to conduct an independent household survey. The cost implication of the independent surveys has been a major impediment to institutionalization of NHA.

Interventions and Results

Health Systems 20/20 worked with several implementers of major household surveys, including the MEASURE DHS project and UNICEF's MICS team, to incorporate a health expenditure module into their questionnaires, eliminating the need for a separate survey.

In the DRC, the inclusion of a health expenditure module in the 2010 MICS produced a cost savings of over US$1 million for USAID, and a richer data set that integrated population information on health outcomes, service utilization, and household health spending. At both the country (e.g., Rwanda) and global levels, Health Systems 20/20 and MEASURE DHS collaborated to develop an official health expenditure module for the DHS questionnaire that countries can opt to include. This module will not only facilitate the inclusion of questions on out-of-pocket health expenditures in the DHS going forward, but will also serve as an example for the development of expenditure modules in other major surveys.

Achievements

- Realized savings in time and costs for NHA and other studies that call for household health expenditure data.
- Exemplified how USAID leverages its global leadership in health systems strengthening – in this case, in the area of health financing and resource tracking in particular – as a way of improving the efficiency and impact of other USAID-funded projects while paving the way for similar efforts by other development partners and country governments.

2.3.2 RWANDA: DEVELOPING THE "HEALTH RESOURCE TRACKER" TO EXPEDITE RESOURCE TRACKING

Rwanda has been a pioneer in resource tracking, having implemented multiple rounds of NHA, NASA, and other international methodologies. As a result of this and of meeting myriad domestic financial information reporting requirements, however, Rwanda experienced data duplication, reporting fatigue, high data collection costs, and heavy reliance on external support. Health Systems 20/20 identified the need to streamline resource tracking and overcome other barriers to NHA institutionalization.

Intervention and Results

Rwanda undertook a comprehensive institutionalization strategy that included building a harmonized data collection system for resource tracking data and enhancing human capacity for analyzing data and producing usable results.

The Health Resource Tracker is a web-based (www.hrtapp.com), integrated health resource tracking system that collects descriptive and financial data on health activities from all government agencies, NGOs, and development partners. A common format allows funders and implementers to enter information on what they plan to spend on each activity in the coming fiscal year and what they spent in the preceding year. Health Systems 20/20 used open-source software and involved units of the MOH throughout the design and two rounds of data collection and analysis, so that they could continue to use the tool beyond the life of the project.

In addition to streamlining data collection, the Health Resource Tracker made financial data available to a wider range of stakeholders. It strengthened health governance and financial management because the data were used to improve accountability and do joint planning. It also made resource tracking more sustainable; the ministry's Health Financing Unit uses it to manage tasks such as collecting data, training data reporters, and analyzing output files.

In just its first year, the Health Resource Tracker obviated the need for three costly surveys that are regularly used to collect data for the NHA.

Achievements

- Realized savings in human and financial resources for health.
- Improved and harmonized financial tracking systems.
- Increased institutionalization of resource tracking leading to enhanced planning and accountability.
- Strengthened capacity for resource tracking in the Health Financing Unit.

2.3.3 AFGHANISTAN: POLICY IMPACT OF THE COUNTRY'S FIRST NHA

Afghanistan has myriad health challenges and a fragile health system. The financial burden of health care on households – in a country where more than one-third of the population lives below the poverty line – was thought to be significant, but had not been estimated. Financial indicators were needed for informing, implementing, and monitoring health policies, such as the National Strategy on Health Care Financing and Sustainability 2008-2013.

Interventions and Results

Health Systems 20/20's work in Afghanistan focused on resource tracking and other health financing activities. It provided technical support for the country's first NHA estimation and institutionalization, built capacity of the Health Economics and Financing Directorate in the Ministry of Public Health to plan, manage, and deliver health resources, and also improved NGO planning, management, and reporting.

Project support for the NHA estimation began with stakeholder workshops and organization of a steering committee and NHA technical team within the health ministry and continued through implementation of the study and release of validated findings. Policy communication workshops taught the team to use NHA data to analyze policy questions and effectively communicate findings to policymakers.

The NHA documented unsustainable health spending patterns, such as the government's low contribution to health (6 percent of total health expenditure) and suspected high household out-of-pocket expenditures (76 percent of total health expenditure). This helped the Ministry of Public Health to advocate for increased government spending on health and for exploring financial risk protection mechanisms – prepayment, community-based insurance, social insurance – to increase access to care and decrease household expenditures.

Although this was the country's first NHA, progress toward institutionalization did occur. Dissemination events generated awareness and demand for NHA results. For example, the initial event drew an audience of 100, including the Minister of Public Health, USAID deputy mission director, and representatives from the WHO, World Bank, and other donors, facility directors, and the national and international media. A Memorandum of Understanding between the Central Statistics Organization and the Health Economics and Financing Directorate mandated that household expenditure questions would henceforth be included in the biennial National Risk and Vulnerability Assessment, making for more robust inputs in future NHA estimations, at minimal cost. Also central to institutionalization was the development of an EMIS. The software-based reporting platform harmonizes health expenditure data from donors and NGOs, expediting reporting, and resulting in more accurate and timely data inputs for NHA. Institutionalization also included the development of an NHA module for the Master in Public Health (MPH) curriculum at Kabul University.

More broadly, capacity building for the Health Economics and Financing Directorate comprised classes and workshops in technical topics such as biostatistics, mathematics, and economics, and in strengthening the administration of the directorate. The project also worked with the Ministry of Public Health and NGOs to streamline donor reporting for NGOs, the main providers of basic health care in Afghanistan.

Achievements

- *Strengthened governance and financial management.* NHA findings improved health planning and policy development and monitoring because conducting routine NHA tracks progress toward government scale-up efforts, decentralization, investments in specific health areas, and efforts to achieve the Abuja target of investing 15 percent of the government budget in health.
- *Informed advocacy.* NHA confirmation of low government spending and high household out-of-pocket spending on health enabled advocacy for greater government health expenditure and for a health insurance program.
- *Strengthened technical capacity.* The Health Systems 20/20-trained NHA team was frequently asked to present on technical issues to ministry counterparts, NGOs, and donors, and assist in complementary activities such as costing and financial risk protection.
- *Increased efficiency and transparency.* The EMIS reduced NGO reporting time from one to two months to as little as one to two days.

2.4 STRATEGY ACHIEVEMENTS

Health Systems 20/20's resource tracking work helped to strengthen health systems in more than 20 countries. Benefits included the ability to make informed health financing policy. Resource tracking data allowed health officials to identify resource gaps and trends, plan better, allocate resources based on need, and measure performance. For example, NHA results have been widely used for policy making, such as increasing government financing for health, developing health prepayment and insurance schemes that expand risk protection and access to care, and improving coordination of country and donor resources. Civil society groups have used NHA information to advocate for health care needs and monitor the government's actions.

By involving country counterparts in resource tracking activities, strengthening health financing training institutions, and improving health financing curricula, the resource tracking strategy built country health financing capacity in topics ranging from data collection and analysis to communication of the findings to appropriate stakeholders in actionable formats. It also contributed to country ownership – and thus the institutionalization and sustainability – of resource tracking methodologies. The more these tools are used to produce robust data, the more apt decision makers and civil society will be to use the data. This transparency and accountability further enforce good health policy and governance. See Annex G for progress made toward meeting the project's M&E indicators through specific activities.

2.5 LESSONS LEARNED

- Institutionalizing the *use* of resource tracking data is different from and harder to achieve than institutionalizing the *production* of the data. For maximal effect, data should be collected, analyzed, and presented in conjunction with other policy-relevant information, such as health outcomes and service utilization. This rarely happens in developing countries. Resource tracking exercises also should be integrated into schedules for planning, budgeting, and performance management so that up-to-date information is available when policymakers and planners need it. Dissemination of findings must go beyond routine government reports. To increase the use of resource tracking data, a country should have a communications strategy that tailors dissemination to specific stakeholder groups (e.g., government technocrats and policymakers, professional and civil society groups, development partners).

- A strong governance body, such as a resource tracking steering committee, is necessary to guide resource tracking institutionalization. This entity should include data users to enable resource tracking activities to anticipate the policy issues that are most relevant to users. Showing users how they can benefit from resource tracking will encourage them to support institutionalization.
- Harmonizing resource tracking activities and tools saves time and resources but requires commitment from both country governments and donors. Harmonization is a multi-year endeavor requiring strong, high-level leadership from the host-country government and resource tracking

steering committee. Key actors must be convinced that building data collection systems and integrating health expenditure questions into routine household surveys reduces the long-term costs of resource tracking.

- Building the capacity of local and regional institutions to help ministries of health do resource tracking estimations and apply the data to policy making can also produce savings. Transferring technical expertise and effective program management to country or regional organizations like schools of public health and research institutes minimizes reliance on external technical assistance and increase country ownership.

2.6 CONSIDERATIONS FOR FUTURE WORK IN THIS AREA

Health Systems 20/20 recognizes that expanding and sustaining access to priority health services requires countries to proactively manage the expenditure of limited health resources. Efficient, robust resource tracking is essential to good management. Strengthening resource tracking calls for efforts at the national and global levels to put in place systems to ensure health expenditure data are accurate, complete, and readily available. Countries need to integrate data collection into existing information systems while regional and global institutions need to strengthen south-south sharing of data and technical expertise.

Countries must also follow up to verify the regularity and quality of the outputs from internationally standardized methodologies, such as NHA, as well as from country-specific tools and data platforms like the Health Resource Tracker. In addition, there should be a consolidation of the gains in methodological development and harmonization and expanded use of the new tools as ways to increase country ownership. Finally, institutionalization efforts should continue and be replicated. Promoting the benefits of NHA and other resource tracking methods in the policy-making process can encourage its further institutionalization and integrate it into multiple components of health systems strengthening.

3. PERFORMANCE-BASED INCENTIVES

"We are given money to do a job, but at the end, what is the impact of that allocation on the population? When we manage for results, there is an intellectual exercise of saying: these are the objectives I want to reach and this is what I need to do to reach them. Having to think this through forces you to think about the population you are supposed to be serving."

– Mr. Dame Camara, Director,
Budget Office of the Ministry of Health, Senegal

3.1 OVERVIEW

Billions of dollars have been poured into health programs in low- and middle-income countries over the last decade, and these financial commitments have done much good. But many serious health woes persist, particularly in areas requiring a functioning health system. The problems of under-utilization of key interventions, low quality of services, and inefficient delivery persist in large measure because the incentives faced by providers and patients are misaligned with better health outcomes.

Performance-based incentives (PBI) is a health financing strategy that aims to tackle these disincentives, motivate the health workforce, focus attention on (and provide demonstrable evidence of) results, strengthen information systems, build local capacity to manage and deliver health services, and, of course, improve health outcomes.

PBI is the transfer of money or goods conditional on taking a measurable action or achieving a predetermined performance target. Traditionally, governments and their donor partners have funded construction, training, equipment, salaries, and other inputs; health results were assumed to follow. But turning financial commitments into improved health involves the actions of innumerable, widely dispersed individuals. Health workers must be motivated and held accountable for delivering quality care, patients and their families must demand services, and managers and regulators must be willing and enabled to make systemic reforms that strengthen the health system.

Performance incentives offered to patients, providers, and managers are designed to encourage behaviors that both increase demand for and use of services, and to improve the quality and availability of those services. They may be paid to households or patients for adhering to a certain regimen or to service providers on the basis of the quantity and quality of their services. Providers paid partially on the basis of performance can decide how to spend the money – empowering them to think creatively about how to reward staff, improve facilities, and reach their community through enhanced outreach efforts.

The benefits of performance incentives can extend beyond their specific interventions to strengthen entire health systems. Because performance incentives require accurate M&E, even programs aimed at specific diseases can help improve overall performance by encouraging health professionals to develop robust information and management systems. Much more than a system of financing, rewarding results can catalyze actions and innovations that increase accountability, enhance service-delivery capacity, strengthen health information systems, and improve the effectiveness of the health workforce.

3.2 THE PBI STRATEGY

For more than a decade, USAID has been a global leader in PBI, supporting the design, implementation, and evaluation of PBI programs, as well as research, to determine what works – and what doesn't. Through Health Systems 20/20, USAID supported the design of new PBI programs in countries such as Senegal and Mozambique, invested in learning more about the potentials of PBI, including the impact of PBI on maternal and child health (MCH), and examined various mechanisms for strengthening accountability in health systems.

These activities have significantly increased the PBI evidence base. On the supply side, Health Systems 20/20 studies strongly suggested that providing incentives to service providers for verified results can lead to increases in the use and quality of immunization, prenatal care, facility delivery, and family planning services; they also can motivate the health workforce and enhance efficiency. On the demand side, the evidence demonstrated that subsidizing transportation costs and providing payments to overcome other household-level obstacles to accessing care is a promising approach to increase health service use. PBI can also serve to strengthen health information systems, build local capacity to manage and deliver health services, and improve health outcomes. Table 4 shows the range of activities the Health Systems 20/20 PBI team has carried out.

The PBI component of Health Systems 20/20 transitioned from being a subset of health financing to becoming one of the eight strategies as the project's role in supporting PBI evolved from one of thought leadership and emphasis on documentation, to building stakeholder support for PBI through regional workshops, and eventually to providing technical assistance to countries on the design and implementation of PBI programs. This expanded portfolio of activities reflected the increased urgency, globally, to achieve the health-related Millennium Development Goals and deliver measurable results. PBI is being used to improve the supply of services – both the quantity and quality – and to enable individuals to access those services.

TABLE 4. SELECTED PBI ACTIVITIES

Objective	Activities
Provide leadership in international working groups	• Guided the global dialogue around PBI through workshops, such as the first Africa and Asia Regional workshops on PBI. • Participated in a GAVI Alliance working group that resulted in a new performance-based aid mechanism. • Provided technical guidance to the Interagency Working Group on Results-Based Financing.
Expand access to global tools	• Developed the *PBI Blueprint Guide*, which leads countries through the PBI design process. • Compiled useful and adaptable PBI-related tools and other forms, sample contracts, verification manuals, and training materials from 13 countries in Asia, Africa, Central America, and South America. The materials can be used directly or adapted by other health systems interested in using PBI. • Developed the *Rough Guide to Community Engagement in Performance-based Incentive Programs,* and led development of *the Options Guide: Performance-based Incentives to Strengthen Public Health Supply Chains* with contributions from USAID's supply system strengthening projects.
Build knowledge base	• Conducted research on PBI programs, identifying trends, building evidence, providing practical tools for PBI program managers, and developing PBI investment guidance for donors and policymakers. • Developed a multi-country case study series that reviewed PBI programs to improve MCH in 14 countries, examined how engaging local communities in PBI can enhance social accountability, and examined how quality and family planning are supported through PBI by conducting field assessments of diverse PBI programs that reward family planning in Kenya, Liberia, and Mexico.
Enhance government capacity to design, implement, and evaluate PBI	Built government capacity to design, implement, and evaluate PBI programs through the following activities: • Conducted the first regional workshops with stakeholder teams in Africa and Asia to design PBI initiatives. • Collaborated with Senegal's MOH and its development partners to design the country's first PBI pilot, with incentives for health facilities and district managers. • Supported the Health Economics and Financing Directorate of Afghanistan's MOH to evaluate a GAVI-funded conditional cash transfer pilot for community health workers and women that encouraged child immunizations and facility-based deliveries. • Analyzed for the DRC's MOH the country's many disparate PBF programs, enabling the MOH to: (1) meet a key condition for a Global Fund grant; (2) establish a PBF unit in the MOH; and 3) develop and roll out a PBF policy. • Performed a situational analysis in Mozambique that assessed strengths and constraints to implementing PBI, and supported the design of a PBI pilot to improve delivery of MCH services, and a performance-based "government-to-government" grant between USAID and the country's public supply chain system. • Completed a situational analysis in Malawi to assess constraints and enabling conditions for implementing PBI.

3.3 ILLUSTRATIVE ACTIVITIES

Health Systems 20/20's role in the PBI field ranged from being a knowledge leader for the global health community to providing technical assistance and building capacity in more than 20 developing countries. Four of these activities are discussed in detail below.

3.3.1 FACILITATING PBI DESIGN: THE CASE OF SENEGAL

Despite significant investments in the health sector, many Senegalese women and children still die from preventable complications or illnesses. For example, the 2008 DHS estimated the maternal mortality ratio at 410/100,000 live births. Further, there is a dearth of skilled health workers, particularly in rural areas, and the health information system is weak, which undermines the process of decision making aimed at correcting these deficiencies. Facing stark health outcomes and encouraged by promising evidence in neighboring countries, the Senegalese Ministry of Health and Prevention (MSP) decided to pilot PBI in three districts (Darou Mousty, Kaffrine, and Kolda).

Intervention and Results

From 2010 to 2012, Health Systems 20/20 worked closely with the MSP, facilitating PBI design workshops and leading the PBI technical working group through a process of determining indicators, targets, payment mechanisms, and other key design and implementation elements. The pilots aimed to improve the quantity and quality of health services, motivate health workers, build the capacity of district health teams, and strengthen public sector health institutions, specifically district health management teams, district hospitals, and health centers.

The idea of linking payment to results resonated deeply with members of Senegal's technical PBI working group, which is composed of representatives from the MSP specializing in health financing, information systems, and MCH. The pilot design was endorsed by stakeholders, including representatives from the Ministry of Finance, the donor community, trade unions, civil society, districts, and regions at a national workshop chaired by the Permanent Secretary of Health in February 2012. This buy-in was critical for ensuring the smooth implementation and sustainability of the scheme, which began implementation in the summer of 2012.

Achievements

- Ministry of Health and Prevention initiated the PBI implementation plan.
- A wide range of stakeholders endorsed the proposed pilot at a national workshop chaired by the Permanent Secretary of Health.
- A new bilateral project is underway to support the MOH roll-out of the PBI plan and to evaluate the pilot.

3.3.2 DEMOCRATIC REPUBLIC OF THE CONGO: SCALING UP PBI

The DRC had some of the earliest and most significant results-based financing (RBF) initiatives in sub-Saharan Africa, covering approximately one-third of the total population in 153 out of 515 health zones. These initiatives, however, were implemented by various donors in different parts of the country and were not harmonized. In 2010, in response to a request from the Secretary General of Health in the MOH of the DRC, a team from the Health Systems 20/20 project agreed to review the RBF schemes.

Intervention and Results

Health Systems 20/20 reviewed the various RBF schemes and captured the results in a technical report, *Review of Results-Based Financing Experiences in DRC*, which the MOH subsequently used for decision making to determine which activities within the health system could be most effectively strengthened through PBI. The project also provided technical support to assist the DRC with an implementation plan and collaboratively developed a training manual to improve the capacity of MOH staff at various levels to guide implementation.

The government of DRC, as the initiator of this activity, facilitated access to key players including other ministries, NGOs, and donors. Because Health Systems 20/20 was not an implementer, it was seen as having no conflict of interest.

Achievements

- Attained approval of the national policy on RBF.
- Completed the plan for the government-led, Global Fund-financed RBF scheme to be implemented in 256 health zones as well as at the provincial and central levels.

3.3.3 BUILDING CAPACITY TO DESIGN AND IMPLEMENT PBI: GUIDE TO DEVELOPING A PBI BLUEPRINT

The basic concept of PBI is easy to grasp, but a PBI scheme must be designed and implemented carefully to elicit the desired behavior change that results in strengthened health systems, and, ultimately, delivers improved health results. To help the MOH, NGO, and health program managers think through the process and plan, Health Systems 20/20 developed a PBI "blueprint guide."

Intervention and Results

Health Systems 20/20 developed *Paying for Performance in Health: A Guide to Developing the Blueprint*, which offers a systematic framework to document and structure the thought process, rationale, and ultimate decisions made when designing a PBI initiative. It walks stakeholders through key design elements, from performance indicators and targets, to payment mechanisms.

The guide was used in the first USAID-sponsored regional PBI workshop for Africa in 2007, which was held in Rwanda, where PBI was being implemented on a national scale. The first Asia regional workshop was held in the Philippines in 2009. Both of the workshop locations allowed host country officials to share their PBI experiences with the participants. Workshop participants learned about PBI approaches in diverse settings, how to work together as a team to identify impediments to effective performance, and how to design and implement an innovative PBI approach customized for their countries.

Achievements

- Teams from 22 countries participated in the PBI workshops, prepared PBI designs, briefed key policymakers, consulted with stakeholders to obtain design feedback and generate buy-in, and assess operational capacity and constraints.
- Fourteen country teams were qualified to apply for seed grants from donors.
- Several of the PBI designs were funded. For example, India received a World Bank Health Results Innovation Trust Fund Seed grant ($50,000) and four other Asian countries received PBI feasibility study seed grants (of $80,000) from AusAID, which enabled the countries to develop a full PBI implementation plan.

3.3.4 BUILDING AN EVIDENCE BASE, LEADING PBI ADVOCACY AROUND THE GLOBE

Health Systems 20/20 provided global leadership through its participation in the Interagency Working Group on Results-Based Financing, presentations at international events, such as the International Health Economics Association and the *Centre d'Etudes et de Recherches sur le Développement International*, participation in the GAVI Alliance task team to develop a new PBI approach for all of GAVI's cash-based support, and contributions to the PBF community of practice.

Intervention and Results

In 2011, Health Systems 20/20 contributed to knowledge sharing and awareness with USAID partners for the Support for International Family Planning Organizations project in Nairobi, to design and implement PBI programs that could expand family planning access. Health Systems 20/20 also supported Translating Research into Action, a five-year USAID grants project focused on maternal, newborn, and child health and other related services, and contributed to a USAID/DELIVER project women's health conference on incentives to motivate supply chain workers and strengthen supply chain performance. The project provided PBI training to USAID missions from the Latin America and Caribbean region through their state-of-the-art event.

Health Systems 20/20 produced a wealth of practical analysis about PBI. Among the PBI-related publications were country case studies that described and analyzed how 13 countries in Africa, Asia, Central America, and South America designed PBI programs; a case study series on PBI and community engagement in three countries (Burundi, Indonesia, and Mexico); a *Performance-Based Incentives Primer* for USAID missions; and *Performance-Based Incentives: Ensuring Voluntarism in Family Planning Initiatives*. To access the extensive collection of PBI materials, visit the Health Systems 20/20 project website.

Achievements

- The project provided leadership and technical support to the Interagency Working Group on PBI and contributed to increased support for PBI by European donors and AusAID.
- Country MCH case studies provided PBI tools (forms, sample contracts, verification manuals, training, and other materials) for other health systems to adapt and use in their own PBI programs.
- The PBI primer, which guided USAID missions considering support for PBI programs, proved popular among missions.
- The PBI family planning report guided USAID missions in the incorporation of voluntary family planning into USAID funding in ways that are consistent with the Tiahrt Amendment.

3.4 STRATEGY ACHIEVEMENTS

The achievements described above reflect the growing global interest in PBI and how Health Systems 20/20 expanded the knowledge base about PBI, especially in the areas of quality health services and social accountability. In addition to working with international bodies to develop strategies to support countries to implement PBI and increase the evidence base, the project transferred skills that enabled country stakeholders as well as USAID and other donors to use PBI to solve health systems constraints and achieve global health goals. More concretely, it helped country PBI teams to move from workshops to actual funding for PBI and other country entities to understand and use PBI to improve the health services they deliver. See Annex G for progress made toward meeting the project's M&E indicators through specific PBI activities.

3.5 LESSONS LEARNED

Design

- Context really matters. It is important for countries to consider political and social realities, the timeliness and quality of information systems, the ability to transfer money securely through banks, and constraints imposed by donors, governments, and NGOs.
- In designing strategies, it is important to determine whose behavior needs to change. How will incentives at higher levels change behaviors at the service delivery level?
- Goals should be set that can be measured and achieved. Programs with vague or overly ambitious goals will not respond well. Improvements in quality, as well as increases in utilization, must be stimulated.
- Higher performers may have more difficulty showing large gains, therefore, customizing targets relative to baseline performance levels is important.

Implementation

- Weak health management information systems that generate unreliable data slow PBI implementation in all settings.
- Clear performance contracts for all players are essential so they know, for example, what is expected, how payment will be linked to attainment of targets, and how to resolve disputes.
- Invest in monitoring and verifying performance. All PBI schemes require a process to verify that what was reported as achieved results actually occurred. Convincing stakeholders that a verification approach is needed may take multiple rounds of implementation.
- Countries must be prepared for the ethical concerns that PBI schemes might raise. For example, providing incentives may damage intrinsic motivation, providing incentives for family planning may result in involuntary family planning, and contracting community organizations to verify results may damage a patient's right to privacy.

3.6 CONSIDERATIONS FOR FUTURE WORK IN THIS AREA

Value for money will continue to be at the top of donor and government agendas, and, consequently, PBI will increasingly be recognized as a strategy to link investments in health systems to the achievement of desired health outcomes, such as the health-related Millennium Development Goals. PBI is also a potentially powerful catalyst to strengthen health systems.

Continued USAID PBI global leadership through participation in high-level activities, such as the Interagency Working Group on Results-Based Financing and the GAVI Alliance task team, is essential. Additional research is also needed to expand the evidence base, as is continued technical assistance to help countries design and implement PBI approaches that benefit from global learning and result in saving lives through stronger and more resilient health systems.

4. HEALTH GOVERNANCE

"We have conducted health system assessments in eight provinces, and made the instrument more relevant to the Vietnam context. This helped us to have strong evidence. With the HSA, we can provide evidence in a comprehensive way … and now there is some action. For example, the voice of civil society and the people was not enough. Based on this, we talked with the Ministry of Health about the role of civil society and of social protection organizations. Now, they invite civil society to policy dialogue meetings."

– Dr. Tran Thi Mai Oanh, Vice Director, Health Strategy and Policy Institute, Hanoi, Vietnam

4.1 OVERVIEW

Health governance refers to leadership and stewardship of the health sector. Although communities have long been involved in health governance on a local scale – running their own community-based schemes and so forth – health governance traditionally has been perceived as top-down, with government-decreed policies and regulations, strategies and action plans, and organizational frameworks. Governance now is recognized as needing to be multi-directional, comprising interactions among central and local governments, public and private providers, and civil society groups and individual consumers of care.

One aspect of governance is financial stewardship. As global initiatives have injected large amounts of resources into country health systems over the past decade – and the more recent global economic recession has underlined the need to use these resources as effectively as possible – financial transparency, traceability, and accountability have become increasingly important. Although financial stewardship is only one aspect of health governance, it is an important one that intersects closely with Health Systems 20/20's work under its resource tracking and costing strategies.

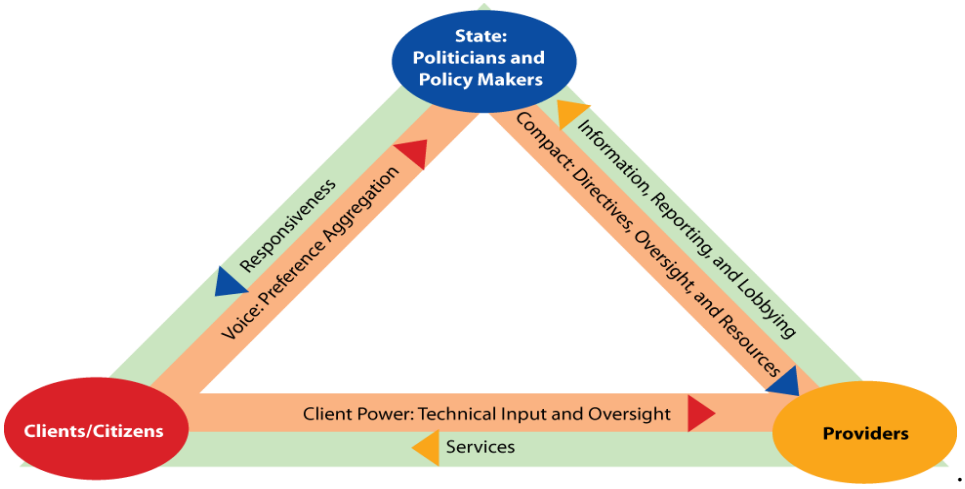
From a health systems perspective, Health Systems 20/20 views governance as both a discrete health system building block and a cross-cutting component that impacts all other health system functions. For example, a common health system problem is provider absenteeism in public facilities; the solution involves attention to regulation, supervision, information asymmetries, and financial and other incentives. These issues all relate to governance.

Best practices in health governance are characterized by: operational capacity and strong leadership of government to plan, manage, and regulate policy, financial resources, and service delivery and coordinate relationships with donors; an evidence-based policy process with the engagement of stakeholders; coordination with the private health sector; participation of civil society to ensure all citizens, particularly the poor and vulnerable, have input in decision making; and transparent systems that increase accountability and minimize corruption. Solutions need to address both the demand (clients/citizens) and supply sides (providers, government) of governance.

4.2 THE HEALTH GOVERNANCE STRATEGY

Health Systems 20/20 approached health governance through a framework that defines the rules, roles, responsibilities, and institutions that shape interactions among three main sets of health system actors: clients/citizens (health service users); government officials; and public and private health service providers (Figure 4). It also recognized that health governance is influenced strongly by the larger governance environment in a country – patterns of patronage among political and economic elites, civil service systems, decentralization, public-private partnerships, and global health initiatives.

FIGURE 4. HEALTH SYSTEMS 20/20 GOVERNANCE FRAMEWORK



The project used the approach to identify problems and design solutions that addressed both the demand and supply sides of governance. On the demand side, the project worked with clients/citizens, civil society organizations, and other oversight entities inside and outside of government to enhance each actor's capacity to exercise his or her voice and demand accountability in health policy making and service provision.

For example, in Kenya, Health Systems 20/20 partnered with the Health NGO Network (HENNET) to organize a workshop that disseminated key NHA findings to HENNET's member organizations and increased their awareness of and demand for information about how health is financed in the country. Members can use such information to advocate for more government funding for health, a different allocation of funding, and so forth. In the Philippines, Health Systems 20/20's pilot test of facility-based governance committees produced a stronger voice to drive health service quality and an increase in community uptake of services.

On the supply side of governance, Health Systems 20/20 assisted health ministries, service providers, and other public health actors with management systems, for example, to increase transparency and traceability of resource allocations and utilization. In Nigeria, Health Systems 20/20 conducted a public expenditure survey, which helped focus policymakers' attention on weaknesses in financial management, transparency, and accountability.

Compared to when the project began in 2006, there is much greater recognition of the importance governance plays in the success of health systems strengthening activities. Health Systems 20/20 contributed to this greater appreciation by addressing three specific health governance challenges:

- Increase the quality of policy and decision making to enhance stewardship and leadership;
- Strengthen accountability and transparency; and
- Increase citizen and civil society engagement.

In Years 1–3, Health Systems 20/20 focused on building knowledge and understanding of health governance concepts, approaches, and tools for health system actors and the international health community. It developed materials to clarify health governance concepts and programming options; provided workshops, presentations, and training sessions; and partook in governance demonstration activities. Focus in Years 4–6 shifted to application of tools and approaches to specific country program needs, such as those described in this chapter. Table 5 summarizes Health Systems 20/20 country activities that addressed the three heath governance challenges. Several activities responded to more than a single governance challenge.

TABLE 5. SELECTED GOVERNANCE ACTIVITIES

Objective	Activities
Use data to increase quality of policy and decision making	• NHA country estimations, disseminations, and institutionalization in 18 countries • HSAs done in 23 countries HIV/AIDS Program Sustainability Assessments in 14 countries • Health worker retention incentive studies in Cote d'Ivoire, Swaziland • Human resources information system strengthening in Cote d'Ivoire • Use of geographic information systems for health in Yemen and Nigeria • Use of health management information systems in Kenya, Rwanda, and Vietnam • Health governance assessment in Rwanda
Strengthen accountability and transparency	• NHA communications workshops in Botswana, Kenya, and Namibia • Quality Assurance Partnership Committee (QAPC) demonstration in the Philippines • Public expenditure management review for reform of financial management systems in Nigeria
Increase citizen and civil society engagement	• CBHI strengthening in Mali • QAPC demonstration in the Philippines • Global Fund reference guide in multiple countries • Civil society assessment in Nigeria

4.3 ILLUSTRATIVE ACTIVITIES

The following activities illustrate how Health Systems 20/20's health governance strategy has contributed to strengthening health systems around the world.

4.3.1 PHILIPPINES QUALITY ASSURANCE PARTNERSHIPS: INTERACTION INCREASES HEALTH SERVICES QUALITY AND USE

Public health services in the Philippines have been a local government responsibility since the passage of the local government code in 1991, which launched a significant decentralization process. The code designated local health boards to serve as the primary mechanism for community participation in health. The challenge was to move from a government mandate to a system in which community participation contributed directly to improved quality and continued quality assurance.

To engender government and provider communication with the community and clients, Health Systems 20/20, through a grant to the Gerry Roxas Foundation, a local NGO, supported a pilot effort to establish facility-based QAPCs. Health Systems 20/20 and foundation field coordinators sensitized providers and communities to the QAPC concept and facilitated the formation of three QAPCs in two provinces in Mindanao. The QAPCs brought together local government officials, health service providers, and community representatives to identify problems, and develop and implement action plans to improve delivery of MCH services in terms of expanding and improving access, availability, quality, and utilization.

Intervention and Results

Although the committee structures, problems identified, and resultant activities of the three QACPs varied in specifics, they were similar overall. The committees identified the following issues:

- Inadequate budget for supplies and medicines;
- Uninformed clients/customers;
- Lack of medical staff, especially emergency facilities for high-risk patients;
- Negative attitudes of some health service providers toward clients and work; and
- Need to improve facility cleanliness, ease of use, and access for the disabled.

QAPCs' efforts were classified into two governance-oriented topics – responsiveness and accountability – and into service delivery. QAPC efforts to increase responsiveness of providers and health authorities included first collecting client and community feedback through formal surveys, suggestion boxes in facilities, and community meetings, and then reporting on the feedback in monthly QAPC and other meetings. One QAPC facilitated interpersonal communication training for providers to improve their behavior with clients. Another translated forms into the local language and posted directional signs in facilities to expedite client access. Accountability results were more limited; some facility managers took community issues into account in investigating complaints about providers, but overall, progress was limited by lack of formal enforcement mechanisms.

Service utilization efforts yielded good results. The use of MCH services (breastfeeding, immunization, etc.) increased due to QAPC activities such as information, education, and communication sessions; the aforementioned facility improvements; and a concerted effort to increase facility referrals from traditional birth attendants. Overall, the QAPC experience produced a more equal power relationship among the three actors. In particular, capacity building gave community members new leadership skills and their participation in the committees increased their confidence in using these skills in interactions with facility managers and public officials.

It should be noted that contextual factors expedited the achievements. The country's health systems decentralization that began in the 1990s included facility-level quality assurance, so staff were already engaged in such programs. They were receptive to community representatives because they saw QAPCs as a natural extension of those programs. The QAPCs were also integrated into Department of Health quality assurance programs. The leadership training gave QAPC community members skills and confidence. QAPC successes raised the general credibility of the committees, and demonstrated their utility to local officials, who in turn increased their support for the committees.

In the QAPC demonstration project, the governance goal of increased accountability was met only to a limited extent. This result was due in part to a lack of enforcement mechanisms, namely formal monitoring against specific indicators and penalties for not meeting the indicators. Nevertheless, the QAPCs gave communities access to information and expertise, and provided the three governance actor

groups an opportunity for a cooperative rather than adversarial relationship. This cooperation may prove important to changing power relationships over the long term.

Achievements

- Increased provider responsiveness to clients' service delivery needs.
- Increased, though limited, accountability of providers and officials to clients.
- Increased use of services through facility outreach and patient education.
- Increased community capacity to communicate and advocate with government.
- Increased official support for community participation.

4.3.2 NIGERIA PUBLIC EXPENDITURE MANAGEMENT REVIEW: LINKS BETWEEN GOVERNANCE, PUBLIC SPENDING, AND HEALTH CARE DELIVERY

Effective resource allocation and use have long been major concerns in Nigeria, particularly in the health sector. Nigeria is recognized as having serious governance weaknesses, including limited transparency and accountability of public funds, which can open the system to unintended inefficiencies, as well as to political influence and corruption. A health systems assessment revealed significant weaknesses in health resource tracking across government levels. The data on resource flows, budgets, and expenditures were largely unavailable, and resources for quality service delivery were inadequate. The assessment highlighted the need for an in-depth review of public health expenditure systems.

Intervention and Results

To help the Nigerian government improve its public financial management system and ensure efficient and effective health resources use, Health Systems 20/20 conducted a PEMR of the health sector in three states (Rivers, Nasarawa, and Sokoto). The objective was to provide information on budget preparation, execution, and resource utilization at the state and local levels, and outline the process of health expenditure in each state.

Stakeholders included commissioners, permanent secretaries, and staff of the Federal MOH Department of Planning Research and Statistics, state ministries of health, finance, and local government, and various local government authorities (LGAs). The project held sensitization workshops in the selected PEMR states to explain the study and gain stakeholder cooperation in data collection. Stakeholder workshops, and meetings with individual state and local government authorities, also were held to validate preliminary findings. Health Systems 20/20 then produced a final report for each state.

The study had four major findings. First, accurate and consolidated financial data were not available. Health facilities do not keep, or were reluctant to share, expenditure records. Financial flows and transfers are complex – for example, salaries are paid by the LGA, commodities by higher levels of the system – making them difficult to reconcile and track. This prevents governments from ensuring that allocations are equitable and effective. Second, the lack of transparency and therefore accountability encourages political influence and dysfunction. Third, weak budgeting and budget execution prevents service delivery priorities from being met. Finally, there is little civil society participation in resource allocation and budgeting activities; other than a few facility-based exceptions, such as a hospital with a management board or committee, there are no meetings, hearings, or other platforms for citizen input, monitoring, or accountability.

Achievements

The study recommended the following:

- Build capacity of state and LGA officials in financial management.
- Improve management control and oversight.
- Increase transparency and accountability of public financing for health among all governance actors.
- Expand options for civil society input and participation.

4.3.3 LIBERIA: CREATING AN ENABLING ENVIRONMENT FOR POLICY IMPLEMENTATION

In Liberia, the project worked with the MOHSW and Office of General Counsel, in conjunction with the International Senior Lawyer Project and the American Bar Association, to build governance and regulatory systems by revising health and pharmaceutical laws, treaties, policies, and/or regulations. These reforms addressed: corruption; overlapping institutional mandates; licensing of health care professionals, hospitals, and medical schools; and policies affecting orphanages and the adoption process.

Intervention and Results

Adequate regulation, enforcement, and a legal framework are necessary for effective stewardship and policy implementation. Liberia is operating under the Public Health Law of 1975, which does not reflect the country's current health policies or institutional arrangements. Health Systems 20/20 partnered with the International Senior Lawyers Project (ILSP) to build the capacity of the office of the general counsel within the MOHSW. Health Systems 20/20 covered travel costs and ILSP provided practicing lawyers who worked closely with the general counsel. The MOHSW is more able to revise laws, treaties, and regulations to reflect the current landscape. The pro-bono lawyers have provided outlines toward amending the public health law, developed a legislative approval process and timeline for the proposed amendments, and developed overall goals for public health laws in Liberia based on laws and regulations that have been developed in other African countries.

What Is a Public Expenditure Management Review?

The PEMR methodology was developed by the World Bank. A PEMR for health examines the flow of funds across government levels down to the service providers and reviews the overall governance environment of public expenditure management to answer the following questions in specific categories:

- Budget planning and preparation: How is the budget prepared and who is involved? Does the budget follow strategic priorities? Does civil society participate in the process?
- Budget execution: What percentage of the budgeted funds is spent? To what extent does spending follow budget planning?
- Budget utilization: What resources are available for service delivery? How are funds utilized at the level of the various agencies and service delivery institutions?

In addition to strengthening Liberia's legal framework, Health Systems 20/20 built the capacity of individuals in the Division of Health Financing and Policy within the MOHSW so they can improve their stewardship of the health system. Based on a request from the division, training was provided on the statistical program SPSS so that members of the division can undertake basic quantitative analysis of survey data. As part of building the presentation skills and knowledge of health financing issues of the members of the division, Health Systems 20/20 facilitated bimonthly rounds of technical presentations in which team members took turns preparing and presenting on health financing issues. Based on the skills developed, two of the team members served as co-trainers for Liberia's second round NHA exercise.

To gather the evidence necessary to inform a national health financing policy, the MOHSW and Health Systems 20/20 conducted two rounds of NHA. In addition, the MOHSW did a case study on catastrophic health expenditures, a benefit incidence analysis on public health investments, and a modeling of the economic impact of high fertility, all of which served as a basis for the Liberians to develop a health financing policy. In 2010, the MOHSW and Liberia's Health Financing Task Force developed the first Health and Social Welfare Financing Policy and Plan by synthesizing the evidence, facilitating consultative workshops, and supporting consultations with the Ministry of Finance. Health Systems 20/20 worked closely with its counterparts to support this collaborative process. Recently, the policy was endorsed by the outgoing cabinet, and the MOHSW is moving forward with its implementation.

Achievements

- Liberia's first Health and Social Welfare Financing Policy was endorsed by the cabinet, and the MOHSW is moving forward with its implementation.

4.4 STRATEGY ACHIEVEMENTS

Health Systems 20/20 governance results and materials contributed to USAID's Global Health Office's global leadership agenda as well as to activities in the field. (See also Annex G for progress made toward meeting the project's M&E indicators through specific activities.)

USAID's Global Health Office's global leadership agenda:

- Helped to increase understanding on the part of USAID health staff, cooperating agencies, and other health professions of what health governance is and how health governance concepts and practices are relevant and applicable to health systems strengthening and how they contribute to better health outcomes.
- Helped to shape the Global Health Office's thinking about governance, in particular how governance contributes to country ownership and health system sustainability and how to integrate governance into health programs.

Field activities:

- Expanded citizen and civil society engagement through CBHI strengthening (Mali) and facility-based joint committees (Philippines).
- Strengthened accountability and transparency through the NHA global access database and related dissemination, and documentation of gaps in public expenditure and financial systems (Nigeria).
- Improved quality of policy and decision making through use of findings from numerous HIV/AIDS Program Sustainability Analysis Tool (HAPSAT), health systems assessments (HSA), and NHA activities.

4.5 LESSONS LEARNED

The following lessons are organized according to the three governance challenges that Health Systems 20/20 addressed.

Increase quality of policy and decision making

- To encourage decisions based on robust evidence, countries should access existing information and

produce evidence by carrying out assessments, such as HAPSATs, HSAs, and NHA. In addition, data analysts and decision makers should clearly understand the value and purpose of the data being collected.

- To give study findings maximum impact, make them accessible and actionable in terms of length, language, content, format, and timing for health system actors and venues. For example, PowerPoint presentation and brief formats may be best for legislators; long, detailed technical reports should be reserved for technocrats. In addition, release of findings must be timed to the legislative schedule or budget cycle; if not, they may never be used.
- To improve the chances of findings having policy uptake, identify one or more in-country actors to be policy champions who take ownership of study findings and advocate for adoption of recommendations. Champions can be mid-level civil servants, national policymakers, or local government leaders. Institutional mapping and stakeholder analysis can help in identifying champions.
- To help with advocacy, train and mentor champions so they can develop a communication strategy – "elevator speeches," policy briefs, and presentations with key messages that are clear and relevant – that will enable them to effectively engage with decision makers.

Strengthen accountability and transparency

- To improve accountability and transparency, information should be accurate and usable, and officials must understand that the information should be made available and shared.
- To encourage sharing and transparency, the legal and regulatory framework should encourage or mandate openness through public officials and other actors reporting on policies, budgets, expenditures, and results. For example, guidelines and regulations on public hearings and access to information can persuade officials to disseminate health data, policies, and plans.
- To encourage advocacy, the capacity of civil society organizations and citizens should be built so they can effectively interact with public officials. Capacity building can include supporting the creation and functioning of new associations (e.g., a network of CBHI organizations, as in Mali), or providing training and support to communities in service monitoring and advocacy (as in the Philippines' facility-based partnership committees).

Increase citizen and civil society engagement

- To help citizens and civil society groups overcome social distance, capacity and confidence gaps, and reticence to question authority, build their capacity to interact with actors such as officials, agencies, and service providers. The most common interactions between communities and health actors are with providers. Community members often are more comfortable engaging as partners rather than as accountability actors (as in the Philippines facility-based partnership committees). When service providers are open to community input, the groups can advocate for changes that increase provider responsiveness to community needs and preferences.
- To enable citizens and civil society groups to play a substantive advocacy and accountability function, encourage public sector actors to accept the legitimacy and effectiveness of the groups and create opportunities for the groups to express their views on health policies and services; for example, a hospital can reserve a position on its board for a community representative. Demonstrating the value of external input in terms of policy quality, service responsiveness, and utilization can enhance decision-maker and provider acceptance.
- Improved policy making requires access to and use of current and accurate data and information by a broad group of stakeholders.

4.6 CONSIDERATIONS FOR FUTURE WORK IN THIS AREA

The challenges for the role of governance in health systems strengthening include:

- the need for ongoing dialogue with health decision makers regarding the connection between effective health governance and ownership and sustainability of health reforms; and
- pursuing applied research to demonstrate how improved governance contributes to health outcomes.

The President's Emergency Plan for AIDS Relief (PEPFAR) II's reauthorization recognizes the governance implications of health systems reform for sustainability, and Heath Systems 20/20's analytic work and field support have contributed to extending this recognition. Health Systems 20/20 suggests the following:

- Recognize the important role governance has in creating incentives for sustained health system performance. Policy and regulatory frameworks that shape actors' behaviors can help to build ownership among in-country stakeholders for health system improvements. The frameworks also influence behaviors related to service delivery, legal compliance, ethical standards, and accountability and responsiveness.
- Understand that governance reform alone will rarely sustain improvements in health system performance. An integrated approach across several or all of the building blocks offers the best potential for effective health systems strengthening.
- Build an evidence base for the role of health governance in health systems strengthening by supporting applied research on how governance is, or can be, connected to health outcomes and impacts. This will show health policymakers and donors how investments in health governance can have substantive impacts on health indicators.
- Expand the use and quality of resource tracking and financial management processes, tools, and systems to build a foundation for transparency, accountability, and reduced corruption. Stewardship of financial resources lies at the heart of good health governance.
- Train and support civil society organizations and communities to be accountability actors, effectively engaging in monitoring and oversight of health policy, resource allocation and budgeting, and service delivery. This oversight need not be adversarial, but instead oriented toward collective problem solving for shared governance.
- Recognize the need to continue the evolution of global understanding of the concept of health governance and to further pilot and document country experiences with the implementation of governance interventions.

5. COSTING AND SUSTAINABILITY

"The HAPSAT taught us how to complete target and cost projections for clinically based interventions and prevention activities. It was a very good approach and we were able to adjust targets and indicators for the Global Fund grant and for the national strategic plan. The national AIDS secretariat is using targets for strategic planning and was able to come up with unit costs for the different interventions. We didn't have that in the past."

– Dr. Hangadoumbo Saidou,
National AIDS Secretariat, Sierra Leone

5.1 OVERVIEW

Over the past decade, major initiatives in global health – such as unprecedented financing for immunizations and HIV/AIDS, progress toward the health-related Millennium Development Goals, and the new focus on universal health care – have increased the demand and need for information on the true costs of health services in order to determine the levels of funding required for countries and programs. More recently, the global economic downturn has shifted program focus to efficiency and sustainability. Before, governments and donors used to ask "How much will this program cost?" Now, they are asking "How can we make these programs sustainable?"

Because governments and donors are under increasing pressure to demonstrate how more health services can be bought with the same amount of money, they need more than the standard cost projections. Instead, programs must show how they are performing in terms of cost per unit delivered and understand the implications of the variance in the cost per unit delivered. In other words, the focus is not only on determining the unit cost of individual services, but also on how services fit together as a whole program, whether the program design is the most efficient, and how these programs turn resources such as drugs, labor, and capital into health services. Answering these questions requires approaches addressing costing data needs that differ depending on the context and the question being asked while also being responsive to these factors.

5.2 THE COSTING AND SUSTAINABILITY STRATEGY

In Year 5, Costing and Sustainability became a stand-alone strategy. The new strategy came about as a result of both the increasing number of requests for costing analyses from the field and the success of the project's innovative and adaptable costing approaches focused on improving country and donor capacity to use costing data and make more strategic decisions about investing in health.

Health Systems 20/20 leveraged its broad expertise in components of health systems strengthening – health financing, health information systems (HIS), human resources for health (HRH), resource tracking, capacity building – as well as in technical areas, such as infectious diseases and MCH, to strengthen the

impact of its costing work. The project worked with partners in over 20 countries to conduct a variety of costing exercises designed to answer well-defined, specific questions. Health Systems 20/20 also built capacity to conduct costing and sustainability analyses within government departments, nongovernmental health partners, and research institutions. Moreover, the project's innovative and adaptable methodologies went beyond fundamental valuation analyses to improve the understanding of how program resources are turned into services and what level of service delivery is achieved with given resources.

These simple, but effective approaches can be used by busy, nonfinancial staff in ministry departments and by implementing organizations to better define their questions, estimate their unit costs, and know the uses and limitations of the cost estimates obtained when applying them to their program budgeting, planning, and evaluation. Health Systems 20/20 costing and sustainability activities fell into three major groups:

- HAPSAT analyses;
- Costing of strategic plans; and
- Output-based financial reporting (OBFR).

HAPSAT Analyses

HAPSAT, developed in 2007, began as a gap analysis tool to support planning for sustainable HIV programs. It estimated size and sources of financing, size and cost of services delivered, and resources needed to maintain defined volumes of services. After implementing the HAPSAT in several countries, however, the project recognized the need to effectively incorporate contextual issues into the sustainability analysis and to broaden stakeholder engagement. As a result, the project released HAPSAT Plus in Year 5, which incorporated explicitly stakeholder involvement in designing research questions tailored to a country's specific needs rather than using the model's predetermined set of analyses to determine findings and develop recommendations. Health Systems 20/20 conducted HAPSAT and HAPSAT Plus analyses in 14 countries. Table 6 shows how HAPSAT findings have been used.

TABLE 6. SELECTED USE OF HAPSAT FINDINGS

Country	Uses of HAPSAT Findings
Angola, Cote d'Ivoire, Guyana, Kenya, Papua New Guinea, South Sudan, Zambia, Democratic Republic of Congo	• Provided evidence for Global Fund proposals • Supported development and implementation of HIV/AIDS Program Operational Plans
Benin	• Quantified gaps in financial and human resources needed to implement the national HIV response
Guyana	• Served as a resource for the implementation of PEPFAR Partnership Framework • Guided development of efficient utilization strategies to best utilize limited number of health workers to provide HIV/AIDS services • Informed USAID's Country Operational Plan development
Haiti	• Helped describe, cost, and identify variation in the package of services offered to orphans and vulnerable children in post-earthquake Haiti.
Kenya	• Provided estimates for needed funds that MOH had to present to the Ministry of Finance

Country	Uses of HAPSAT Findings
	• Guided development of strategies for increasing domestic revenue for HIV program (levy on airline tickets, increase in premiums of National Hospital Insurance Fund)
Nigeria	• Supported advocacy for increasing the financial responsibility for HIV programs by the Nigerian government
Sierra Leone	• Determined human resource needs and costs for sustaining and scaling up HIV services
Vietnam	• Assessed HIV policies and implementation plans for sustainability
Zambia	• Assessed the impact of policy decisions on sustainability of HIV programs over the short, medium, and long term

Costing of National HIV Strategic Plans

Health Systems 20/20 helped the governments in Angola, Botswana, Papua New Guinea, Suriname, and Trinidad and Tobago to cost their national strategic plans for HIV/AIDS, a key qualifier for accessing Global Fund financing. Health Systems 20/20 used an iterative methodology, which consisted of consultations with working groups and key stakeholders, and also helped them to review work plans and budgets. This process helped stakeholders to develop a detailed implementation plan that translated broad strategic objectives into specific targets and activities to which could be attached a unit cost. Few countries had done this necessary step. Instead, they had done costing only as a post-planning activity. This additional process increased the likelihood of developing a realistic and feasible plan – important criteria for external donor support.

In Papua New Guinea, Health Systems 20/20's costing activities yielded results that were used in the country's Global Fund Round 10 proposal, which was approved. The $50 million in new funding will be used to implement the national HIV strategy, which puts more emphasis on prevention as a strategy for addressing the increasing HIV prevalence. Total multi-year costs for country implementation plans ranged from less than US$100 million to over US$1 billion, illustrating the wide range of country contexts and needs. Table 7 provides a brief snapshot of how costed national strategic plan have been used at the country level.

TABLE 7. SELECTED USE NATIONAL STRATEGIC PLAN COSTING DATA

Country	Uses
Angola	Supported Round 10 Global Fund proposal, which was approved for five years with funding of US$69 million
Botswana	Supported Botswana's National AIDS Coordinating Agency in costing of its national operational plan for implementation of Second National HIV and AIDS Strategic Framework. The costing evidence is being used for Resource Mobilization Strategy development and for budget negotiation with the government.
Papua New Guinea	Supported costing of the country's National HIV/AIDS Strategy. The costing evidence also used for Round 10 Global Fund proposal, which was approved for five years with funding of US$50 million.
Suriname	Improved the structure, content, and format of planning and budgeting of national strategic plan activities.
Trinidad and Tobago	Used to advocate and justify resource mobilization for the National Strategic Plan (2011-2016) submitted to Office of the Prime Minister (approximately $77 million over five years).

Country	Uses
Ethiopia	Supported costing of Ethiopia's Second National HIV/AIDS Strategic Plan. The costing is being used by the HIV/AIDS Prevention and Control Office for more resource mobilization for HIV/AIDS from development partners as well as for budget negotiation with the government.

Output-Based Financial Reporting

Health Systems 20/20 developed the OBFR methodology for funders and implementers of programs that deliver HIV prevention and treatment services, care, and support. The methodology helps nonfinancial staff to understand the specific services being delivered and how much these services cost per unit. OBFR also enables them to routinely carry out costing analyses at the service delivery level and utilize results to monitor the efficiency with which they turn their resources into services.

OBFR differs from traditional M&E activities by including expenditures and much greater detail about the unit being assessed so that scale and efficiency are expressly monitored. For example, two partners may provide home-based care (HBC), but in reality the HBC services actually provided may be quite different. Consider the following:

- Partner A visits the home twice a month using a paid community worker who provides basic medical care, including medication for pain and opportunistic infections.
- Partner B visits the home once a month using a volunteer who has no medical training and cannot provide drugs, but has been trained to recognize when to refer a patient to a health facility or nurse.

Both services would be reported as "HBC," but clearly the service differs in resource intensity (skilled vs. less skilled labor), which will result in different costs. By recognizing the impact of cost drivers, program managers, funders, and policy designers can understand how decisions around program design and scale have substantial impact on the efficiency with which resources are turned into services. They can better monitor the efficiency of their resource use, improving program management in terms of planning, programming, and budgeting. In addition, governments and donors can understand why there is variation across partners, who may ostensibly be doing similar things, and then make informed decisions about approaches.

Health Systems 20/20 developed workshop materials and process guides to support the OBFR methodology and its implementation. Table 8 shows how countries have used OBFR findings.

TABLE 8. USE OF OBFR FINDINGS

Country	Uses of OBFR Findings
Mozambique	• Supported refinement of the national strategy, which previously contained only very limited cost data. • Provided deep insights around the efficiency of using alternative program structures and the costs of capacity building.
Tanzania	• Supported the design of the new national strategy highlighting the need to make decisions around how the country might structure the care program with reduced donor support.
Ethiopia	• Supported the streamlining of HIV prevention programs by providing pertinent information on scale efficiency and the variation in costs of implementing the same program but focused on different groups of beneficiaries.

5.3 ILLUSTRATIVE ACTIVITIES

Health Systems 20/20 carried out a large number of costing activities to answer a variety of questions about human resources, efficiency of health facility-level service delivery, and health financing in the context of the countries supported. The following examples highlight how the application of costing analyses is most useful when it possesses the flexibility to help partners answer appropriate, context-specific questions.

5.3.1 HAITI: COMPARING HIV SERVICE COSTS OF PEPFAR PARTNERS IN HAITI

The USAID mission in Haiti wanted to understand the costs of providing antiretroviral therapy (ART) to HIV patients across its programs, the components of the care package beyond clinical ART services, and the reasons for cost-per-beneficiary variations. Health Systems 20/20 conducted a costing study covering a full package of care for HIV patients.

Intervention and Results

When program implementers report very different costs for what is supposedly the same service, governments and funders should wonder why. Health Systems 20/20 conducted a comprehensive costing of HIV services delivered by five PEPFAR-supported health networks in Haiti to answer the following questions:

- Was there a difference in the packages of HIV services that patients received across networks, regions, and levels of facilities?
- Was there a difference in the costs of HIV service packages?
- Was there an association between patient outcomes and costs?

Health Systems 20/20 collected detailed HIV program and cost data from 15 health facilities across the five PEPFAR-supported health networks. The data collection teams also reviewed approximately 1,300 patient medical records for specific information on the actual number of patient visits, support services (nutrition, cash transfers, transportation), drugs (ARVs and non-ARVs), and laboratory tests delivered per year.

The data showed significant variations among facilities both within and among networks in terms of HIV service packages delivered to ART patients, particularly with regard to nonclinical services (such as nutritional support and transportation fees). These program differences led to a wide difference in annual cost per ART patient, from $220 to $429. Variations among the protocols actually received by the patients (as opposed to the protocol recommended) in terms of number of visits and number of laboratory tests also contributed to the variation in unit costs.

Achievements

The study increased evidence for Haiti's National HIV Program, PEPFAR, USAID, and other programs in the following respects:

- Provided a detailed understanding of the variation of specific service packages provided by different implementing partners in Haiti;
- Increased understanding of unit cost variations and cost drivers for each package; and
- Provided evidence to support future decision making about which services to adopt and efficiencies to address.

5.3.2 GUYANA: MAXIMIZING HUMAN RESOURCES FOR HEALTH IN HIV PROGRAMS

Guyana has been successful in achieving high levels of coverage for many key HIV/AIDS services, including ART, prevention of mother-to-child transmission (PMTCT), and blood screening. Funding uncertainties and human resources problems, however, are threatening to disrupt these programs. In 2010, Guyana received substantial HIV/AIDS funding from PEPFAR, the Global Fund, and the World Bank. Both PEPFAR and the World Bank have been scaling down their investments, and by 2015 Guyana will have to rely primarily on its own government resources to fund HIV/AIDS initiatives. The country's challenge now is to identify and establish long-term solutions that will put HIV/AIDS programs on the path to sustainability.

Intervention and Results

Guyanese stakeholders, including the National AIDS Program Secretariat, came to the HAPSAT process concerned about a lack of human resources to provide HIV/AIDS services. After estimating the number of health workers needed to deliver ART and HIV testing, and analyzing schedules and patterns in patient appointments, HAPSAT found that the shortage of human resources was less acute than previously thought. The overwork reported by staff was due to the fact that most patients were arriving at health centers in the morning, causing bottlenecks. HAPSAT stakeholders devised a plan to set up an appointment system to spread the flow of clinic visits throughout the day. This will allow the same number of patients to be seen by the same number of health workers in a much more efficient way. In addition, the number, distribution, and tasks of health workers providing HIV/TB services are being reexamined.

Achievements

- The appointment system was revised to spread the flow of clinic visits throughout the day, allowing the same number of patients to be seen by the same number of health workers in a more efficient way.
- In addition, the number, distribution, and tasks of health workers providing HIV/TB services are being reexamined to boost efficiency.

5.3.3 EGYPT: DEVELOPING COSTING MODELS FOR SPECIFIC NEEDS

Health Systems 20/20 helped to establish the Health Economics Unit (HEU) within Egypt's Ministry of Health and Population (MOHP) to support health care financing and health policy activities. The HEU was tasked with institutionalizing the collection of regular cost estimations for MOHP hospitals, ensuring that cost analyses are periodically conducted and that findings are used to help manage resources efficiently.

Intervention and Results

The MOHP took its first step toward establishing an evidence base for hospital programming by carrying out a costing study of seven hospitals that assessed the efficiency of services from July 2007 to June 2008. The study, led by Health Systems 20/20, provided policymakers with key health sector data to inform decision making around resource use in Egypt's hospital-based health services delivery. The hospital costing study was designed to serve as a pilot for a larger study that covered a representative sample of 10 percent of MOHP hospitals. The MOHP will use findings from the study to understand efficiency issues with regard to the distribution of health workers, medical supplies, and other health resources countrywide.

Achievements

- Improved stewardship of the health system by generating and using evidence to monitor health system performance.
- Strengthened capacity of the MOHP to conduct costing analysis to identify and address efficiency issues.

5.4 STRATEGY ACHIEVEMENTS

In the area of HIV/AIDS program costing, Health Systems 20/20 has made a major contribution to the field by moving costing from building models to focusing on producing usable results that meet country needs. See Annex G for progress made toward meeting the project's M&E indicators through specific activities. In addition, the project supported the following types of costing activities:

Highly stakeholder driven: Analyzed what matters to in-country stakeholders rather than what the existing tool analyzes best.

Prioritized: Helped stakeholders prioritize and analyze what matters most to the country.

Comprehensive: Focused on entire programs. For example, Health Systems 20/20-led studies addressed costs of the HIV epidemic, not only treatment costs, but also costs on all fronts – prevention, nonclinical care and support, human resources, capacity building – all currently supported by donor programs, but issues for which countries need to be prepared to assume responsibility.

Solutions-oriented: Answered not only "how much does a service cost?" but also the increasingly important question of "how can we make our resources more effective and efficient?"

Sustainable: Developed, implemented, and taught methodological approaches that prioritized specificity and simplicity so that technical support led to the establishment of capacity, which can be leveraged to support the sustainability of many health programs.

5.5 LESSONS LEARNED

Although there are a plethora of tools and an increasing emphasis on costing strategies for donors in the costing health services space, costing is often done outside the context of strategic planning. Over the life of the project, Health Systems 20/20 learned the following:

- Many countries and programs are still using historical budgets with percentage changes to budget for the future rather than collecting actual unit costs to ensure that budgeting includes activity scale-up and quality improvement.
- Stakeholders are seldom aware of the amount of information a costing exercise can provide and, consequently, they need to be shown what they can do with costing information. In other words, technical assistance partners should not expect a country requesting costing data to know how and where to apply the information appropriately.
- Stakeholders are not always aware that regional cost estimates (typically found in ready-made tools) or top-down costing estimates do not provide enough information for program management (e.g., determining value for money, identifying opportunity to increase efficiencies).
- Country donors and stakeholders are aware that although policy targets tend to be politically motivated, operational plan targets must be realistic. If they are not, then resource mobilization strategies often will not be aligned with feasible, evidence-based operational plan targets to ensure that resources are used efficiently.

- Finally, producing unit costs with existing tools without first working with the country to understand the context and educate potential users of costing data may lead to inefficient use of assistance resources, producing cost analysis and findings that may or may not address relevant issues. For this reason, Health Systems 20/20:
    - focused on developing processes that emphasize engagement with stakeholders;
    - increased policymakers' capacity to use data; and
    - ensured that costing targeted major contextual issues by guiding the transparent identification and prioritization of programmatic issues limiting program sustainability.

5.6 CONSIDERATIONS FOR FUTURE WORK IN THIS AREA

Health Systems 20/20 recommends that the response to accelerated demand for costing work focus on building in-country capacity, of both government and local implementing partners, to conduct their own costing estimates, correctly interpret their findings, and use the information appropriately.

Going forward, the emphasis should be on the following:

- Contextualizing the costing activity and producing well-defined questions for the activity to answer;
- Streamlining and simplifying the process of data collection by using technology to simplify data collection and lower costs as opposed to building complex costing models requiring expensive technical assistance; and
- Extending the use of the cost data to all levels of programming, from policy design through program design, down to program management and evaluation.

Future costing efforts should also be approached as a way to improve the understanding of how program resources are converted into services (rather than focusing on a unit cost figure) and what level of service delivery is being achieved with available resources, as well as what implications for efficiency may be suggested by this relationship.

These recommendations will increase the availability of real time, relevant costing data that can be used for advocacy and support of the design of health financing policies, for assisting with evaluation, and for assessing quality. In an environment of increased emphasis on universal coverage at a time of economic constraints, demonstrable efficiency will become as important a criterion of successful programs as effectiveness.

6. HUMAN RESOURCES FOR HEALTH

"I visit health facilities in my LGA every month. When I get there, I go straight to the TB clinic, I ask questions, I check their data, generate data from them. If there is a complaint, I make sure I tackle it. Then I move to the pharmacy, check the stock level.… This assessment has enabled me to identify the problem at the center, how I'm going to tackle it, the steps to be taken. It is great. For example, if we are out of stock of drugs, I should order for drugs immediately, and I will do that."

– Mr. Sosanya Abdulrasaq,
Lagos Mainland Local Government Area Supervisor

6.1 OVERVIEW

A well-performing health system has a sufficient number and mix of health workers who are distributed fairly and in alignment with the overall health priorities of the country. WHO's 2006 *World Health Report*, however, estimates that 57 countries, most in Africa and Asia, face severe shortages in the health staff. The introduction of new drugs, technologies, and vaccines, and the emergence of new diseases and drug resistance affect how health workers are recruited, prepared, and deployed. Nonclinical health system issues, such as decentralization and the introduction of quality assurance programs that require workers to demonstrate improvements in health outcomes, also have an impact on health workers.

Several developments during the past decade have also called attention to the need for skilled, effectively deployed health workers:

- The lack of health workers has caused a slower-than-expected scale-up of global initiatives to address HIV/AIDS, malaria, and other priority diseases – even though many workers have been shifted to priority diseases, to the detriment of other duties. This has slowed progress toward important global health targets, such as the health-related Millennium Development Goals and universal health care.
- Civil conflicts and weak economies have pushed health workers out of rural areas into safer cities and even into other more stable countries.
- The massive response to the HIV/AIDS crisis has depleted an already scant health workforce in many countries.

Although there is no universal model for a good health workforce, there are some well-established requirements. The composition of the workforce should be linked to the package of care to be delivered. The staff should also be well organized and well managed, with supportive policies, financing, and service delivery infrastructure.

6.2 THE HEALTH RESOURCES FOR HEALTH STRATEGY

Health Systems 20/20 used its expertise in all aspects of health systems strengthening to help countries strengthen their health workforce and to provide evidence about how to improve HRH, thus complementing the body of knowledge from other organizations and projects working in HRH, including the WHO Global Health Workforce Alliance, the World Bank, and CapacityPlus. Health Systems 20/20's HRH work spanned six areas:

- *Workforce planning* determines the number of health workers needed to meet service delivery plans as compared with the current stock of workers, those expected to join the system, and those expected to leave the system.
- *Workforce management* integrates recruitment, hiring, retention, payroll, human resource information systems (HRIS), and staff supervision and development into a comprehensive management system.
- *Workforce development* enhances and harmonizes preservice education and in-service training, strengthens faculty and teaching methods, ensures appropriate curricula and materials, and strengthens professional associations.
- *Workforce retention and motivation* involves understanding the factors that motivate health workers; these can be financial or nonfinancial.
- *Quality improvement* involves understanding the root causes of system weaknesses, and countering the causes by designing interventions to update treatment protocols, supportive supervision, performance management systems, and procedures for licensure, regulation, and inspection.
- *Global review of national and cross-country best practices and lessons learned.* As governments and partners create and implement strategies to strengthen HRH, there is a need for a solid evidence base to share lessons learned and build on existing projects.

Table 9 summarizes HRH strategy activities.

TABLE 9. SELECTED HRH ACTIVITIES

Objective	Activity
Workforce planning	• Task Shifting Economic Impact Study in Ethiopia: Analyzed the economic impact of shifting the provision of antiretroviral therapy from physicians to nonphysician clinicians. It costed factors for implementing task shifting and for measuring results and expected service delivery outcomes. • Namibia Workload Indicator Staffing Needs (WISN): Determined staffing norms for four cadres of health workers at district hospitals using the WHO WISN tool. • Egypt's Workforce Planning: Assisted the MOHP to roll out a workforce planning model based on the WHO WISN to eight governorates. Built capacity of the MOHP team concerning the workforce planning process and the analysis of results. • Swaziland HRH Costing: Assisted in restructuring and strengthening the MOH's organizational capacity for HRH through finalizing the MOH HRH Strategic Plan and developing cost structures for the planned HRH restructuring and reforms.
Workforce management	• Cote d'Ivoire: Scaled up hardware and software for the HRIS to contribute to improved planning, coordination, and management, and trained 91 workers in

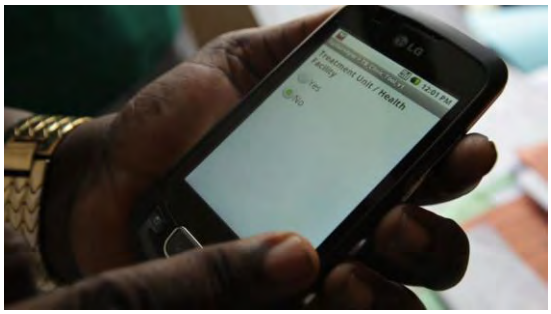
Objective	Activity
	35 districts to use it. Worked with the MOH and the National Institute of Health Worker Training (INFAS) to develop job descriptions, annual individual performance plans, and methods for job performance improvement. • Swaziland: Assisted the MOH in reorganizing their personnel and conducted a 12-month operational research study to assess the effect of a nonmonetary incentive scheme aimed at increasing the performance of public health workers.
Workforce development	Health Systems 20/20 has worked with: • Nigeria's Federal Ministry and key stakeholders to update the country's medical and dental curricula to respond to current country needs and meet international standards and practices. The new curricula was disseminated in September 2012. • Cote d'Ivoire's INFAS to reinforce teaching capacity. Provided salary support for 35 additional instructors. Improved record archiving. • INFAS to improve its physical infrastructure, reference materials, and staff skills at libraries.
Workforce retention and motivation	Health Systems 20/20 conducted studies and pilot programs to: • Understand the complex drivers of intrinsic worker motivation in Malawi. Studied the links between motivation and retention and the impact of compensation on motivation. • Explore health worker compensation in Uganda. In collaboration with the Capacity and CapacityPlus projects, compared public sector health workers' compensation with nonhealth employees in the public sector. Also looked at wage differentials across health workers in the public and private sectors.
Quality of care improvement	• Assessed health extension workers on clean and safe delivery in Ethiopia. Explored whether health extension workers could improve clean and safe delivery. • Supportive Supervision for TB programs in Nigeria: In collaboration with the National TB and Leprosy Training Center, piloted the use of personal digital assistants to strengthen supportive supervision.
Global review of HRH evidence base	• Conducted a comprehensive review of preservice and nursing education interventions to identify what works and how. Key findings included: team approaches to care delivery appear to be effective; ensuring coordination between preservice education, credentialing entities, and other stakeholders is important; accountability for quality must be clear and enforced; preservice education planning must focus on national health priorities; support for faculty is essential; and building and sustaining research capacity for students and faculty is an incentive for recruitment and retention.

6.4 ILLUSTRATIVE ACTIVITIES

The following activities illustrate how Health Systems 20/20's HRH strategy has contributed to strengthening health systems around the world.

6.4.1 NIGERIA: TB SUPPORTIVE SUPERVISION

Nigeria has made significant progress in its fight against TB in recent years. According to WHO, Nigeria now ranks 13th on the list of countries with a high TB burden, down from fourth in 2009. During that time, the National TB and Leprosy Control Program and its affiliated training center improved the supportive supervision systems that oversee facilities where TB is diagnosed and treated. The program's aim, through providing more supportive supervision, was to improve the service delivery system, especially in areas with high defaulter rates, drug stock-outs, and HIV/TB services integration.



Intervention and Results

Beginning in 2010, Health Systems 20/20 collaborated with the National TB and Leprosy Training Program (NTBLTP) on a series of activities intended to improve TB-supportive supervision systems. The NTBLTP, Health Systems 20/20, WHO, and other donor-funded programs developed one standard, integrated TB supervision checklist to assess and monitor diagnostic laboratories and directly observed treatment short course services at the facility level in the public and private sectors. The NTBLTP and Health Systems 20/20 then piloted the new checklist in four states using personal digital assistants. Automating the checklist allowed supervisors to make calculations and analyze data on the spot during their site visits. This rapid analysis became the platform for specific quality improvement plans that were made on the spot and could be monitored.

Achievements

- After the successful pilot, the project scaled up to more than 200 facilities in 2011-2012 and upgraded the technology platform to smartphones.
- In Lagos mainland LGA, the proportion of HIV/TB co-infected patients on cotrimoxazol preventive treatment (CPT) jumped to 100 percent in March 2012 from 33 percent in March 2011. It was still at 100 percent as of the most recent supervision visit in May 2012. At the same time, the proportion of HIV/TB co-infected patients on ART increased from 54 percent to 68 percent between March 2011 and May 2012. In addition, the new smear positive cure rate improved, increasing from 62 percent in March 2011 to 79 percent in May 2012.
- In Ikeja LGA, Lagos, the defaulter rate dropped from 20 percent in March 2011 to 5.2 percent in May 2012. The new smear positive cure rate increased from 67 percent in March 2011 to 86 percent in May 2012. Outside of Lagos in Ohafia LGA, Abia, the defaulter rate decreased by 60 percent between March and May 2012. Finally, in Fagge LGA, Kano, the treatment completion rate more than tripled in one year (from 16 percent in March 2011 to 51 percent in March 2012). In the same LGA, the proportions of HIV/TB co-infected patients on CPT and ART have increased, from 33 percent in March 2011 to 80 percent and 50 percent, respectively, between March 2011 and March 2012.

- LGA and state-level supervisors have begun purchasing their own SIM cards so that they can transmit data from their smartphones to the central database without the need for an Internet connection. The SIM card uses 3G wireless to transmit the data, so it can be done from anywhere anytime as long as a cellular network exists.

6.4.2 COTE D'IVOIRE: HUMAN RESOURCES MANAGEMENT

The government of Cote d'Ivoire has instituted health sector reforms to improve effectiveness, efficiency, equity, quality, and access to health care. Reforms include implementing decentralization, strengthening community participation, improving cost-sharing schemes, conducting in-service training of medical staff, relocating personnel to underserved regions, and maintaining drug supplies and equipment. Closing the HRH gap – retraining health workers, redeploying and retaining them in underserved areas, and developing a system to track HRH – became central to reaching these health goals.

Intervention and Results

Health Systems 20/20 provided technical assistance to the Ministry of Health and Public Hygiene (MSHP) to strengthen human resource management at regional and district levels. This assistance started with three assessments (2006-2008) that provided empirical evidence from which to rebuild the HRH system. Resultant activities included creating a new HRH strategy, hiring instructors to improve health worker training at INFAS, and piloting performance-based pay.

To strengthen HRH management for improved delivery of HIV-related services in the decentralized health system, Health Systems 20/20 built MOH capacity to train regional and district staff in leadership and management. To institutionalize the management training program, Health Systems 20/20 provided training-of-trainers for 16 individuals from the MSHP, Ministry of Family and Social Affairs, and Ministry to Fight against AIDS. The MOH trainers then conducted more than eight, five-day trainings in management and leadership to approximately 300 health managers, with emphasis on core management competencies: planning, coordination, strategic thinking, and rational use of resources, in the context of decentralization and limited availability of workers.

To replace the paper-based HRH management system, which severely limited managers' ability to track and monitor personnel, Health Systems 20/20 collaborated with the Ministry of Finance to adapt and expand that ministry's GESPER (personnel management system) software to MSHP needs. The project also worked with the MSHP Department of Human Resources and Ministry of Finance to develop a GESPER support plan that comprised training staff and master trainers on use of the software, testing the software before national implementation, and developing information products about the system. In the first year, Health Systems 20/20 trained 184 regional- and district-level managers from 19 health districts in the three regions of Aboisso, Yamoussoukro, and Daoukro. Participants came from the National Care and Treatment Program of People Living with HIV/AIDS, Directorate of Information, Planning and Evaluation, National Program to Fight Tuberculosis, and district health teams in HIV/AIDS and other priority health services.

In 2006, INFAS' unwieldy teacher-to-student ratio prevented adequate supervision of students' in-service training and limited INFAS' ability to sufficiently prepare students for the workforce. Health Systems 20/20 supported the emergency hiring of 35 instructors for three INFAS campuses. The results from the INFAS strengthening efforts included a more adequate student-to-teacher ratio; improved student attendance, mentoring, and oversight; a strengthened INFAS management team; and the realignment of the curriculum to match country needs.

The project also designed a pilot scheme to test the viability and efficacy of PBI to support resumption of basic health services and institute HIV-related services in areas hardest hit during the conflict. The PBI pilot began in 2009, in the northern district of Ferkessedougou, where HIV prevalence was nearly 17

percent and infant mortality was 127 deaths per 1,000 births. "Hardship" salary increases of 20 percent were paid to all staff at participating facilities. Other incentive payments were based on achievement of performance-specific indicators on HIV counseling and testing and PMTCT services. Award payments were made to individuals and in the form of facility upgrades.

Achievements

- The MOH's capacity in leadership and management training to manage the delivery of HIV and other priority services in a post-conflict setting was strengthened; notably with a limited number of health workers.
- HRH management was enhanced by developing an HRIS system for personnel tracking and monitoring. In the first year of using GESPER for HRH, over 60 percent of health worker personnel records were captured.
- INFAS strengthening efforts included a more adequate student-to-teacher ratio; improved student attendance, mentoring, and oversight; and a strengthened INFAS management team.
- Preliminary results from the PBI pilot show that health workers were attracted back to participating facilities and recent graduates agreed to serve in the pilot facilities.

6.4.3 MALAWI: STUDY TO EVALUATE WHAT MOTIVATES PROVIDER BEHAVIORS

In response to a 2003 study that documented Malawi's extreme lack of HRH, the government instituted an Emergency Human Resources Program to increase health workers in the MOH and in the Christian Health Association, which together provide about 97 percent of the country's health workers. The program succeeded in increasing the number of workers in 11 HRH cadres by 53 percent by 2009 through heavy reliance on salary top-ups and other financial incentives.

Intervention and Results

To statistically assess nonfinancial incentives, such as intrinsic motivation and job satisfaction, which drive health worker retention, Health Systems 20/20 studied 602 workers at 163 public, private, and faith-based sector health facilities in Malawi. The study was the first of its kind to investigate the influencers of health worker motivation and retention across a representative sample of the population in Malawi as well as across health sectors.

The study found that the strongest drivers of worker motivation were not financial but rather professional development opportunities, recognition from facility management, and opportunities for promotion. Public sector workers demonstrated the highest levels of intrinsic motivation. Interestingly, the relationship between clients' overall satisfaction with their provider and health workers' perceptions about their jobs was weak. Study findings provided practical and sustainable opportunities to increase the intrinsic motivation of workers in order to improve worker retention.

Achievements

- Enriched the evidence body of global HRH.
- Demonstrated the significance of nonfinancial incentives in motivating and retaining health workers in Malawi.
- Provided the government of Malawi with recommendations for nonfinancial incentives to use.

6.5 STRATEGY ACHIEVEMENTS

Health Systems 20/20 provided both new and expanded evidence for policymakers and program managers to use in efforts to strengthen HRH. (See also Annex G for progress made toward meeting the project's M&E indicators through specific activities.)

Workforce planning: Through national needs assessments and costing activities, the project built country capacity in, and enriched the evidence base regarding, the economic impact of task shifting and the application of the WHO WISN tool.

Workforce management: Strengthened management and costing capacity at the MOH level, and scaled up HRIS to improve planning, coordination, and management of HRH.

Workforce development: Strengthened teaching capacity, improved medical and dental curricula, and documented lessons learned in preservice medical and nursing education initiatives; improved the quality of the physical infrastructure, reference materials, and library staff skills at the country level.

Workforce retention and motivation: Tested financial and nonfinancial incentive systems to improve health workforce retention, performance, and productivity; assessed differences in performance, retention, and motivation between faith-based organizations and public sector providers; conducted studies to explore health worker compensation differentials.

Quality improvement: Strengthened supportive supervision approaches and contributed to evidence regarding the expanded use of extension workers for clean deliveries

Global reviews: Completed a comprehensive review of preservice medical and nursing education interventions over the past 20 years that will better inform decisions about where to invest resources. Enriched the global evidence base for health worker motivation. In addition to its own study results papers, Health Systems 20/20 produced key journal articles on HRH, including a synthesis of HRH findings from country HSAs.

6.6 LESSONS LEARNED

- Costing studies must be an integral part of workforce planning.
- An effective HRIS system responds to user feedback and evolves as the people, processes, and technology used in the system evolve.
- Supervision should shift away from simply inspecting facilities and gathering service statistics to concentrate on performance of clinical tasks and resolution of problems experienced by the health worker, as well as to increase feedback from supervisors. Careful introduction of technologies such as an HIS system is an effective way to navigate the transition.
- Nonfinancial incentives are powerful tools to improve health worker motivation, job satisfaction, and retention, and should be further explored and applied.
- Increasing HRH production (strengthening medical and nursing school output and quality) is a multi-year commitment and must be addressed from numerous platforms: service delivery norms; institutional policy; curricula reform; financing; and teaching quality and supportive materials.

6.7 CONSIDERATIONS FOR FUTURE WORK IN THIS AREA

Workforce planning and budgeting in a time of globally constrained resources is even more vital than usual to health systems strengthening efforts. More and continued research is needed to clearly understand what motivates health workers. Attention to policy and cost issues that impact the production of new health workers and the support of those already in the health systems can have a powerful influence on performance. For example, whenever health worker tasks are shifted without policy support, little is likely to change. Capacity building to apply costing tools strategically at the country level is also needed. In addition, infrastructure investments, including quality laboratories, equipment, and supplies, are needed to enable health workers to perform well.

7. CAPACITY BUILDING

"As a result of all of this assistance, one of the greatest things we have achieved is cohesion in the network. Without the governance assistance, as well as the development of fundamentals, it is likely that the network would have crumbled in the first year. We have different institutions, different cultures, and different ways of doing things and yet we have maintained cohesion and I attribute a lot of that to the assistance of the Health Systems 20/20 project."

–David Mukanga, Executive Director, AFENET, Kampala, Uganda

7.1 OVERVIEW

The increased flow of funds to many health systems over the past decade has highlighted a lack of institutional capacity in many countries. Many health ministries and organizations are unable to provide the necessary leadership, management, and resources health programs need. Training institutions are unable to provide the specialized expertise needed to strengthen health systems. Research institutions lack the capacity to provide the evidence needed to inform decision making, and there are few consulting firms and NGOs that can provide technical assistance to solve specific problems and remove bottlenecks. Without this in-country capacity, health systems strengthening efforts will continue to rely on costly international sources of technical assistance. They will also be deprived of the local ownership that encourages long-term sustainability. The success of health systems strengthening, therefore, is directly linked to the capacity of organizations that are responsible for the performance of the broader health system.

7.2 THE CAPACITY BUILDING STRATEGY

Capacity building was one of Health Systems 20/20's original mandates. Capacity building can be viewed at three levels:

- Strengthening the skills and knowledge of individuals;
- Building the capacity of organizations that are essential to strengthening the health system; and
- Strengthening the system through increased political commitment, clearly defined institutional arrangements, effective coordination mechanisms, and improved processes for decision making and sharing information.

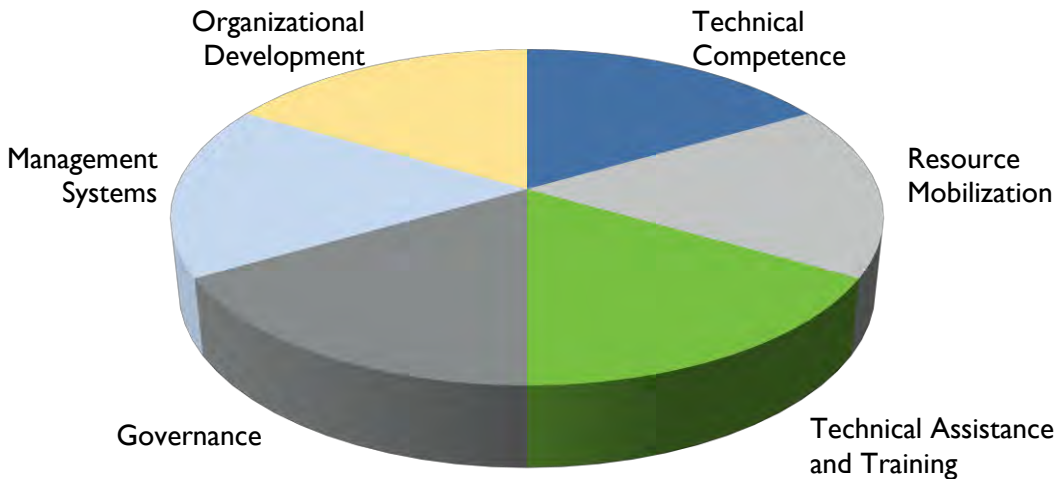
Health Systems 20/20's focus was primarily on the organizational level and, in the last few years, on the system level as well. Broadly speaking, the capacity-building activities fell into two areas:
1) comprehensive capacity-building activities aimed at strengthening the entire organization; and
2) targeted organizational capacity building aimed at building capacity in a specific technical area or function. Table 10 illustrates the range of organizations strengthened, and highlights specifically targeted capacity-building activities.

TABLE 10. THE SCOPE OF ORGANIZATIONS STRENGTHENED UNDER HEALTH SYSTEMS 20/20

Category	Organizations
Central government agencies	MOH HIV/AIDS office in DRC, Liberia NAC Secretariat, Namibia HIS Directorate, MOH Health Financing Directorate in Afghanistan, MOH Global Fund Unit in Mozambique, MOH in Cote d'Ivoire
Local government	District health management teams in Cote d'Ivoire
NGOs, consulting organizations	AFENET, PROSALUD in Bolivia, HSAN, consulting firms and NGOs in Zambia and Senegal
Research institutions	Kinshasa School of Public Health (KSPH), CESAG, Regional School of Public Health in Benin, Makerere School of Public Health, ECSA, HEARD in S. Africa, HSPI in Vietnam
Training institutions	Zaria TB Institute, KSPH

Figure 5 depicts the competency model that Health Systems 20/20 used to guide its organizational capacity-building work. Health Systems 20/20 also used this core competency framework to guide initial assessments and to develop intervention plans to address the gaps identified.

FIGURE 5. CAPACITY-BUILDING AREAS



Assessments and the development of intervention plans were developed in full partnership with the client organization. Change management principles were used to select and sequence interventions so they resulted in meaningful and sustainable changes. In most activities, a Health Systems 20/20 international organizational development specialist oversaw the work, but worked closely with local talent – individual consultants, NGOs and private firms – on the implementation. Table 10 shows the range of institutions strengthened over the life of the project.

In the first three years of the project, Health Systems 20/20 developed a conceptual framework and built a portfolio of capacity-building activities. Many of the activities lasted for several years, evidence of the growing interest in organizational capacity-building on the part of USAID missions and country counterparts, and of the length of time it really takes to strengthen an institution. Implementation of these activities continued in Years 4 and 5 and new activities were undertaken. The project also began to focus more attention on targeted organizational capacity building, which resulted in increased integration with the other project strategies. For example, Health Systems 20/20 trained six institutions in sub-Saharan Africa to provide technical assistance on three important methodologies – health systems assessment, national health accounts, and HAPSAT — so that countries in the region would be able to access African technical assistance. In the final year of the project, in addition to wrapping up individual activities, project staff increasingly took time to reflect on their capacity-building work and to capture and disseminate lessons learned.

Health Systems 20/20's work resulted in local organizations that gained the knowledge, skills, and tools they needed to make their operations more effective and sustainable, to continue strengthening their own domestic health systems, and to provide assistance to neighbor country health systems.

7.3 ILLUSTRATIVE ACTIVITIES

The following five country activities illustrate the scope and approach of Health Systems 20/20's capacity-building work. The first four examples were comprehensive activities and the fifth is an example of targeted technical capacity building.

7.3.1 AFRICAN FIELD EPIDEMIOLOGY NETWORK: STRENGTHENING A REGIONAL NETWORK OF PUBLIC HEALTH INSTITUTIONS

Health Systems 20/20 began assisting the African Field Epidemiology Network (AFENET) in 2006, when it had five institutional members, a three-person secretariat staff, a budget of $750,000, and only rudimentary operational systems. Six years later, this Uganda-based organization has 10 members, including some of the Africa's strongest schools of public health, 29 full-time staff, and a $14 million budget. It is now a regional source of field epidemiology and laboratory know-how and training for the U.S. development community and other institutions in Africa.

Intervention and Results

Health Systems 20/20's rapid assessment of AFENET in 2006 used a web-based survey and individual interviews with secretariat staff and members to determine what types interventions were needed in the six organizational competencies. The findings resulted in a Phase 1 intervention plan; over five years, two additional phases of activities were added. Phase 1 created a governance structure, resource mobilization plan, and a communication infrastructure. Phase 2 included developing strategic and human resource plans, strengthening the accounting systems, developing an indirect cost rate, and strengthening the secretariat team, including defining roles and responsibilities. Phase 3 did further management and team building, built resource mobilization capacity, and strengthened administrative procedures.

Today, AFENET is carrying out its five-year strategic plan, following its detailed administrative procedures manual, and using a financial management system that is compliant with U.S. government accounting standards. It has a strategic plan to guide decision making and a human resources plan that details the network's staffing and skill needs. The revised constitution restructured the board of directors, which is working well, and the secretariat functions as an effective team. A long-term resource mobilization plan and the establishment of a business development unit have positioned AFENET to grow and diversify its funding sources.

Achievements

- Strengthened organization's ability to manage growth with 29 staff and an annual budget of $14 million in 2011;
- Strengthened organization with an effective financial management system, a fully functioning board of directors, clear organizational structure, senior leadership team to provide direction, and improved capacity to mobilize resources;
- Expanded membership from five countries in 2007 to 12 programs covering 19 countries in 2011, resulting in greater reach in strengthening public health surveillance systems; and
- Enhanced credibility as a regional organization for field epidemiology and disease surveillance.

7.3.2 KINSHASA SCHOOL OF PUBLIC HEALTH: BUILDING RESEARCH CAPACITY THROUGH FINANCIAL AND HUMAN RESOURCE STRENGTHENING

The Kinshasa School of Public Health (KSPH) is part of the University of Kinshasa, operating under the Faculty of Medicine. In addition to offering academic programs, KSPH conducts a significant level (approximately $6 million per year) of research and training in public health in the DRC. USAID evaluations of KSPH in 2005 and 2006 identified a number of institutional weaknesses. In 2008, USAID asked Health Systems 20/20 to provide assistance. Health Systems 20/20 has partnered with KSPH for four years.

Intervention and Results

Health Systems 20/20's rapid assessment identified several organizational weaknesses, including lack of controls in financial tracking, a management committee that met only intermittently, ineffective management of indirect costs and contract records, and infrastructure issues that impeded effective operations. Professional staff often took on research projects as their own, to the detriment of the school's revenue stream and the ability of junior faculty to enhance their research skills. The MPH curriculum had not been updated since the school was founded in the mid-1980s, and there was no succession plan to replace professors nearing retirement.

Health Systems 20/20 interventions addressed all these issues by working on the entire range of KSPH organizational competencies. This included developing leadership skills of the management committee and establishing action teams to carry out individual projects. Financial management processes were strengthened and a business development unit was created to implement the resource mobilization plan. In 2010-2011, KSPH collected nearly $150,000 in indirect costs, a significant contribution to its financial health. The physical infrastructure was upgraded, in particular, an information technology (IT) system with reliable power and Internet access, office equipment, and vehicles were added. The MPH curriculum was updated, with concentrations established in health management, maternal child health, and health economics. MPH admission procedures were modified to recruit more women each year (from four in 2008 to 10 in 2011 out of class of 30), and scholarship support allowed 65 MPH and four doctoral students to complete their studies at KSPH and abroad. The doctoral graduates have joined the KSPH faculty and are involved in managing research projects in addition to their teaching duties. Three of the new faculty are on the newly named five-person management committee, thus positioning them to become the future leadership of the school.

A notable aspect to KSPH's capacity building was not only its many components but also the interconnectedness of the interventions. For example, improving the financial management system required a functional IT system, which in turn required a reliable power supply, provided through a backup generator. Maintaining the IT system required additional operating costs, which was addressed through better recovery of indirect costs from research projects. The tangible improvements enabled staff to apply their new skills and procedures, and built credibility for the changes.

The activity relied heavily on the use of local consultants and subcontractors, including a local audit firm that took on strengthening the financial management system. The American University of Beirut's School of Public Health assisted in the development of the new MPH curriculum.

Achievements

- Created a cohesive leadership team that provides overall direction and takes responsibility for the long-term sustainability of the school.
- Established a functional financial system, IT, and administrative systems.
- Provided enhanced succession planned through integration of new faculty.
- Provided critical infrastructure, including IT, backup generator, and a van to transport students.
- Enhanced resource mobilization capacity through a new indirect cost rate and the establishment of a business development center.
- Updated MPH curriculum that meets international standards and includes a core set of courses with three concentrations.

7.3.3 LIBERIA NATIONAL AIDS COMMISSION: IMPROVING THE RESPONSE TO HIV/AIDS

In 2008, a presidential decree established the Liberia National AIDS Commission (NAC) with the intention of developing a multi-sectoral response to HIV/AIDS. A steering committee was established to guide development of a national strategic framework for HIV/AIDS and a fully functioning NAC secretariat. The USAID mission asked Health Systems 20/20 to assist in establishing the secretariat, which was especially challenging because the 15 years of civil conflict had left the health system with weakened institutions, a shortage of competent human resources, and very limited financial support from government.

Intervention and Results

Health Systems 20/20's assistance to the government of Liberia was aimed at creating an organization essentially from scratch. The project applied experience from work in other countries to define the role and functions of the secretariat. It developed an organizational structure and staffing plan and defined job descriptions, performance objectives, and work plans. The project also provided coaching for the executive director and management training for other staff members. It helped staff to determine the operating budget needed for basic functioning. Later, it assisted in developing an M&E system with selected national indicators and a regular reporting cycle and strengthened the financial management system.

> "Our positive experience is due in part to the flexibility of the Health Systems 20/20 funding. The funding was originally provided to support management training, team-building, and structure. Along the way we agreed that because of severe financial limitations we could use funds to support country needs. We also agreed to strengthen our financial management…this flexibility is excellent. In some of the funding we get, you have to stick with the original plan."
> **— Ivan Camanor, Director, Liberia NAC Secretariat**

The Liberia NAC secretariat is a powerful example of the need to tailor interventions to the country context – in this case, a post-conflict setting with few institutional, human, or financial resources – and to remain flexible to achieve success. Originally support was aimed at the management-related interventions needed to establish a viable organization, including an organizational structure, staffing plan, job descriptions, management skills, and team development. The focus was on hiring staff with the minimum of qualifications and then developing their skills – in management and team development as well as technical expertise. Health Systems 20/20 responded to new needs as they emerged. It hired a regional consultant to provide on-site capacity building for the M&E coordinator. A small grant supported county activities and bridge funding for a key staff person. A regional financial specialist strengthened the financial management system by developing a financial procedures manual and helping to install a new accounting software.

These efforts paid off in the NAC secretariat's ability to manage itself and gain recognition as a leader in the country's efforts to fight HIV. Staff grew from one person in 2008 to seven in 2011. Annual revenues increased and the proportion of national-to-donor funding reversed: in 2008, $30,000 came from the national treasury and $88,000 from donor supplemental funds. By contrast, in 2011, these numbers were $100,000 and $73,000, respectively. Secretariat staff now provide training in HIV/AIDS to line ministries, and they play a role in promoting decentralization of services. The secretariat also supports a civil society organization of people living with HIV, and development of a charter for a national association of people living with HIV organizations.

Achievements

- The NAC has achieved legal status as a national commission under the presidency.
- An organizational foundation was developed that allows the secretariat to manage its financial resources, operate as a team, and develop and use annual plans.
- NAC plays an essential role in the coordination of the HIV/AIDS response and M&E of HIV/AIDS programs and services.
- There is strengthened financial sustainability with funding from the national budget and donor support.
- The Liberia NAC gained increased credibility as a player on the national HIV stage.

7.3.4 PROSALUD: INSTITUTIONAL STRENGTHENING TO INCREASE SERVICE ACCESS TO LOW- AND MIDDLE-INCOME POPULATIONS

PROSALUD is a Bolivian NGO whose network of primary and secondary health care facilities serves a population of 600,000 in nine peri-urban areas, approximately 13 percent of the urban population. It also manages a nationwide social marketing program. PROSALUD plays an important role in reducing the burden on the MOH to provide health services and expand services to low- and middle-income populations.

Intervention and Results

Health Systems 20/20 worked with PROSALUD for three years in three broad areas of capacity building: strengthening the management team and board of directors, improving quality of services delivered by its contracted providers, and increasing financial self-sustainability. PROSALUD's overall goal of cost recovery was 90 percent of its annual budget.

Health Systems 20/20's initial assessment pointed to various needs. To strengthen organizational capacity, the project helped PROSALUD to complete its strategic plan for 2008-2012, including the development of management indicators. Institutional roles of the board of directors, in particular in regards to the general assembly, and organizational roles of the management team were clarified. To improve the quality of service delivery, Health Systems 20/20 guided the centralization of laboratories and adoption of bio-safety best practices to help control intra-hospital infections. This also improved efficiency − twice the number of analyses were processed at less cost and with more accurate results. Also to strengthen financial sustainability, Health Systems 20/20 provided social marketing support and developed a sustainability plan.

The work of Health Systems 20/20 evolved considerably over the three years. In the second year, PROSALUD requested assistance in the areas of human resources management, strengthening consulting skills to assist other service delivery organizations, developing procedures for contracting with medical providers to comply with new government regulations yet retain incentives, and providing management coaching of the executive director. Over the three years of assistance, PROSALUD's cost recovery rate increased from 80 percent in 2008 to 95 percent in 2011.

Achievements

- Strengthened decision making, guided by the strategic plan 2008-2012.
- Improved governance system under which board meets regularly, represents PROSALUD externally, but limits involvement in internal matters to specified areas of responsibilities.
- Improved financial efficiency and quality of care through centralized laboratory analysis and refined contracting of physician services.
- Strengthened financial sustainability through greater cost recovery.
- Strengthened systems for human resources, management, and communication.
- Developed strategy that will allow expansion of the social marketing program.

Several factors facilitated these achievements. The initial assessment identified "quick hits" for success in the first phase and generated opportunities for following phases. The strategic planning exercises created an environment that led to efficient integration of the organizational improvement efforts. Aligning institutional actors ensured governance and laid the groundwork for appropriate management of the changes, and the commitment of the PROSALUD team to their own improvement process created a learning environment receptive to change.

7.3.5 BUILDING ORGANIZATIONAL CAPACITY TO PROVIDE HEALTH SYSTEMS STRENGTHENING ASSISTANCE

Health Systems 20/20 experienced high demand for assistance from countries in implementing three core health systems strengthening methodologies: HSA, NHA, and HAPSAT. To enable the continued use of these important methodologies in sub-Saharan Africa, Health Systems 20/20 selected six partner institutions and trained them to provide future technical assistance in each methodology.

Intervention and Results

Using a combination of mapping study to identify institutions and their institutional competencies, web-based research, consultations with third-party experts, and interviews with the candidate institutions, Health Systems 20/20 selected six partner institutions for training in providing technical assistance. One Francophone and one Anglophone institution were chosen for each of the three methodologies. They were:

- HSA: Regional School of Public Health (IRSP) in Benin and Makerere School of Public Health in Uganda;
- NHA: *Centre Africain d'Etudes Supérieures en Gestion* (CESAG) in Senegal and Commonwealth Regional Health Community for East, Central, and Southern Africa Health Community (ECSA) in Tanzania; and
- HAPSAT: *Institut de Santé et Développement* (ISED), University of Anta Diop in Senegal and Health Economics and HIV/AIDS Research Department (HEARD), University of Kwazulu Natal in South Africa.

The objective was for each partner to become a center for carrying out the methodology in its subregion. Each organization participated in a one-week training program consisting of a four-day technical training in the methodology and a one-day management module covering project management, budget, contracting, and marketing aspects. Approximately 75 staff were trained across the six partner institutions. Following the training, five of the six organizations did a field application of the methodology while overseen and mentored by Health Systems 20/20 technical staff. In addition, focused capacity building was provided to address any shortcomings that the partner was found to have during field application. The capstone to the capacity-building process was an after-action review with each institution to determine lessons learned and guidance for the future.

Achievements

- Six African research institutions were trained to use three core health systems strengthening methodologies.
- Health Systems 20/20 also identified valuable lessons learned from the trainings:
    - Selecting the right partner is key to success since targeted technical capacity building often does not provide the scope to address the underlying management capacity. The partner must have functional management systems, ability and interest in providing technical assistance, leadership commitment to use the strengthened capacity, and a willingness to engage as full partners and learn from the experience.
    - Targeted capacity building requires a strong learning-by-doing component, close oversight at each stage of the process, and ongoing mentoring and support by a senior person. Training is not nearly enough to build capacity.
    - Methodologies requiring qualitative data collection and analysis are more difficult to master than those that are quantitative in nature.
    - Strong leadership commitment by partner must be present throughout the process.

Most of the six organizations are now in a position to use these methodologies and offer the service to donors and implementing partners. However, even though the institutions have some of the strongest health systems strengthening expertise in Africa, their capacity is still limited, constrained by competing academic commitments and staffing limitations.

7.4 STRATEGY ACHIEVEMENTS

Health Systems 20/20 has better defined the role of capacity building in health systems strengthening by identifying the types of institutions that should be targeted – those that enable and strengthen health systems rather than the actual providers of health services. This perspective is reflected in Health Systems 20/20's updated *Health Systems Assessment Approach: A How-to Manual.*

In addition, Health Systems 20/20 demonstrated that a comprehensive approach of multi-year duration grounded in the principles of organizational development can result in a strengthened institution and that this approach can work in a range of countries, including post-conflict and low-resource settings.

The project also successfully integrated organizational capacity building into the other Health Systems 20/20 strategies, most notably in the effort to develop regional institutions in Africa to conduct NHA, HAPSAT, and HSA. See Annex G for progress made toward meeting the project's M&E indicators through specific activities.

7.5 LESSONS LEARNED

Role of organizational capacity building in health systems strengthening

- Build the capacity of organizations whose role is to strengthen the health system, namely those that play key roles in stewardship, provision of evidence for decision making, technical assistance, and training of specialized expertise such as health economics.
- Understand that technical capacity alone is insufficient; management capacity is equally important.

Targeted organizational capacity building

- Select organizations with functional management systems, leadership commitment, eagerness to learn, a viable business model, and preexisting technical capacity.
- Provide a strong learning-by-doing component and close oversight at each stage.

Design of organizational capacity-building activities

- Take a comprehensive approach; address the full range of organizational competencies.
- When working with a new organization, ensure it has a viable business model that will generate revenue from the services it provides.
- Design capacity-building activities so the client organization has the incentive to participate, such as supporting IT improvements and increased potential for business opportunities.
- Define benchmarks for success and milestones for measuring progress at the beginning and update on an ongoing basis.

Practice of organizational capacity building

- Build trust with the host organization through collaborative engagement. This process takes time.
- Maximize the use of local consultants and organizations, but provide close oversight.
- Ensure buy-in and commitment from senior leadership of the client organization.
- Be flexible and adapt the approach and the interventions to emerging needs, to build credibility for the capacity-building process.
- Tailor interventions to the country context, size, and sophistication of the host organization, and the resources available.

7.6 CONSIDERATIONS FOR FUTURE WORK IN THIS AREA

Should donors invest in organizational capacity-building activities? Health Systems 20/20's experience – and the increased interest of USAID missions and receptivity of client organizations – strongly indicates that these investments are essential to health systems strengthening. The project's lessons learned have helped to move the field forward, but more should be done in this important area, including the following:

- Develop standard indicators for organizational capacity building. Developing these will be challenging – capacity building outcomes, like leadership and teamwork, are hard to quantify.
- Create a more systematic approach to choosing which organizations to strengthen.
- Put more attention on defining the boundaries of capacity building. When working with a single office in a larger organization – for example, the HIV/AIDS office in an MOH – there are issues outside the control of the office that need to be addressed.
- Shift more focus on capacity building at the system level. Strengthened political commitment, workable and clearly defined institutional arrangements, effective coordination mechanisms, and improved processes for decision making and sharing information are needed.
- Create cost-effective models for building capacity at decentralized levels.

8. MEASURING AND MONITORING HEALTH SYSTEMS PERFORMANCE

"The Health Systems Assessment gives you a full picture of the situation on the ground, which I found very useful as I advised the minister on how to decentralize primary health care. For example, take the case of pharmaceuticals. The HSA clearly gives you a picture of the status of pharmaceutical problems and issues so as you prepare to transfer responsibility from the central government to local authorities, you don't move the problems with you. In essence, you don't move things that you already know fail."

– Mpopo Tsoele, Decentralization Advisor, Ministry of Health and Social Welfare, Lesotho

8.1 OVERVIEW

When it comes to assessing health systems performance, the biggest challenge is usually not a lack of data, but incomplete, nonstandardized data from too many disparate sources. Developing countries often collect abundant information about their health systems, but they may lack the capacity to consolidate the many different types of data from multiple sources. This siloed data collection results in an incomplete picture of the health system and its performance.

Successfully implementing health plans and policies requires regular M&E data on health systems performance and then communicating that information to government officials, health workers, and other stakeholders. The Health Systems 20/20 strategy for measuring and monitoring health systems has been to provide and maximize the use of innovative tools to ensure more standardized measurement. These tools include:

- HAS and the *Health Systems Assessment Approach: A How-to Manual*, which produce a profile and analysis of the whole system to prioritize health systems strengthening solutions;
- Health Systems Database, which allows users to compile and analyze country data from multiple sources to quickly assess a health system's performance, benchmark that performance against other countries using key indicators, and monitor progress;
- geographic information systems (GIS) technology, which identifies trends that inform program planning and decision-making and also correlate service delivery with health outcomes.

While there continues to be distinct funding for HIV/AIDS, TB, malaria and other priority health issues, the integration of these services into broader health programs offers opportunities to streamline data collection and reporting. For data to be useful to policymakers, it must be timely, meet their needs, and be communicated in an actionable format. Health Systems 20/20 has leveraged a set of tools that allow countries to rapidly create specific, yet standardized measurements for a range of purposes.

8.2 THE MEASURING AND MONITORING STRATEGY

In the early stages of Health Systems 20/20, the focus was on establishing methodologies to support the assessment of country health systems. During the next stage, there was greater emphasis on strengthening capacity for gathering data and using information to make evidence-based policy and planning decisions as field support increased. More recent efforts focused on the establishment and testing of health systems strengthening indicators, at both national and community levels.

The Health Systems 20/20 measuring and monitoring strategy maximizes the use of a set of innovative tools that create standardized measurement of the health system. A key starting point for countries is to conduct an HSA to identify the relative strengths and weaknesses of the health system, priority issues, and potential recommendations. After this initial assessment, HIS can be strengthened to improve linkages among health care entities at the local, regional, and central levels in order to increase the flow of accurate, complete data in a timely manner. HIS strengthening includes leveraging key analytical tools, such as GIS technology, to identify trends that inform program planning and decision making and to correlate service delivery with health outcomes.

The web-based Health Systems Database allows users to easily compile and analyze country data from multiple sources to quickly assess the performance of a country's health system, benchmark performance against other countries on key indicators, and monitor progress toward system strengthening goals. Finally, Health Systems 20/20 has provided global leadership in the continuing development of health systems strengthening evaluation indicators that can provide the global health community with more precise and reliable tools for measuring the impact of health systems strengthening actions.

Health System Assessment

An HSA looks at the *entire* health system, including governance, health financing, health services delivery, human resources, pharmaceutical management, and HIS. Health Systems 20/20 also incorporated the private sector into the process to identify opportunities for the private sector to relieve public sector constraints and to facilitate the long-term sustainability of the HIV responses as countries face static or declining aid for HIV/AIDS programs. Health Systems 20/20 staff detailed the HSA methodology in the recently updated *Health Systems Assessment Approach: A How-to Manual*.

Health Systems 20/20 teams identified common challenges across the six WHO building blocks as well as the private sector. Through its measuring and monitoring strategy, Health Systems 20/20 applied interventions designed to reduce or eliminate those constraints. See Table 11.

TABLE 11. COMMON CHALLENGES AND INTERVENTIONS RESULTING FROM THE HSAS

Health System Domain	Challenge	Illustrative Examples of Activities
Governance	Outdated or incomplete legislative framework for monitoring, licensing, and regulating health facilities.	Provided technical assistance to the MOH regulatory unit responsible for this function, as well as to staff from health facilities, to be licensed and accredited.
	Beneficiaries of the health system have no voice in defining health needs and health services required to meet those needs.	Promoted 'health committees' at the community level.
Financing	Absence of data on the sources, management, and use of financial resources across the health system.	Used NHA reports, *if available*, to show resource use and resource flows and measure important indicators such as household out-of-pocket health spending, regional distribution of health spending, and donor spending on health. *If not available,* introduced NHA methodology and built capacity for institutionalization.
	Insufficient resources allocated to health (for example, small percent of GDP allocated to health compared to peer countries).	
Service Delivery	Patients bypassing rural primary health facilities to access the urban-based hospital for outpatient services, leading to over usage of the Accident and Emergency room.	Implemented formal referral and follow-up mechanisms, in conjunction with user fees that are higher when primary care facility is bypassed.
Human Resources for Health	Shortage or imbalanced allocation of skilled health workers across the country.	Implemented PBI recruitment and retention program, targeting incentives to both workers and health facilities.
Pharma-ceutical Management	Low level of public financing on pharmaceutical expenses.	Studied cost-sharing options (e.g., revolving drug funds and insurance). Improved efficiencies elsewhere in the system to reduce costs. Studied alternatives for reallocation of funds (review drug selection to focus more on priority medicines).
Health Information Systems	Lack of quality control/assurance mechanisms leading to unreliable data. Data are available, but not trusted and not used for decision making.	Introduced routine data quality assessment programs into existing structures, ensuring feedback mechanisms to the data producers at the lower levels of the health system and turning them into users.

Health Information Systems and Geographic Information Systems

The analysis and use of information for decision making are essential components of a functioning health system. Health Systems 20/20 worked with government counterparts at the national and local levels to strengthen information systems through the development of guidelines, improved tools, and capacity building. With the scale up of HIV/AIDS programs, for example, health care facilities now need to strengthen their patient tracking for HIV/AIDS services such as ART and PMTCT. The HIS systems can also inform decision making such as the reallocation of health workers and/or budget alignment. GIS complements the HIS to visually present health and other data to allow policymakers to easily see the numbers and distribution of health services in terms of health workers, facilities, laboratories, and other components of care, and thereby to identify and fix gaps in the system.

Health Systems Database

In September 2009, Health Systems 20/20 launched the Health Systems Database, a web-based tool that allows users to analyze and compile standardized country data from internationally comparable sources such as the WHO, World Bank, and DHS. Since its launch, the database has undergone continuous improvements to maintain its high level of quality and ensure user satisfaction. In the final year of the project, significant improvements to the database have been completed, including the following:

- Updates from data sources such as World Bank Development Indicators, WHO Global Health Observatory, World Bank Worldwide Governance Indicators, WHO World Medicines Situation Report, UNESCO, UNAIDS, DHS, and UNICEF.
- Improvements to database user interface and functionality, including
    - data tables and data visualizations that dynamically update as users define filters and parameters, easy-to-access indicator sources and definitions, redesigned navigation page with clear controls and descriptions of all database components, and improved filtering and export options for both data tables and visualizations.
    - Redesign of database platform to a new, open-data platform that supports current Application Programming Interface. This updated platform will allow the database to automatically update indicators without external assistance and as sources supporting the interface (such as the World Bank) update their datasets.

Developing measurement indicators

Measuring the overall performance of a country's health system as well as improvements linked to health systems strengthening efforts remains a challenge due to the complexity of health systems, the paucity of appropriate guidelines, and shortages of information. Various institutions and partnerships, including the WHO, GAVI, the World Bank, and USAID, have supported numerous efforts to develop more effective measures. To date, however, the practical application of tools that can accurately measure health systems strengthening results has been limited. In order to address this gap, the project undertook several key activities in Year 6. They included the following:

- Completed five case studies to test the applicability of a standardized set of indicators in monitoring and tracking changes in health system performance over time. A set of health systems indicators from WHO's *Handbook on Monitoring the Health Systems Building Blocks* was collected and analyzed in five countries (Bangladesh, Ethiopia, Peru, Vietnam, and Zambia), over an 11-year period (2000-2011). The results of this five-country study will be presented at the *Second Global Symposium on Health Systems Research* being held in Beijing, China, in October 2012.
- Supported the Global Fund's evaluation framework by developing a framework and guidelines for the evaluations of health systems strengthening programs. The framework addresses a common issue: the lack of appropriate outcome and impact indicators in results frameworks of health systems strengthening programs. Although at times indicators are irrelevant to the interventions, at other times, they can be relevant. However, data quality issues, such as a lack of or wrong baseline surveys, can also exist. The new framework provides a systematic approach to better align indicators and interventions. In addition, the framework provides a methodology to assess performance of the appropriate outcome and impact indicators and assess the system-wide effects of the examined program. The framework and guidelines were developed with input from a broad group of technical experts from PEPFAR, WHO, World Bank, the Pan American Health Organization, academics, and implementing partners. Some elements of the methodology have been tested in the HSA and with the HAPSAT.

8.3 ILLUSTRATIVE ACTIVITIES

8.3.1 VIETNAM HEALTH SYSTEM ASSESSMENT TO IMPROVE LOCAL-LEVEL HIV/AIDS SERVICES

Health Systems 20/20 conducted HSAs in 23 countries, including Vietnam. While Vietnam has made important achievements over the past decade, it faces two major challenges to maintaining its health system achievements: the burden of communicable and noncommunicable diseases and regional disparities in health outcomes. To address these challenges, the government has implemented several national policies, including the decentralization of the health sector, which has focused on devolving autonomy and accountability to provincial and district social service institutions, including health facilities.

Several assessments of Vietnam's health system at the national level had been conducted, but the information proved too broad for use at the subnational level. Vietnam decided to test the HSA to determine if this tool could collect provincial-level data detailed enough to inform specific program planning, such as improving HIV/AIDS services at the local level.

Intervention and Results

In 2008, with project assistance, Vietnam's Health Strategy and Policy Institute (HSPI) revised the HSA for use at the provincial level. HSPI then piloted the approach in two provinces. This was the first HSA conducted by an all Vietnamese team. The activity built HSPI's capacity to carry out an HSA, including data analysis, interpretation of findings, and report writing. In 2009, HSPI conducted HSAs in six more provinces, leading them to conclude that the HSA could be used as an M&E tool to measure the progress of the provincial health systems over time. HSPI has prepared a manual to train provincial teams to be able to conduct HSAs in an additional 16 provinces and to monitor key health system performance indicators over time.

HSPI's success in conducting HSAs and using the results to advance health policy shows the immense benefits that can arise from building the capacity of local institutions to evaluate and monitor their own health systems. Vietnam now has an institution capable of conducting an HSA at the subnational and national levels. Given HSPI's connection to the MOH and its ability to influence policy and health system reform, this capacity is especially valuable to strengthening Vietnam's health system.

Achievements

- *Influenced health policy:* The HSA raised specific concerns regarding both the quality of care and rational drug use. In order to address these issues, the MOH passed a new law on examination and treatment, which seeks to improve quality of care, as well as to create a nationally distributed circular providing guidance on use of medicines in health facilities.

- *Built local capacity for health systems strengthening:* HSPI's ability to independently assess local health systems is one of the lasting impacts of Health Systems 20/20's work in Vietnam.
- *Increased payment equity:* Based on HSPI's recommendation, the MOH now provides a universal fee schedule for government health services. (The HSAs showed that purchasing and provider payments were not aligned.) A new payment system is being piloted and should improve equity in payment for health services going forward.

An HSA conducted in 2007 in South Sudan highlighted the absence of a working routine health management information system (HMIS). A plan to develop the system based on the "3-ones" strategy (one database, one monitoring system, one leadership) was put in place under the leadership of the MOH. The MOH has since developed, tested, and refined the tools and procedures for the routine HMIS, produced a comprehensive roll-out plan, and started the integration of health programs into the system, including the provision of equipment, printing and distribution of registers and manuals, and training in HMIS and DHIS of MOH officers, partners, and program staff (Laku et. al 2012).

- Examined health information system: Through a prioritization/scoring exercise, HIS was identified during the HSA as the weakest health system function overall. As a result, it has received very high level attention. The minister of health is chairing a new national HMIS project to improve the overall HIS.

8.3.2 KENYA INFORMATION SYSTEMS STRENGTHENING TO IMPROVE THE ART INFORMATION SYSTEM

In Kenya, basic and essential information required to manage patients according to national therapeutic guidelines was often not available. In addition, the information needed to manage facilities, programs, and commodities, as well as to review and formulate policy and report to international donors and organizations with respect to HIV/AIDS (and other basic health) services was often not available. This situation led to the proliferation of independent and parallel data collection and reporting systems supported by external partners/donors to meet their individual information needs. Often, however, this information was not made available to the MOH.

Intervention and Results

From 2006-2011, Health Systems 20/20 supported efforts to improve the availability of key health information and, in the process, became the major implementing partner to the National AIDS Program with respect to information systems development and strengthening. During this same period, Health Systems 20/20 expanded the vision of the Kenya government to include other health information system strengthening activities and began working in collaboration with the MOH's Division of Health Information Systems. This shift from program-specific support to a more inclusive health systems strengthening approach (under the assumption that improved HIS function would improve availability, quality, and utilization of HIS/AIDS-specific information) mirrored a shift in the Office of U.S. Global AIDS Coordinator's and USAID's approach to strategic information as well.

Health Systems 20/20 efforts focused on creating and applying the tools and methods necessary to ensure that needed information was available to domestic as well as external stakeholders. Activities included the following:

- Revised a set of indicators for all HIV/AIDS services and programs that included:
  - Harmonization of reporting tools, forms, and data collection instruments;
  - Documentation of the use of tools and instruments;

- Generation of training materials for staff, including training-of-trainers materials;
- Training of 10 provincial and 250 district personnel in the use of the harmonized tools and data collection instruments; and
- Liaising with software developers to ensure that the platforms would perform correctly.

- Created a Master Facility List, which standardized the nomenclature, reference numbers, and geo-codes for all facilities, thereby simplifying the tracking and updating of information on the definition of services and contact information, which is done by district-level (rather than central-level) staff.
- Revised an indicator manual for the MOH.
- Supported the deployment of the DHIS software.

Achievements

- Improved quality and availability of defined health information.
- Enhanced HIV/AIDS care through better use of therapeutic and clinical guidelines.
- Improved program management.
- Increased availability of commodities through improved program management.
- Increased transparency and public access to information within the health sector.

8.3.3 COTE D'IVOIRE: USING GIS TO IMPROVE HEALTH SYSTEM PLANNING

In Cote d'Ivoire, GIS has been used to present health and other data to allow policymakers to visualize numbers and distribution of health services in terms of health workers, facilities, laboratories, and other components of care, and thereby to identify and fix gaps in the system. GIS displays inform the political decisions needed to plan the post-crisis recovery of the health system.

Intervention and Results

Health Systems 20/20 provided GIS support to DIPE, the MOH unit charged with information, planning, and evaluation. Using GIS to present health and other data allows policymakers to visualize numbers and distribution of health services in terms of health workers, facilities, laboratories, and other components of care, and thereby to identify and fix gaps in the system. In Côte d'Ivoire, the GIS displays were especially useful in informing the political decisions needed to plan for the post-crisis recovery of the health system. The collaboration has achieved the following results:

- Equipped a dedicated health map laboratory;
- Trained 15 DIPE staff on the use of GIS software; and
- Produced the first post-2002 crisis health atlas of 22 health maps.

Achievements

One of the key achievements of the GIS mapping efforts was the quantification and visualization of the significant gaps in numbers of health workers required to support the need for HIV/AIDS treatment services in the northern regions. As a result, the project worked with the MOH to pilot a PBI program to recruit and retain health workers for HIV/AIDS programs in the north. Initial results proved promising, showing an increase in recruitment, retention, and number of patients counseled on HIV.

8.4 STRATEGY ACHIEVEMENTS

There were a number of key achievements across the monitoring and measuring health system strategy as a whole. (See also Annex G for progress made toward meeting the project's M&E indicators through specific activities.):

- Developed and applied a standardized methodology for conducting HSAs.
- Conducted HSAs in 23 countries in a six-year time period, leading to identification of priority health interventions for ministries of health, USAID missions, Global Fund proposals, and other key stakeholders supporting health systems strengthening activities (see Table 12).
- Trained two regional institutions (Regional School of Public Health or IRSP in Benin and the Makerere School of Public Health in Uganda) to be HSA resources in Africa to support English- and French-speaking countries, as well as HSPI in Vietnam.

TABLE 12. OVERVIEW OF HSAS CONDUCTED BETWEEN 2005 AND 2011

Country	Year	Primary Audience	Application	Innovations
Angola	2005	USAID	Design of integrated health programs	Pilot (PHR*plus*)
Azerbaijan	2005	USAID	Pharmaceutical management strategy	Pilot (PHR*plus*)
Benin	2006	Ministry of Health (MOH)	New national health strategy	Pilot (PHR*plus*)
Pakistan	2006	USAID	Inform health system activities	
Yemen	2006	MOH	Framework for health system review	
Malawi	2006	USAID	Bilateral design	
Ghana	2006	USAID	Assessment of insurance	
S. Sudan	2007	MOH	GAVI health systems strengthening (HSS) proposal	
Namibia	2008	Ministry of Health and Social Services	National Health sector review Global Fund proposal	
Nigeria	2008	Federal Ministry of Health State Ministries of Health USAID/Nigeria	Health systems strengthening planning	Subnational assessment of 32 states and the Federal Capital Territory
West Bank	2009	MOH, USAID	New national health strategy	
Senegal	2008	MOH	New national health strategy	
		USAID	Health systems strengthening planning	
Vietnam	2008 & 2009	PEPFAR & MOH	Partnership Framework Implementation Plan	Subnational assessment of eight provinces
			Developing a baseline for monitoring health systems strengthening	Built HSA capacity within national research institution
Cote d'Ivoire	2009	PEPFAR	New national health strategy Health policy reviews	Technical work was conducted by national working groups and built local capacity.
Lesotho	2010	USAID	Health sector planning	Primary quantitative data collection
		Ministry of Health and Social Welfare	Health systems strengthening planning	Built MOH HSA capacity
Zimbabwe	2010	MOH	National Investment Plan	Primary quantitative data collection
		PEPFAR	Country Operational Plan	
Angola	2010	MOH	New national health strategy New district health strategy	
Kenya	2010	Ministry of Medical Services and Ministry	Health policy reviews Health sector planning	Extensive stakeholder engagement, including Ministry

Country	Year	Primary Audience	Application	Innovations
		of Public Health and Sanitation	Health systems strengthening planning	ownership and leadership
Guyana	2010	MOH USAID	New health sector strategy Health systems strengthening planning	Built MOH HSA capacity Tested formal stakeholder engagement methodology
Tanzania	2010	MOH, USAID, other donors	Health sector planning Health financing review	Emphasis on local stakeholder engagement in the process.
Ukraine	2011	MOH	MOH health reform agenda HIV, TB, and family planning programming	Drafted Cabinet Memo to inform health policy reform
		USAID, PEPFAR	Partnership Framework development	
Uganda	2011	MOH, USAID	Providing a baseline for measuring progress against recently launched national health strategy	Build capacity of regional research institution in HSA methodology
Mozambique	2011	MOH, USAID	Inform planning for new national health strategy	
Ethiopia	2011	MOH, USAID	Inform implementation of current national health strategy	Built capacity of regional research institution in HSA methodology Additional module on private sector
St. Kitts and Nevis	2011	MOH, USAID	Support implementation of the US-Caribbean Regional HIV and AIDS Partnership Framework Support MOH health sector planning	Additional module on private sector
Antigua	2011	MOH, USAID		
St. Vincent and the Grenadines	2011	MOH, USAID		
Grenada	2011	MOH, USAID		
Dominica	2011	MOH, USAID		
St. Lucia	2011	MOH, USAID		
Benin	2011	MOH, USAID	Inform health sector planning	Build capacity of regional research institution in HSA methodology

- Designed, developed, and implemented multiple information systems (e.g., HMIS, GIS, registries) to facilitate production of data for decision making.
- Built the Health Systems Database as a web-based platform to review and analyze nationally comparable data sets, review health-related trends over time, and create a health snapshot of numerous countries.
- Developed an evaluation framework and guidelines for the Global Fund health systems strengthening grants.

8.5 LESSONS LEARNED

HSA findings have expanded and enriched donor knowledge of health systems in general and at local country levels. Lessons learned from the assessments will continue to enhance the health systems assessment approach. Health Systems 20/20 will continue working with local counterparts to implement well-informed targeted health system improvements based on HSA findings.

- The lack of an agreed-upon set of health systems strengthening indicators continues to interfere with the ability to provide the global health community with the desired level of evidence-based recommendations regarding priority health systems investments.

- The private sector is an important actor to include in health systems assessments.
- The HSA methodology sets the stage for health systems strengthening and demonstrates the value of creating strong linkages across the six health systems strengthening building blocks.
- Developing *systems* for data usage does not ensure data usage.
- Strengthening stakeholder engagement and capacity building are essential keys to long-term sustainability.

8.6 CONSIDERATIONS FOR FUTURE WORK IN THIS AREA

The global health community should continue to prioritize work in developing and testing health systems strengthening indicators that offer the desired level of evidence. This is perhaps the most important and most challenging "next frontier." Without it, much of the foundational work of health systems strengthening cannot be satisfactorily linked to improved systems and health outcomes across programs and countries.

HSAs have begun to pave the way for stronger evidence-based and better integrated national planning. However, further attention is needed to:

- Ensure a more efficient and cost-effective generation of evidence for use by policy makers and program planners at the country level;
- Strengthen the ability to generate evidence and transfer this capacity locally; and
- Continue to seek result linkages among health systems strengthening evidence, health program interventions, and service delivery outcomes.

PART 3 – NEW PERSPECTIVES ON HEALTH SYSTEMS STRENGTHENING

LESSONS LEARNED

Over the life of the project, the importance of health systems in expanding equitable, quality health care, including preventive health care and health promotion, has become increasingly clear. The project has seen health systems strengthening as a continuum, along which countries will progress by applying specific strategies, tools, and methodologies, depending on their particular context and priorities. Looking back on six years of testing and refining approaches to strengthening health systems worldwide, Health Systems 20/20 distilled 13 lessons to share with the global health community as it plans for the future of health systems strengthening. These lessons offer new perspective for the way forward. They also complement the strategy-specific lessons described in the previous chapters.

Health Systems Strengthening

1. Health systems strengthening is a nonlinear process that benefits significantly from holistic systems analysis rather than from traditional, vertical assistance. This paradigm shift requires paying attention to how individual components within the overall system and subsystems interact and affect one another. Working on several components of the system simultaneously, such as governance and financing, yields greater impact than addressing an individual constraint.
2. Each country follows a unique path to improving its health system's performance, depending on its specific health care needs, resources, politics, and leadership. There is no perfect one-size-fits-all model for health systems strengthening because such efforts should respond to the country context (e.g., introducing health insurance may or may not be the highest priority for improving financing in all countries.). Effective health systems strengthening interventions should target constraints that can have maximum benefit across multiple health programs.
3. The field would benefit from standardized, precise definitions that distinguish activities that *support* a health system from those that *strengthen* a health system. S*upporting* a health system can be accomplished solely by providing inputs to improve services, such as upgrading facilities and equipment. S*trengthening* a health system is accomplished by more comprehensive changes to policies and regulations, organizational structures, and relationships across system components that, in turn, motivate changes in behavior and/or allow the more effective use of resources to improve multiple health services. Both supporting and strengthening are important and necessary, and the balance between the two should be driven by the country context.

Financial Risk Protection

4. Health Systems 20/20's field work and regional health insurance workshops for 18 African countries revealed misconceptions that financial risk protection interventions, such as health insurance and fee exemptions, automatically result in increased access and coverage for

poor and vulnerable groups. In reality, these interventions only improve equity if they are purposefully designed and implemented to cover poor populations, reduce their out-of-pocket spending, and increase their access to quality health care services.

5. User fee exemption policies need to be thoughtfully considered within a broader health financing strategy, not as a series of isolated changes or uniquely in relation to specific health services. Exemption policies must be accompanied by reform measures that respond to the resulting increased demand and to the replacement of lost facility-based income. User fee exemptions can overstretch resources available at public facilities causing a negative impact on the level and quality of services provided, encouraging informal fees, and forcing the population to seek alternative care, which tends to be either more expensive (private providers) or ineffective (traditional healers).
6. Small, isolated CBHI schemes have limited impact on equity and are vulnerable to bankruptcy. Risk pools need to be larger and more diversified, and may require government subsidies.

Resource Tracking

7. Although NHA have proven to provide valuable data for policy development, Health Systems 20/20 has identified four critical lessons related to successful local institutionalization:

- Countries should have an explicit government mandate to produce health resource tracking data. Strong government ownership of the process is essential to gain buy-in from stakeholders, coordinate and/or harmonize various resource-tracking efforts in the country, and ensure use of the results.
- NHA results have the greatest policy traction when they are distilled into key policy messages, translated into concise dissemination products targeted to specific stakeholders, and delivered as part of a deliberate communications strategy.
- The cost of NHA can be dramatically reduced by building capacity of local and regional technical institutions to be providers of technical assistance, reducing reliance on expensive international consultants.
- Intuitive, user-friendly software, such as the NHA Production Tool, can simplify and streamline data management and analysis for NHA, making the process faster, easier, less expensive, and more consistent over time.

Performance-based Incentives

8. When carefully designed and implemented, PBI have considerable potential to strengthen health systems and improve health outcomes. Because incentives are so powerful, however, poorly designed PBI schemes can skew behavior that leads to unintended results. Continued research is needed on effective design and implementation arrangements with a focus on how to motivate improved quality as well as how to increase quantities of services provided.

Health Governance

9. Better governance cannot be treated as a stand-alone activity, but instead should be integrated across all parts of the health system. Governance structures and processes influence how actors in the system are linked and interact, and ultimately affect the quality and sustainability of health services. To ensure strong governance, improved structures and processes should to be woven into the health systems strengthening interventions from the beginning.

Costing and Sustainability

10. Historically, countries have used costing information to advocate for either more funding or, as in cost-effectiveness studies, new interventions. However, cost-effectiveness does not measure

efficiency of implementation, and in the current economic climate, efficiency has become as important as effectiveness. Local health program implementers and partners must deliver cost-effective interventions sustainably, at scale and in a consistently efficient manner, as countries increase their fiscal responsibility for health. As a result, rather than building generic costing tools, Health Systems 20/20 has unpacked unit cost data to measure the efficiency with which resources are turned into services. We have found that working with government and donor programs to 'connect the dots' – showing how cost and output data can strengthen policy development, program design, program management, target setting, and program evaluation – has been one of the most valued aspects of the project's technical assistance.

Human Resources for Health

11. Countries are unable to attend to population health needs without an adequate number and range of well-trained, accessible health care workers. In addressing this dilemma, consideration should be given to several key issues in the process of developing and implementing a sustainable national HRH strategy – namely, financing, management, and compensation. National strategies need to be aligned with realistic (current and future) economic and labor workforce realities. Management of the health care workforce requires capable management structures, performance monitoring systems, and mechanisms, primarily information reporting systems, to ensure accountability at the government, facility, and provider levels. Adequate compensation is key to a productive, motivated, and stable workforce, and requires thoughtful and deliberate policies targeted at both the financial and nonfinancial interests of providers and institutions.

Capacity Building

12. Building the capacity of local and regional institutions, such as schools of public health, NGOs, and consulting firms, minimizes reliance on external technical assistance, increases country ownership, and boosts the sustainability of the overall health system. This important process requires transferring both technical expertise and effective management capacity. These institutions, however, may not be able to meet all their needs, and external technical assistance will still be necessary. Building management capacity is most effective if addressed in a comprehensive approach that includes the full range of organizational competencies and if implemented over several years.

Measuring and Monitoring Health System Performance

13. Measuring the impact of health systems strengthening interventions can be more challenging than measuring the impact of a targeted service delivery project because the interventions are multifaceted and even further removed from service outputs and health outcomes. Even those projects working directly with doctors and patients find it difficult to measure and attribute impacts on health status resulting from specific programs, due to confounding contextual factors (such as economic growth, political change, or other concurrent interventions) and weak routine health information systems. Systems strengthening interventions often – and ideally – involve nationwide policy changes.

    As a result, there may be no comparison group to allow for a controlled impact evaluation. Health Systems 20/20, however, has creatively used existing M&E tools, techniques, and approaches to track health system performance. The project's Health Systems Database, which consolidates and benchmarks health system performance indicators from many sources, provides a starting point to assess a country's health system. In Ghana, we conducted a pre- and post-evaluation of the National Health Insurance Scheme and found that this major health financing policy had led to increased use of some services (e.g., curative care), but no change in others (e.g., institutional deliveries). In Ethiopia, we are using a mixed methods approach to measure whether facility-level revenue retention improves health worker productivity and service availability. Improved metrics and

methods are still needed to systematically capture the effects of complex systems strengthening interventions, including those that generate evidence, build institutional capacity, contribute to policy making, and improve management.

In Summary

In conclusion, Health Systems 20/20 is proud to have contributed to advancing the technical work and thought leadership in the field of health system strengthening. An important evolution in the project's approach was to shift its focus from health system support to health system strengthening, and to shift its emphasis from strengthening systems directly to increasing the ability of *countries* to strengthen their own health systems. Country ownership of health systems strengthening will be a critical step to achieving sustainability and, ultimately, universal health coverage.

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ANNEX A: HEALTH SYSTEMS 20/20'S PARTNERS

Name	Country Location	Country of Implementation
African Health Project	Nigeria	Nigeria
Alliance Group	Malawi	Malawi
American University of Beirut	Lebanon	Lebanon
AMS Consulting Limited	India	India
Association of Nigerian Physicians in the Americas	USA	USA
Attain Enterprise Solutions	Kenya	Kenya
Austral-COWI, Lda	Mozambique	Mozambique
Avo Health Limited	Nigeria	Nigeria
Center for African Family Studies	Kenya	Kenya
Center for Community Health Research and Development	Vietnam	Vietnam
Central Agency for Public Mobilization and Statistics	Ethiopia	Ethiopia
Centre Africain d'Etudes Superieurs en Gestion	Senegal	Senegal
Centre d' Appui de la Reserche et a la Formation (CARE-F)	Mali	Mali
China Health Economics Institute	China	China
Christian Health Association of Sudan	South Sudan	South Sudan
Clarke Architects	Namibia	Namibia
Coach Africa Limited	Uganda	Uganda
Coordinating Assembly of Non-Governmental Organisations (CANGO)	Swaziland	Swaziland
East, Central and Southern African Health Community	Tanzania	Tanzania
Eckhard Siedentopf Architectural Design	Namibia	Namibia
Ecole Nationale de Statistique et Economie Appliquée	Cote d' Ivoire	Cote d' Ivoire
Emcon Consulting Group	Namibia	Namibia
Federal University of Technology (FUT)	Nigeria	Nigeria
Gerry Roxas Foundation	Philippines	Philipines
GRM International	Zimbabwe	Zimbabwe
Health Research Unit, Ghana Health Service	Ghana	Ghana
Health Strategy and Policy Institute (HSPI)	Vietnam	Vietnam
Institut de Sante et Developpement (ISED)	Senegal	Benin and Senegal
Institut National de La Statistique (INSTAT)	Cote d' Ivoire	Cote d' Ivoire
Institut Régional de Santé Publique de Ouidah - Bénin	Benin	Benin
Institute for Development Management	Swaziland	Swaziland

Name	Country Location	Country of Implementation
Institute of Population, Health and Development	Vietnam	Vietnam
International Senior Lawyers Project	USA	Liberia
Isoko District Medical Office	Zambia	Zambia
Kapiri Mposhi District Health Office	Zambia	Zambia
Kinshasa School of Public Health	DRC	DRC
Knowing Ltd	Kenya	Kenya
Liberia National Aids Commission	Liberia	Liberia
Maer Associates	Kenya	Kenya
Makerere University School of Public Health	Uganda	Uganda
Management International	Malawi	Malawi
Miz-Hasab Research Center	Ethiopia	Ethiopia
Mkushi District Health Office	Zambia	Zambia
Mpika Hospital	Zambia	Zambia
Mporokoso District Health Office	Zambia	Zambia
Mullan & Associates (Pty) Ltd	Botswana	Botswana
PS Consulting	Uganda	Lesothoa and Uganda
Qualitas	Cote d' Ivoire	Cote d' Ivoire
Reproductive Health & Training & Research Center	Senegal	Senegal
Reseau d'Expertises en Santé et Development	Mali	Mali
Rwanda School of Public Health	Rwanda	Rwanda
Serenje District Health Office	Zambia	Zambia
Siyelo Software	South Africa	Rwanda and South Africa
Stratec-Arc	Cote d' Ivoire	Cote d' Ivoire
Strong NKV	DRC	DRC
Summit Consulting Group	Malawi	Malawi
Union Technique de la Mutualité	Mali	Mali
University of KwaZulu Natal (HEARD)	South Africa	South Africa
Vietnam Medical Software Joint Stock Company	Vietnam	Vietnam
Yemeni Midwives Association	Yemen	Yemen
Zaria Institute National Tuberculosis and Leprosy Training Center	Nigeria	Nigeria

ANNEX B: HEALTH SYSTEMS 20/20'S ACTIVITY LIST BY CORE AND FIELD SUPPORT FUNDING

CORE COMMON AGENDA
NHA Conferences
Health Systems Action Network (HSAN)
Global HIV Initiative Network (GHIN)
Governance
Capacity Building
Integration
Country Demo-Development
Country Demo-Liberia
Country Demo-India
Monitoring and Evaluation, Project reporting
NHA Symposium
Global Access Database
NHA Thought Leadership
Special Studies
Country Demo - PBF Workshop
Venture Fund
Country Demo Senegal
Benchmarking
African Research Institutions
Fragile States
Institutional Capacity Building
Health Systems Assessment
Financing
Capacity Building for Health Systems Strengthening of Local Institutions
PBF Improving Efficiency
GHI Health Systems Strengthening Field Rollout
Nutrition Scale-up and Integration
International ME Universal Coverage
Health Systems Strengthening Blocks Analysis of Global Fund Grants
Health Systems Strengthening Training Phase II
Mali CBHF Evaluation
WHO GHED PT Collaboration
Measure Result Conference
Project Reporting GHC and Videos
Project Reporting Briefs
CORE REPRODUCTIVE HEALTH
Reproductive Health Repositioning
Contraceptive Security
Health Insurance

	Pay for Performance RH
	Family Planning Reproductive Health Resources
	Family Planning Insurance Analysis
	SWAP
	SWAP Abidjan Field Office
	SWAP National Institute of Health Workers (INFAS)
CORE MATERNAL AND CHILD HEALTH	
	Safe Birth Africa
	Maternal Health
	Mainstreaming
	NHA
	Child Health-CBHF
	PMNCH Costing Tools Selection
	GAVI
	CBHF Capacity Building
	Performance-based Financing
	Maternal Child Health Governance
	Health Insurance for MCH
	MCH Marginal Budgeting for Bottleneck
	Ghana Barriers to Delivery
	Ghana Evaluation Report
	Health Systems Strategy
	New P4P Scan
	P4P Countdown and MDG
	IWG and GAVI
	New Ghana Barriers
	Technical Assistance to Scale-up National Health Insurance Plan
	Maternal Health Publications
	Technical Assistance to Evaluate P4P in GHI Countries
	P4P Enhance Blueprint Guide
	Zambia Marginal Budgeting for Bottleneck
	Kenya Marginal Budgeting for Bottleneck
	Ethiopia Marginal Budgeting for Bottleneck Case Study
	MCH Evidence Summit
CORE OHA DIRECTED	
	NHA
	UNAIDS
	HCD Assessment and HR Productivity Improvement
	HIV/AIDS Services Sustainability Analysis
	Expanded ARTIS
	Strengthening Leadership
	OHA IVCTD
	MTP Evaluation Namibia
	Health Systems Assessment
	OHA SWEF
	Namibia Health Systems Review and NHA
	P4P HR Retention

	Management Strengthening
	HIS Strengthening Vietnam
	Health Systems Strengthening Nigeria
	GIS Mapping Cote d'Ivoire
	The Third One Strategic Information Strengthening
	Organizational and Management Capacity Strengthening
	SWEF Leadership
	Compact Country Funds
	HRH Policy
	Sustaining Resource Tracking for HIV/AIDS
	HIV/AIDS Program Sustainability Analysis Tool
	FBO Comparative Analysis Malawi
	FBO Comparative Analysis Uganda
	Testing Financial and Non-financial Retent
	Zimbabwe HSA
	HAPSAT/NHA Linkages
	Liberia NAC
	Lesotho HSA
	Building Governance in Health Systems Strengthening Methodologies
	Kenya HAPSAT
	DRC HAPSAT
	South Sudan HAPSAT
	Guyana HAPSAT
	Lesotho HAPSAT
	GIS for National Program Planning
	Guyana HSA
	Health Systems Assessment Priority Intervention
	Costing HIV/AIDS Strategies
	Tanzania HSA
	HAPSAT Supplement
	NHA Production Tool
	Kenya HSA
	SHOPS Private Sector Collaboration
	Angola HIV/AIDS Costing
	HSA Stakehldr Engagement
	Vietnam OD
	Botswana HIVAIDS Costing
	Health Info - Public Private Partnerships
	Pre-Service Education Review
	Health Systems Strengthening Methodologies Institutionalization
	HIS Directorate Namibia
	USG Health Systems Strengthening Training
	Wage Study
	SWEPT Health System Performance Tracking Tool
	Ethiopia HSA Health Systems Assessment
	Benin HSA
	Swaziland HAPSAT
	Sierra Leone HAPSAT

	Trinidad Costing
	OHA Mozambique Rollup
	Mozambique Twinning
	Mozambique PBI
	Mozambique MMAS
	Mozambique HSA
	Sustainability Guide
	Sustainability Guide Supplement
	OHA Suriname Costing
	Benin HAPSAT
	Evaluation Framework for GF Health Systems Strengthening Grants
	Ensuring Efficiency in HIV Treatment Service & Delivery
	Measuring CSS
	HIV Insurance Mapping
	PBI Supply Chain Guide
	Task-shifting Economic Impact
	Namibia Task Shifting Study
CORE OID DIRECTED	
	Mainstreaming
	Malaria
	Other Infectious Diseases
	OID Health Systems Strategy
	Costing Malaria in Mali
FIELD SUPPORT AFRICA REGION	
RWANDA	
	Rwanda NHA
	Rwanda M&E Capacity
	Rwanda Drug Efficacy
	Rwanda ESR Preparedness
	HIV Costing and Sustainability Assessment
	Governance Assessment
	Rwanda Policy Support
	Rwanda Home Office Management
	Rwanda RT Harmonization
AFRICA REGIONAL BUREAU	
	Africa Regional Bureau-Ghana Survey
	Africa Bureau-RH NHA
	NHA Uganda
	Health Financing
	Africa Bureau CBHF
	NHA Policy Impact
	NHA Institutionalization/Resource Tracking
	Health Insurance
	Institutional Capacity Building
	Africa Bureau Liberia
	Africa Bureau Performance-Based Financing
	Africa Bureau Francophone Health Insurance Conference

	Africa Bureau Health Insurance follow-up
	Africa Bureau Regional Events
KENYA	
	Kenya-ARTIS
	Kenya-NHA Institutionalization
	Health Resource Track
	Kenya Health System Assess
	Kenya NHA
GHANA	
	Ghana-Survey
REDSO	
	REDSO-P4P
	REDSO-NHA and SHI
COTE D'IVOIRE	
	Cote D'Ivoire Field Work
	Ivoire HRIS Strengthening
	Ivoire Long Term Institutional Capacity Building
	Ivoire INFAS Library Strengthening
	Ivoire National Institute of Health Workers
	Ivoire Incentive Scheme - Health Workers
	Ivoire Pre-Service Training and Real World Needs
	Ivoire NHA Activity
	Ivoire HSA Activity
	Ivoire TA for HRM
	Ivoire MLS Capacity Building
	Ivoire Capacity Building
	MFFAS Capacity Strengthening
	MSPH Task Shifting Approaches
	Strengthen School of Social Work Library
	MSPH DIEM Infrastructure Mgmt Strengthening
	Technical Assistance to DIPE for GIS
NIGERIA	
	Nigeria TB Strategy
	TB Nigeria
	Nigeria HR Assessment
	Nigeria Supportive Supervision
	Nigeria Health Sector Strategies
	Nigeria GIS
	Public Expenditure Management Review
	SWEF HIV Programming Opportunities
	HSA Priority Intervenetions
	Med Education Curricula Review
	Financial Management for HS Managers TOT
	National TB Services Improvement
	Nigeria ART Decentralization
	HIV Prevention Non-State Actors

	Non-Health Ministries and Agencies in HIV/AIDS
	Nigeria Site Office Expenses
	Nigeria HIS Strengthening
MOZAMBIQUE	
	Mozambique CNCS (NAC)
	Mozambique NHA
	Mozambique MOH Global Fund
	Mozamb MMAS
	Mozambique Performance-based Financing
	Mozambique CBC Costing
ETHIOPIA	
	Ethiopia HAPSAT
	Ethiopia SWEF
	Ethiopia Rev Assessment
	HIV/AIDS Service Delivery Cost Study
	Ethiopia HSA
	Ethiopia HEWs Assessment
	Ethiopia HCF and HFGov and HEProg Technical Paper
TANZANIA	
	Tanzania Costing
	Tanzania Public Expenditure Review
	Tanzania MCH Costing
	Tanzania NHA
	Tanzania OVC Costing
	Tanzania HBC Costing
	Tanzania Public Expenditure Review Round 2
	Tanzania HIV AIDS PER
UGANDA	
	Uganda Health System Assessment
DEMOCRATIC REPUBLIC OF CONGO	
	DRC Health Finance
	DRC AFENET
	DRC Kinshasa School of Public Health
	DRC PNLS Strengthening
	DRC PBF/Mutuelles
	DRC NHA Water/Hygiene
	Global Fund SubRecipient Assessment
	DRC Cost Share
	DRC PRONANUT
	DRC PMTCT Capacity Building
SENEGAL	
	Senegal Health System Assessment
	Senegal PBF
NAMIBIA	
	Namibia Infrastructure Strategy
	Nambia NHA

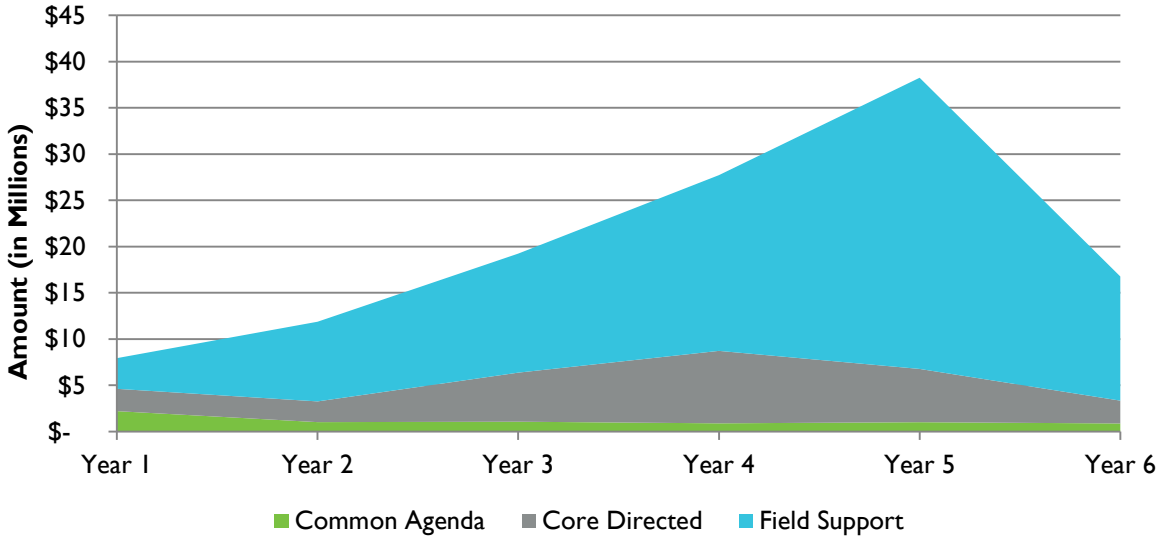
	NHA Institutionalization
	Namibia Human Resources for Health
	Namibia HIS Directorate
	Health Care Finance Strategy
	Resource Allocation
LIBERIA	
	Liberia Health Finance Policy
	Liberia National Health Accounts
	Liberia Financial Support and Capacity Building
	Liberia PBF
	Liberia JFK Hospital
	Liberia HIV/AIDS Strategy
	Liberia Family Planning Advocacy
	Liberia Legal Support
	Liberia Private Sector Assessment
	Liberia User Fees and Costing
RHAP	
	RHAP Regional Move
	RHAP Swazi HRH Costing
MALI	
	Mali User Fees Study
	Angola Rollup
	Angola HSA
MALAWI	
	Malawi District Drug Management
	NMCP Management Training
	Malawi NHA
	Malawi FBO Comparative Study Field Supported
	Malawi PBI
LESOTHO	
	Lesotho HRH Costing
	Lesotho HRH Mentoring
	Lesotho HAPSAT
BOTSWANA	
	Botswana NHA
	Botswana Resource Mobilization
	Botswana NHA Institutionalization
SWAZILAND	
	Leadership Training
	Strengthening Swazi HRH Costing
ZIMBABWE	
	Zimbabwe HSA Implementation
SOUTH SUDAN	
	South Sudan Leadership and Management Training
	South Sudan Financial Management Training

FIELD SUPPORT ASIA and NEAR EAST
YEMEN
Yemen-IHD (HIS)
Yemen-HS Stewardship
Yemen-Routine Immunization
Yemen-Midwives
Yemen-Community Awareness
ASIA AND NEAR EAST REGIONAL BUREAU
ANE Bureau Task 1
INDIA
India Insurance
India Insurance for HIV
EGYPT
Egypt National Health Accounts
Egypt Site and HQ Office
Egypt Workforce Planning
Egypt HIO
Egypt Leadership Academy
Egypt Health System Assessment
Egypt Benchmarking
HSR Case Study
Egypt Social Insurance
Health Sector Reform Conference
VIETNAM
Vietnam HCMC Evaluation
Vietnam Health System Assessment
WEST BANK/GAZA
West Bank/Gaza Expenses
INDONESIA
Indonesia Private Sector
Indonesia Decentralization
Indonesia Insurance Impact
AFGHANISTAN
Afghanistan National Health Accounts
HEFD Capacity Building
NGO Financial Management
Revenue Generation
Insurance Feasibility & Innovative Financing
Innovative Financing
BPHS Costing
Capacity Building for Results
BANGLADESH
Bangladesh Health Systems Stregthening

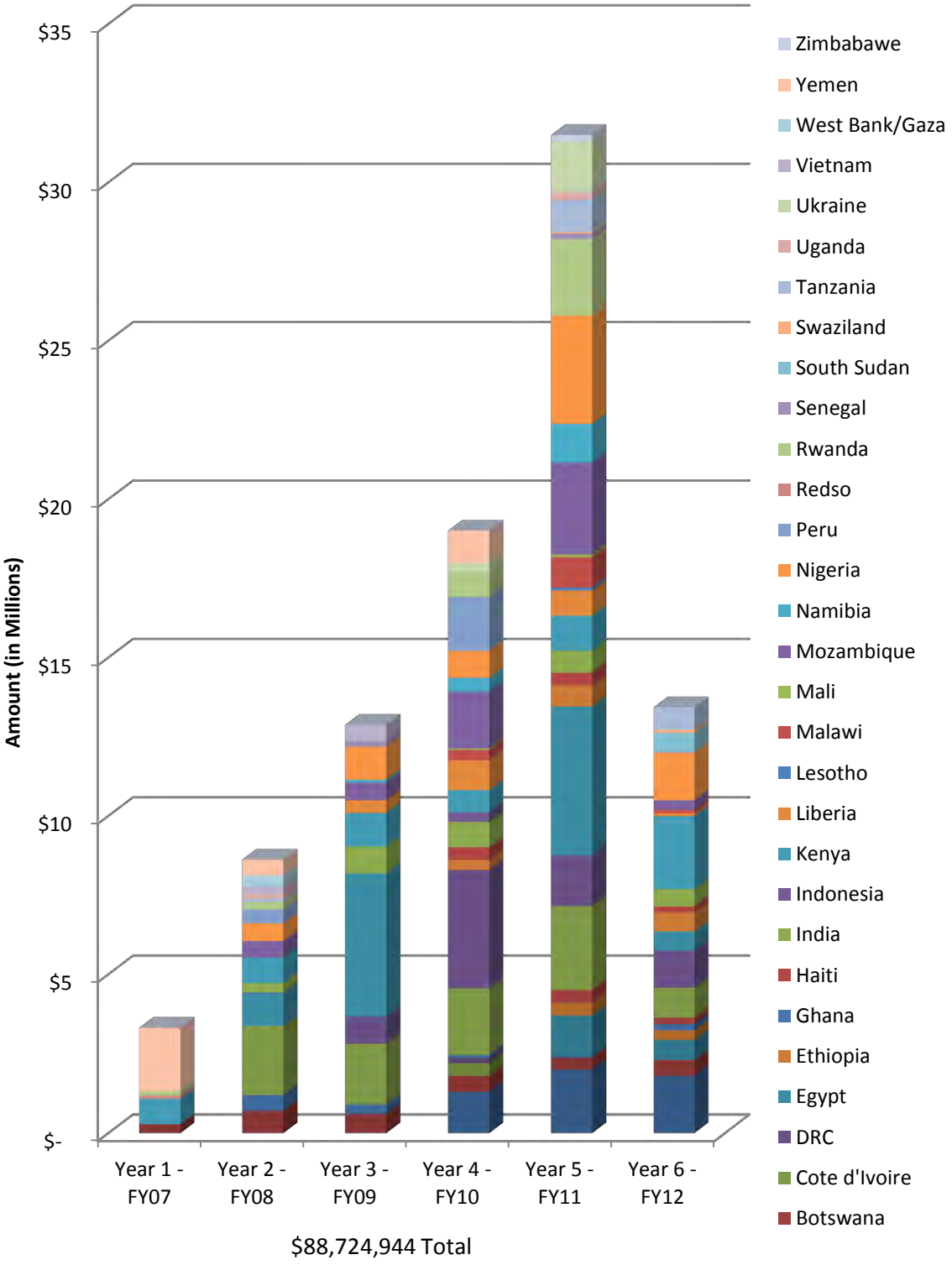
FIELD SUPPORT EASTERN EUROPE REGION
UKRAINE
Ukraine Policy
Ukraine HIV and TB HSA
FIELD SUPPORT LATIN AMERICA AND THE CARIBBEAN
PERU
Peru HS2020 PRAES
BOLIVIA
NHA Institutionalization and UHC
HAITI
Haiti HAPSAT
Haiti HIV Service Costing Study
Haiti Scoping
Resource Tracking Study
BARBADOS
Caribbean Stakeholder Meeting
Caribbean HSA for Organization of Eastern Caribbean States
Jamaica PAHO HSA
Suriname Costing
SLU Hospital Costing
Caribbean Technical Coordination
St. Kitts NHA
Antigua Costing
Dominica NHA

ANNEX C: MAP OF COUNTRIES WHERE HEALTH SYSTEMS 20/20 WORKED

ANNEX D: FUNDING OF HEALTH SYSTEMS 20/20 PROJECT

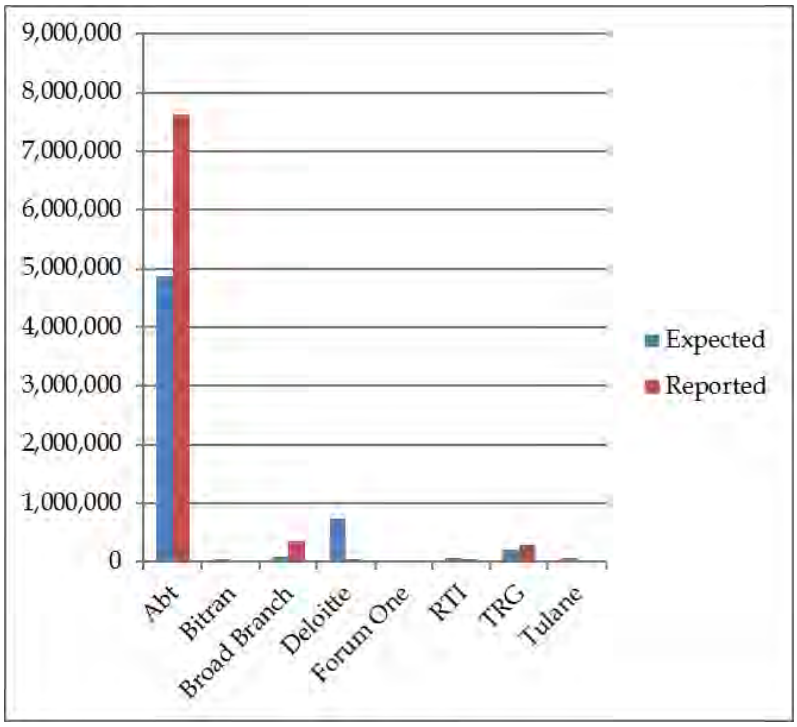


HEALTH SYSTEMS 20/20 FIELD SUPPORT FUNDING

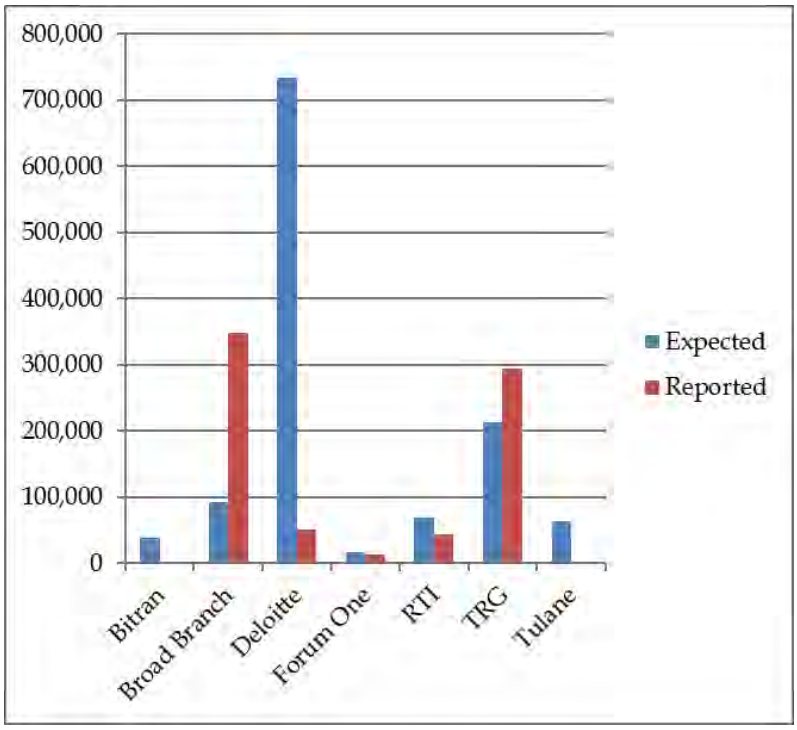


$88,724,944 Total

LIFE OF PROJECT PARTNER COST SHARE CONTRIBUTION, AS OF JULY 31, 2012



LIFE OF PROJECT PARTNER COST SHARE CONTRIBUTION, AS OF JULY 31, 2012 (SUB-PARTNERS ONLY)

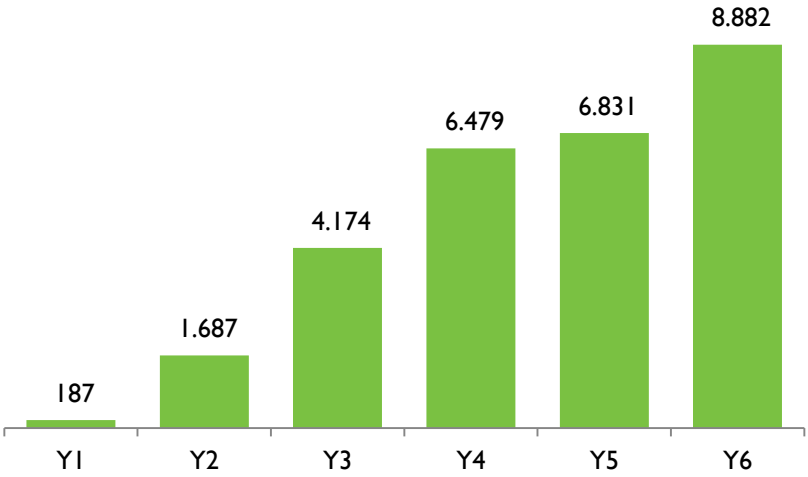


ANNEX E: WEBSITE AND SOCIAL MEDIA OUTREACH

WEB SITE

Visits to the Health Systems 20/20 project website steadily increased over the six-year life of the project. The graph below illustrates the exponential growth of web site usage from Year 1 to Year 6.

HEALTH SYSTEMS 20/20 - AVERAGE DAILY PAGEVIEWS YEAR 1 - YEAR 6



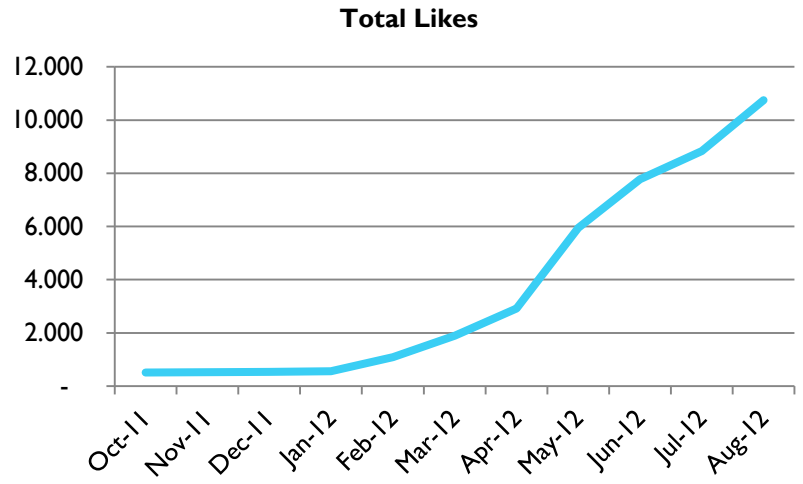
Visiting Countries

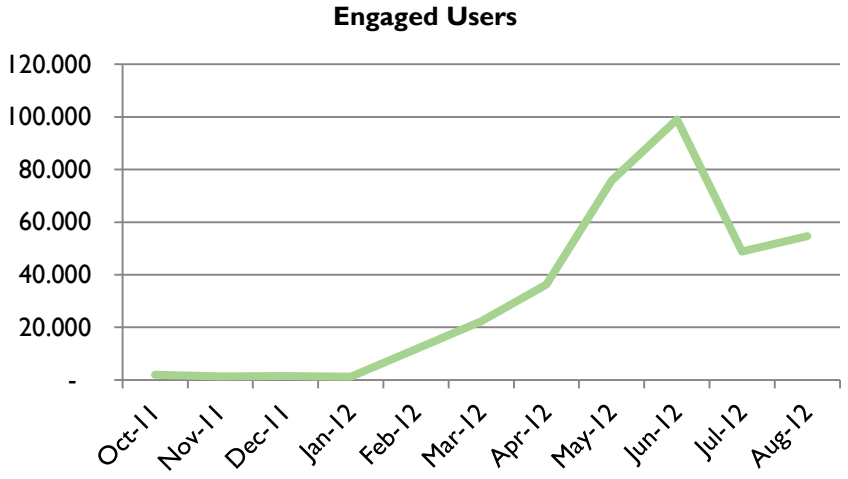
The Health Systems 20/20 web site achieved a wide global audience with visitors from almost every country in the world. In Year 6, users from 183 countries accessed the site. The top 20 countries* visiting the site in Year 6 include:

1. China
2. United Kingdom
3. India
4. France
5. Canada
6. Sweden
7. Germany
8. South Africa
9. Australia
10. Russian Federation
11. Kenya
12. Japan
13. Peru
14. Ghana
15. Mexico
16. Nigeria
17. Egypt
18. Uganda
19. Brazil
20. Philippines

*Excludes the United States

FACEBOOK


Total Likes
12.000
10.000
8.000
6.000
4.000
2.000
-
Oct-11
Nov-11
Dec-11
Jan-12
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12


Engaged Users
120.000
100.000
80.000
60.000
40.000
20.000
-
Oct-11
Nov-11
Dec-11
Jan-12
Feb-12
Mar-12
Apr-12
May-12
Jun-12
Jul-12
Aug-12

ANNEX F: HEALTH SYSTEMS STRENGTHENING TOOLS USED BY COUNTRY

Country	NHA	HSA	HAPSAT	OBFR	NHA Production tool	HRT	GIS
Afghanistan	■						
Angola		■					
Antigua and Barbuda		■					
Benin		■	■				
Botswana	■						
Cote d'Ivoire	■	■	■				■
Democratic Republic of Congo	■		■				
Dominica	■	■			■		
Egypt	■						
Ethiopia	■	■	■	■	■		
Grenada		■					
Guyana		■	■				
Haiti	■		■		■		
Kenya	■	■	■				
Lesotho		■	■				
Liberia	■						
Malawi	■						
Mozambique		■		■			
Namibia	■	■					
Nigeria		■	■				■
Rwanda	■					■	
Senegal		■					
Sierra Leone			■				
South Sudan		■	■				
St. Kitts and Nevis	■	■			■		
St. Lucia		■					
St. Vincent and the Grenadines		■					

Country	NHA	HSA	HAPSAT	OBFR	NHA Production tool	HRT	GIS
Swaziland			■				
Tanzania	■	■		■			
Uganda	■	■					
Ukraine		■					
Vietnam	■	■	■				
Yemen							■
Zambia			■				
Zimbabwe		■					

*Shading indicates tool was used in-country

ANNEX G: M&E INDICATORS

This annex lists M&E indicators and progress toward them that can be demonstrated by Health Systems 20/20 activities. The indicators are drawn from the original Health Systems 20/20 Monitoring and Evaluation Plan. In that plan, 36 indicators were linked to the project's four Intermediate Results (financing, governance, operations and capacity building). At the end of the project's third year, however, the Health Systems 20/20 team re-conceptualized the project's overall approach and identified eight strategies to address the constraints that undermine the equity, efficiency, quality, and effectiveness of priority health services. As such, the indicators identified earlier have been adapted to reflect the work that was done under these eight strategies. In addition, given the cross-cutting nature of some strategies, such as governance, and the intentional integration of strategies, there is some overlap among indicators and activities.

FINANCIAL RISK PROTECTION

Indicator	Country	Activity	
		Progressed	Achieved
FRP 1 : New or strengthened risk-sharing mechanisms covering PHN priority services supported with HS2020 assistance	India		Increasing financial access to care in Delhi
	Afghanistan		Determining the feasibility of health insurance
	Benin		Follow-up to the Health Insurance Conference
	Rwanda		Using CBHF schemes to improve Child Health
	Mali		Community-based Health Financing
	Africa (Kigali,Rwanda)		Francophone Health Insurance Conference for 8 countries (Benin, Burkina Faso, Cameroon, Cap Verde, Guinea Bissau, Mali, Mauritania, Senegal)
	Africa (Accra, Ghana)		Anglophone Health Insurance Conference 8 countries (Ethiopia, Kenya, Liberia, Nigeria, Sierra Leone, Tanzania, Uganda, Zambia)
	Africa		Africa Bureau - Health Insurance Conference Follow-up
	Liberia		Liberia Health Finance Policy Development
	India		Mainstreaming HIV care in insurance
	Egypt		Strengthening Egypt's Health Insurance Organization

FRP 2: Risk-sharing mechanisms supported with HS20/20 assistance showing a x percent increase in the number of individuals covered	India		Increasing financial access to care in Delhi
	Mali	Community-based Health Financing: The first phase of the CBHI roll-out was intended to start in 2012 and cover three regions and about 1.2 million people, or about 40 percent of the targeted population. During this three-year first phase, the goal is to establish 150 schemes in 21 districts. Twelve districts will create CBHI networks. Based on lessons learned from this phase, CBHI will then be rolled out in Mali's other five regions.	Because of the political unrest in Mali, the roll-out was still on hold in September 2012
FRP 3 : Countries with risk-sharing mechanisms covering more than 20 percent of the population and including households in the poorest two quintiles in their coverage	Mali		C-section user fee evaluation
	Rwanda		Using CBHF schemes to improve Child Health
	Ghana		Evaluation of the National Health Insurance Scheme
	Egypt		Strengthening the Health Insurance Organization

RESOURCE TRACKING

Indicator	Country	Progressed	Achieved
		Supported NHA exercise/process	NHA completed and disseminated
RT 1 : Countries in which government institutions regularly collect and make publicly available NHA and other financial data for the health sector through Health Systems 20/20 assistance	Afghanistan		FY2008
	Botswana		FY2007/8-2009/10
	Cote d'Ivoire		FY2007-2008
	Dominica	FY2010/11	
	DRC		FY2008-2009
	Egypt		FY2007/8, FY2008/9
	Ethiopia*	FY2011	
	Haiti	FY2010/11	
	Kenya		FY2005/6, FY2009/10
	Liberia		FY2007/8, FY2009/10
	Malawi		FY2006/7-2008/9
	Mozambique		FY2004-2006
	Namibia		FY2001/2-2006/7, FY2007/8-2008/9
	Rwanda		FY2006, FY2009/10
	St. Kitts & Nevis	FY2010	
	Tanzania		FY2002/3-2005/6, FY2009/10
	Uganda	FY2009/10	FY2006/7 (not disseminated)
	Vietnam	FY2009	FY2006

*Ethiopia NHA led by USAID's Health Sector Financing Reform (HSFR) project; targeted TA provided by Health Systems 20/20

Indicator	Country	Progressed	Achieved
		NHA used to advocate for increased health budget	Demonstrated increase or commitment to increase government health budget
RT 2: Countries increasing the amount of resources budgeted for health as a result of improved availability and use of NHA data produced with HS 20/20 assistance	Afghanistan		
	Botswana		
	Cote d'Ivoire		
	Dominica	NHA ongoing	
	DRC		
	Egypt		
	Ethiopia*	NHA ongoing	
	Haiti	NHA ongoing	
	Kenya		
	Liberia		
	Malawi		
	Mozambique		
	Namibia		
	Rwanda		
	St. Kitts & Nevis	NHA ongoing	
	Tanzania		
	Uganda		
	Vietnam		

*Ethiopia NHA led by USAID's Health Sector Financing Reform (HSFR) project; targeted TA provided by Health Systems 20/20

Note: *Shading indicates progress or achievement during the life of the project (2006-2012)

Relevant indicator	Country	Progressed	Achieved
		Capacity building for in-country technical staff on analysis and use of health financing data for policy	Findings from resource tracking studies incorporated into strategy or policy documents, forums
RT 3: Countries in which policy makers and program managers improve their analysis and use of health financing data for policy decisions or program management through HS 20/20 assistance	Afghanistan		
	Botswana		
	Cote d'Ivoire		
	Dominica		
	DRC		
	Egypt		
	Ethiopia*		
	Haiti		
	Kenya		
	Liberia		
	Malawi		
	Mozambique		
	Namibia		
	Nigeria		
	Rwanda		
	St. Kitts & Nevis		
	Tanzania		
	Uganda		
	Vietnam		
	West Africa region**	Training of CESAG (Dakar, SN)	
	East Africa region**	Training of ECSA (Arusha, TZ)	ECSA carried out NHA in Uganda

*Ethiopia NHA led by USAID's Health Sector Financing Reform (HSFR) project; targeted TA provided by Health Systems 20/20

**Capacity-building for regional technical institutions to be providers of TA for NHA estimations in the region

Note: *Shading indicates progress or achievement during the life of the project (2006-2012)

Relevant indicator	Country	Progressed	Achieved
		NHA policy use and communication workshop and/or capacity building	Demonstrated use of NHA results by civil society for health advocacy
RT 4 : Countries in which NHA data produced through HS 20/20 assistance is available to civil society stakeholders	Afghanistan		
	Botswana		
	Cote d'Ivoire	Not part of activity	
	Dominica	NHA ongoing	
	DRC	Not part of activity	
	Egypt	Not part of activity	
	Ethiopia*	NHA ongoing	
	Haiti	NHA ongoing	
	Kenya		
	Liberia		
	Malawi	Not part of activity	
	Mozambique	Not part of activity	
	Namibia		
	Rwanda		
	St. Kitts & Nevis	NHA ongoing	
	Tanzania		
	Uganda	Not part of activity	
	Vietnam	Not part of activity	

*Ethiopia NHA led by USAID's Health Sector Financing Reform (HSFR) project; targeted TA provided by Health Systems 20/20

Note: *Shading indicates progress or achievement during the life of the project (2006-2012)

Relevant indicator	Country	Progressed	Achieved
		Implemented health resource tracking study(ies) or system(s)	Findings from resource tracking studies used in monitoring reports/assessments
RT 5: Countries which have successfully implemented mechanisms to track resources and monitor performance of Global health initiatives through HS 20/20 assistance	Afghanistan	NHA, Hospital MIS, RT system	
	Botswana	NHA	
	Cote d'Ivoire	NHA	
	Dominica	NHA ongoing	
	DRC	NHA, HH survey, PLHIV survey	
	Egypt	NHA	
	Ethiopia*	NHA, UNGASS, HH survey, PLHIV survey	
	Haiti	NHA ongoing	
	Kenya	NHA	
	Liberia	NHA	
	Malawi	NHA, HH survey, PLHIV survey	
	Mozambique	NHA	
	Namibia	NHA, NASA	
	Nigeria	PEMR	
	Rwanda	NHA, NASA, RT system	
	St. Kitts & Nevis	NHA ongoing	
	Tanzania	NHA, PER	
	Uganda	NHA ongoing	
	Vietnam	NHA, PLHIV survey	

MIS = Management Information System; RT = Health Resource Tracking HH = Household; PLHIV = People living with HIV; PER = Public Expenditure Review
PEMR = Public Expenditure Management Review; UNGASS = UN General Assembly Special Session (HIV/AIDS indicators)
*Ethiopia NHA led by USAID's Health Sector Financing Reform (HSFR) project; targeted TA provided by Health Systems 20/20
Note: *Shading indicates progress or achievement during the life of the project (2006-2012)

PERFORMANCE-BACED INCENTIVES (PBI)

Indicator	Country	Progressed	Achieved
PBI 1: Health institutions implementing performance-based payment systems for delivering PHN priority services through Health Systems 20/20 assistance	Democratic Republic of Congo, Ghana, Kenya, Liberia, Malawi, Nigeria, Tanzania, Uganda, Zambia		Africa regional PBI Workshop
	Afghanistan, Bangladesh, Cambodia, India, Indonesia, Nepal, Pakistan, Philippines, Vietnam		Asia regional PBI workshop
	Liberia		P4P-RH
	Burundi		P4P-RH
	Kenya		P4P-RH
	Indonesia		PBI Governance Case Study
	Burundi		PBI Governance Case Study
	Mexico		PBI Governance Case Study
	Belize		PBI Governance Case Study
	Benin		PBI Governance Case Study
	Brazil		PBI Governance Case Study
	Ethiopia		PBI Governance Case Study
	Egypt		PBI Governance Case Study
	India		PBI Governance Case Study
	Kenya (MSK and Vouchers)		PBI Governance Case Studies
	Mozambique		PBI Governance Case Study
	Pakistan		PBI Governance Case Study
	Philippines		PBI Governance Case Study
	Tanzania		PBI Governance Case Study
	Uganda		PBI Governance Case Study
	Global		*Paying for Performance in Health: Guide to Developing the Blueprint*
	Mozambique		PBI
	Africa		Africa Bureau - Performance-Based Financing
	DRC		PBF/Mutuelles
	Senegal		PBF
	Malawi		PBI
	Global		PBI Supply Chain Guide
PBI 2: Instances in which the implementation of performance-based payment systems has resulted in improved performance in delivering PHN priority services through Health Systems 20/20 assistance	Democratic Republic of Congo, Ghana, Kenya, Liberia, Malawi, Nigeria, Tanzania, Uganda, Zambia		Africa regional PBI Workshop
	Afghanistan, Bangladesh, Cambodia, India, Indonesia, Nepal, Pakistan, Philippines, Vietnam		Asia regional PBI workshop
	Kenya		P4P-RH
	Liberia		P4P-RH
	Burundi		P4P-RH
	Africa		Africa Bureau - Performance-Based Financing

GOVERNANCE

Indicator	Country	Progressed	Achieved
		Implemented health resource tracking study(ies) or system(s)	Findings from resource tracking studies used in monitoring reports/assessments
Gov 1 : Countries in which government institutions regularly collect and make publicly available NHA and other financial data for the health sector through Health Systems 20/20 assistance	Afghanistan	NHA, Hospital MIS, RT system	
	Botswana	NHA	
	Cote d'Ivoire	NHA	
	Dominica	NHA ongoing	
	DRC	NHA, HH survey, PLHIV survey	
	Egypt	NHA	
	Ethiopia*	NHA, UNGASS, HH survey, PLHIV survey	
	Haiti	NHA ongoing	
	Kenya	NHA	
	Liberia	NHA	
	Malawi	NHA, HH survey, PLHIV survey	
	Mozambique	NHA	
	Namibia	NHA, NASA	
	Nigeria	PEMR	
	Rwanda	NHA, NASA, RT system	
	St. Kitts & Nevis	NHA ongoing	
	Tanzania	NHA, PER	
	Uganda	NHA ongoing	
	Vietnam	NHA, PLHIV survey	
	Nigeria		Public Expenditure Management Review
	Nigeria		Financial Management for Health System Managers TOT
Gov 2 : Instances in which policy makers and program managers improve their analysis and use of health financing data for policy decisions or program management through Health Systems 20/20 assistance	Senegal		Safe Birth - Africa (Senegal Misoprostol)
	Rwanda		Governance Assessment
	Mali		U5 removal of fees
	Nigeria		Public Expenditure Management Review
	Nigeria		Financial Management for Health System Managers TOT
	Nigeria		Non-State Actors in HIV/AIDS Prev. & Mitigation
	Afghanistan		NGO Financial Management

*see also Resource tracking indicators for more information

Relevant indicator	Country	Progressed	Achieved
		NHA policy use and communication workshop and/or capacity building	**Demonstrated use of NHA results by civil society for health advocacy**
Gov 3: Countries in which NHA data produced through Health Systems 20/20 assistance is available to civil society stakeholders	Botswana		
	Dominica	NHA ongoing	
	Ethiopia	NHA ongoing	
	Haiti	NHA ongoing	
	Kenya		
	Liberia		
	Namibia		
	Rwanda		
	St. Kitts & Nevis	NHA ongoing	
	Tanzania		
Gov 4: Instances in which civil society is represented in town hall meetings, participatory budget exercises, public hearings, health service delivery governance institutions with assistance from Health Systems 20/20	Philippines		Maternal and Child Health Goverance
	Yemen		Community Awareness
Gov 5: Instances in which MOH is engaged to set priorities, improve accountability, and share feedback with civil society/government/donor/ global health initiatives/foundations through Health Systems 20/20 assistance	Senegal		Safe Birth - (Misoprostol)
	Philippines		Maternal and Child Health Goverance
	Rwanda		Governance Assessment
	Mali		U5 removal of fees
	Nigeria		Public Expenditure Management Review
	Nigeria		Non-State Actors in HIV/AIDS Prev. & Mitigation
	Nigeria		Non-Health Gov Ministries/Agencies in HIV/AIDS
	Liberia		Family Planning Advocacy
	Liberia		Legal Support
	Yemen		Health System Stewardship
	Yemen		Community Awareness
	Afghanistan		NGO Financial Management
	Rwanda		NGO Financial Management

COSTING AND SUSTAINABILITY STRATEGY

Indicator	Country	Activity Name	
		Progressed	Achieved
CS 1: Number of instances in which policy makers and program managers improve their analysis and use of health financing data for policy decisions or program management through Health Systems 20/20 assistance	Global		PMNCH Costing Tools Selection
	Global		MCH-MBB
	Global		HAPSAT Supplement
	Angola		Angola HIV/AIDS Costing
	Botswana		Botswana HIV/AIDS Costing
	Swaziland		Swaziland HAPSAT
	Sierra Leone		Sierra Leone HAPSAT
	Trinidad		Trinidad Costing HIV/AIDS Strategies
	Global		Sustainability Guide
	Global		Sustainability Guide Supplement
	Suriname		OHA Suriname Costing
	Benin		Benin HAPSAT
	Mali		Costing Malaria Mali/Emory malaria costing review
	Rwanda		HIV Costing and Sustainability Assessment
	Nigeria		Nigeria TB Costing
	Haiti		Haiti HAPSAT
	Haiti		Haiti Costing Study
	Barbados		Suriname HIV/AIDS Costing
	Kenya		Kenya HAPSAT
	Democratic Republic of Congo		DRC HAPSAT
	South Sudan		South Sudan HAPSAT
	Guyana		Guyana HAPSAT
	Uganda		Uganda HAPSAT
	Papua New Guinea		Costing HIV/AIDS Strategies - Papua New Guinea
	Nigeria		ART Decentralization Costing
	Mozambique		Mozambique CBC Costing
	Ethiopia		Ethiopia HAPSAT
	Ethiopia		HAPCO FMOH CB Costing
	Ethiopia		Service Delivery Cost Study
	Tanzania		Tanzania Costing
	Tanzania		Tanzania MCH Costing
	Tanzania		Tanzania OVC Costing
	Tanzania		Tanzania HBC Costing
	Ethiopia		Ethiopia HIV Prevention Costing
	Egypt		Egypt Hospital Costing Study

	Namibia		Using the Cost-It tool to develop unit cost of hospital services and health outreach services as an input into revised resource allocation methodology (tool leading to policy shift).
	Haiti		Minimum Service Package Costing for Contracting
CS 2: Number of instances in which countries have increased the amount of resources budgeted for PHN priority services as a result of improved availability and use of NH and cost data through HS20/20 assistance	Angola		Angola HIV/AIDS Costing
	Botswana		Botswana HIV/AIDS Costing
	Swaziland		Swaziland HAPSAT
	Haiti		Haiti Costing Study
	Kenya		Kenya HAPSAT
	South Sudan		South Sudan HAPSAT
CS 3: Number of health system institutions budgeting resources with a planning system supported through Health Systems 20/20 assistance that is based on cost information and/or policy priorities, rather than historical practice	Global		MCH-MBB
	Angola		Angola HIV/AIDS Costing
	Botswana		Botswana HIV/AIDS Costing
	Swaziland		Swaziland HAPSAT
	Suriname		OHA Suriname Costing
	Benin		Benin HAPSAT
	Rwanda		HIV Costing and Sustainability Assessment
	Barbados		Suriname HIV/AIDS Costing
	Kenya		Kenya HAPSAT
	DRC		DRC HAPSAT
	South Sudan		South Sudan HAPSAT
	Guyana		Guyana HAPSAT
	Nigeria		ART Decentralization (Cost-Effectiveness)
	Mozambique		Mozambique CBC Costing
	Ethiopia		Ethiopia HAPSAT
	Ethiopia		HAPCO FMOH CB Costing
	Ethiopia		Service Delivery Cost Study
	Tanzania		Tanzania Costing
	Tanzania		Tanzania MCH Costing
	Tanzania		Tanzania OVC Costing
	Tanzania		Tanzania HBC Costing
	Egypt		Egypt Hospital Costing Study

HRH INDICATORS

Indicator	Country	Progressed	Achieved
HRH 1: Information on human resources for health is available to decision makers	Cote d'Ivoire		Technical Assitance for HR Mgmt
	Malawi		FBO Comparative Analysis
	Uganda		FBO Comparative Analysis
	Ethiopia		Global HIV Initiative Network (GHIN)
	Cote d'Ivoire		HRIS Strengthening
	Lesotho		HRH Costing
	Nigeria		Human Resources Assessment
	Global		Pre-Service Education Review
	Swaziland		HRH Costing
	Egypt		Workforce Indicators of Staffing Needs (WISN) assessment
	Namibia		WISN work
	Uganda		Wage Study
HRH 2: Country has a new or strengthened health information system that regularly collects and uses data on human resources and other health inputs	Cote d'Ivoire		HRIS Strengthening
HRH 3: Country has improved hiring, compensation, deployment, training and development, and/or retention of health workers	Cote d'Ivoire		Incentive Scheme-Health Workers in Hard-to-Fill posts
	Cote d'Ivoire		INFAS Library Strengthening
	Nigeria		Medical Education Curricula Review, Revision, and Dissemination
	Cote d'Ivoire		National Institute of Health Workers
	Cote d'Ivoire		Strengthen School of Social Work Library
	Nigeria		TB Supportive Supervision with mobile phones
	Uganda		Wage Study
HRH 4: Country has a demonstrated improvement in the number, allocation, and/or skills of health workers	Zambia		HCD Assessment & HR Productivity Improvement
	Cote d'Ivoire		Incentive Scheme-Health Workers in Hard-to-Fill posts
	Cote d'Ivoire		INFAS Library Strengthening
	Nigeria		Medical Education Curricula Review, Revision and Dissemination
	Cote d'Ivoire		National Institute of Health Workers
	Cote d'Ivoire		Strengthen School of Social Work Library
	Egypt		Workforce Planning
	Ethiopia		Task Shifting Economic Impact

CAPACITY BUILDING

Indicator	Country	Institution	Activity	
			Progressed	Achieved
CB 1: Government institutions that have increased capacity to act as effective stewards of the health system and actively support Health Systems Strengthening efforts	Namibia	Establishing an HIS Directorate in the MOHSS in Namibia		Establishing an HIS Directorate that is accepted by stakeholders and ensures an integrated HIS. Includes helping to develop the organogram, job descriptions, action plan and timeline, and participatory planning for integrating the various parallel health information systems. Also includes establishing a technical working group to guide planning process.
	DRC	MOH HIV/AIDS Office (PNLS)		Improved the management and coordination capacity of PNLS. Included strengthening leadership and management skills, strengthening planning process, improved internal team work, strengthened relationships with provincial offices, coordination of activities of implementing partners, and installation of IT infrastructure.
	DRC	MOH Nutrition Office (PRONANUT)		Improved management and coordination capacity of PRONANUT. Activity was cancelled by USAID/DRC to free up resources for another activity.
	DRC	MOH Reproductive Health Office (PNSR)		Improved management and coordination capacity. Establish a PMTCT coordination committee and an interagency coordination mechanism with PNLS to oversee and guide PMTCT activities
	Liberia	Liberia National AIDS Commission (NAC) Secretariat		Established a permanent Secretariat that can coordinate activities of partners, develop national strategies, monitor and evaluate program, and mobilize resources. Interventions include staffing plan, job descriptions, team-building, performance management system, executive coaching, strengthening finance system, and building M&E capacity.
	Malawi	MOH National Malaria Control Program		Conducted a management and organizational assessment of the NMCP and develop a five-year strategic plan with extensive stakeholder involvement.
	Afghanistan	MOH Health Economics and Financing Directorate (HEFD)		Improved the capacity of HEFD systems, structures, tools, and strategies, and staff skills and knowledge to implement and institutionalize health economics and financing activities and services. Include work study partnership program with university in Thailand.

	Cote d'Ivoire	Leadership training for decentralized levels of MOH		Developed the capacity of National Institute for Public Health to conduct leadership and management training. Developed course materials, trained MOH trainers to deliver it, and supported delivery to over 200 MOH staff in regions and districts.
	Mozambique	Ministry of Women and Social Affairs		Institutionalized training for social workers and developed and implemented long-term strategic plan to provide ongoing educational and training opportunities for staff. Curriculum for social welfare technicians and early child educators has been updated.
	Mozambique	National AIDS Commission		Provided technical assistance to strengthen capacity on NAC. Interventions included improving financial management capacity and organizational improvement.
	South Sudan	Leadership and Management Training Program		Put in place the building blocks to develop leadership and management training capacity in MOH. Developed a course, delivered it twice to national- and state-level officials. IN FY 12, trained a cadre of MOH officials to deliver the course and then supervised delivery in three states by local trainers.
Regional institutions	Africa	Strengthening Institutional Capacity of the African Field Epidemiology Network (AFENET)		Strengthened the organizational foundation of AFENET to manage a significant increase in activities and resources through development of strategic plan, team-building of Secretariat, development of HR plan, revision of constitution, strengthening administrative procedures, and strengthening of financial system based on USG standards.
	Worldwide	Health Systems Action Network (HSAN)		Health Systems 20/20 helped to legally establish the HSAN as an NGO, develop a strategic plan, and create an online communication platform.
	Regional	African Observatory		Subcontracted the London School of Economics to carry out a study to determine feasibility of establishing an African Observatory for Health Systems. The study consisted of a mapping study of potential members, review of institutional options, and financial feasibility. The conclusion was that while there is interest there was not sufficient donor financial support.

	Africa	Institutionalization of Health System Strengthening Methodologies		Developed the capacity of six African regional institutions to use three key Health Systems Strengthening methodologies, HAPSAT, HSA, NHA: CESAG and ECSA for NHA, HEARD and ISED for HAPSAT, and Makerere School of Public Health and IRSP in Benin for HSA.
	Tanzania-based ECSA			NHA
	Senegal - CESAG			NHA
	Makere University School of Public Health - Uganda			HSA
	Regional School of Public Health - Benin			HSA
	South Africa - HEARD			HAPSAT
	Senegal - ISED			HAPSAT
CB 2: Developing country institutions strengthened to provide technical assistance in finance, governance and operation	Vietnam	Health Strategic and Policy Institute (HSPI)		With Health Systems 20/20 oversight, HSPI applied the HSA tool in two provinces and built HSPI's capacity to conduct data analysis, interpret findings, and write reports. To strengthen HSPI's capacity to mobilize resources, HSPI staff learned about market analysis, business planning, development of marketing materials, and proposal writing.
	Senegal and Zambia	Developing capacity of local organizations		Trained executive directors of local NGOs, consulting firms, and research organizations to develop their own organizations, using a comprehensive framework for organizational strengthening. Activities in both countries consisted of training and follow-up.
	Bolivia	PROSALUD		Strengthened PROSALUD's core competencies so the organization can become self-sustaining. Activities were aimed at developing systems to improve quality of services, strengthening management skills, and developing financial strategies to become more financially sustainable.

	Egypt	MOH Leadership Academy		Established leadership training academy in MOH. Developed plan to establish the leadership academy and began implementation. Two courses were developed and trainers trained to deliver them. Activity was cancelled in mid-stream by USAID/Egypt.
	DRC	Kinshasa School of Public Health (KSPH)		Improved the long-term sustainability of KSPH through development of leadership team, strengthening of resource mobilization capacity, improving financial management system, installing IT system, revising MPH curriculum, procurement, streamlining administrative services, and scholarship program.
	Nigeria	Nigeria Leadership and Management Training		Health Systems 20/20 developed a five-day leadership and management course and then trained staff at the National TB and Leprosy Training Centre (NTBLTC) in Zaria to deliver it to TB and HIV managers. During the leadership and management course, state and national TB and HIV managers learn to motivate staff, use key project management and planning tools, develop and monitor program budgets, and monitor and evaluate program activities.

MONITORING AND MEASURING HEALTH SYSTEMS

Indicator	Country	Activity	
		Progressed	Achieved
MM 1: Instances in which countries have successfully implemented mechanisms to track and monitor resources from Global Health initiatives through Health Systems 20/20 assistance	Rwanda		Resource tracking database in Rwanda
	Afghanistan		NHA
	Botswana		NHA
	Cote d'Ivoire		NHA
	Democratic Republic of Congo		NHA
	Dominica		NHA + NHA Production tool
	Egypt		NHA
	Ethiopia		NHA + NHA Production tool
	Haiti		NHA + NHA Production tool
	Kenya		NHA
	Angola		HSA
	Antigua and Barbuda		HSA
	Benin		HSA
	Cote d'Ivoire		HSA
	Dominica		HSA
	Ethiopia		HSA
	Grenada		HSA
	Guyana		HSA
	Kenya		HSA
	Lesotho		HSA
	Zimbabwe		HSA
	Nigeria		Conducted PEMR in Nigeria (three state-level studies)
MM 2: Instances of civil society stakeholders and NGOs using financial and other HMIS data for advocacy or accountability with Health Systems 20/20 assistance	Dominica		Used HSA chapter on HIS to advocate with MoF for more staff funds
	Botswana		Held NHA communications/advocacy workshops
	Kenya		Held NHA communications/advocacy workshops
	Namibia		Held NHA communications/advocacy workshops
	Nigeria		HAPSAT findings supported advocacy for increasing the financial responsibility for HIV programs by the government
	Rwanda		Health Resource Tracker made financial data available to a wider range of stakeholders
	Philippines		Quality Assurance Partnership Committee (QAPC)
	Nigeria		Public expenditure management review for reform of financial management systems

MM3: Instances of data produced through financial management systems supported with Health Systems 20/20 assistance has informed policy and programmatic decision-making	Egypt		Capacity building of Health Insurance Organization in financial management system
	Nigeria		Public expenditure management review for reform of financial management systems
	Africa		Implementation of a financial management system for the African Field Epidemiology Network (AFENET)
	DRC		Implementation of financial management process and resource mobilization plan for The Kinshasa School of Public Health (KSPH)
	Liberia		Assisted the MOH to strengthened the financial management system.
	South Sudan, Namibia, Nigeria, Senegal, Vietnam, Cote d'Ivoire, Lesotho, Zimbabwe, Angola, Kenya, Guyana, Tanzania, Ukraine, Uganda, Mozambique, Ethiopia, St. Kitts & Nevis, Antigua, St. Vincent and the Grenadines, Grenada, Dominica, St. Lucia, and Benin		23 HSAs conducted and results used for a variety of programatic and policy decision-making
	Afghanistan, Botswana, Cote d'Ivoire, Dominica, DRC, Egypt, Ethiopia, Haiti, Kenya, Liberia, Malawi, Mozambique, Namibia, Rwanda, St. Kitts & Nevis, Tanzania, Uganda, and Vietnam		18 NHAs conducted and results used for a variety of programatic and policy decision-making
MM 4: Instances of policy makers and program managers using health information system data for policy decisions or program management through Health Systems 20/20 assistance	El Salvador		Pharmaceutical Supply Information system
	Kenya		Master Facility List & ARTIS
	Yemen		Yemen immunization registry
	Cote d'Ivoire		CI GIS Atlas
	Vietnam		HSPI and provincial HSAs
	Guyana		HSA findings used to improve HRH planning
	Senegal		HSA findings used to improve technical coordination at MOH, HRH allocation, strengthen regional health districts, and improve health insurance planning
	St. Lucia		HSA process resulted in increased funding for new national hospital
MM 5: Instances of local organizations using tools and methodologies with support from Health Systems 20/20 to improve health	Ethiopia		NHA Production Tool (PT) usage
	Haiti		NHA PT usage
	Dominica		NHA PT usage
	Namibia		HIS technical working group used HMN/HIS assessment tool to help identify priority areas for HIS strengthening

financing, governance and operations	Vietnam		HSPI used HSAA methodology at province level to benchmark
	Africa	African Field Epidemiology Network (AFENET)	
	Tanzania	ECSA	
	Senegal	CESAG	
	Uganda	Makere University School of Public Health -	
	Benin	Regional School of Public Health -	
	South Africa	HEARD	
	Senegal	ISED	