



**U.S. Agency for International Development (USAID)
Report to Congress on an Interagency Plan to Strengthen the Capacity
of Health Systems in Developing Countries**

The U.S. Agency for International Development (USAID) submits this report pursuant to Section 7019(e) of Division K of Public Law 115-141, the Department of State, Foreign Operations, and Related Programs Appropriations Act, 2018, which incorporates by reference the requirements of Senate Report 115-152 on the Global Health Programs account, which directed that:

The USAID Administrator, in consultation with the Global AIDS Coordinator at the Department of State, the Director of the Centers for Disease Control, and the heads of other relevant Federal departments and agencies, shall develop a comprehensive inter-agency plan to strengthen the capacity of developing countries to effectively manage their national health systems with the goal of promoting country ownership and building resiliency.

USAID is a leading investor in the development of health institutions around the world. Over the last several decades, USAID has established best practices and advanced the state of the art for core health-system functions (see Annex 1), while focusing increasingly on measurable outcomes. USAID led the U.S. Government interagency in the development of the new, integrated approach to strengthening health systems articulated in this report. A “health system” is not just government-funded or -managed organizations, but consists of the people, public and private institutions, resources, and activities whose primary purpose is to improve, expand, and sustain health outcomes.

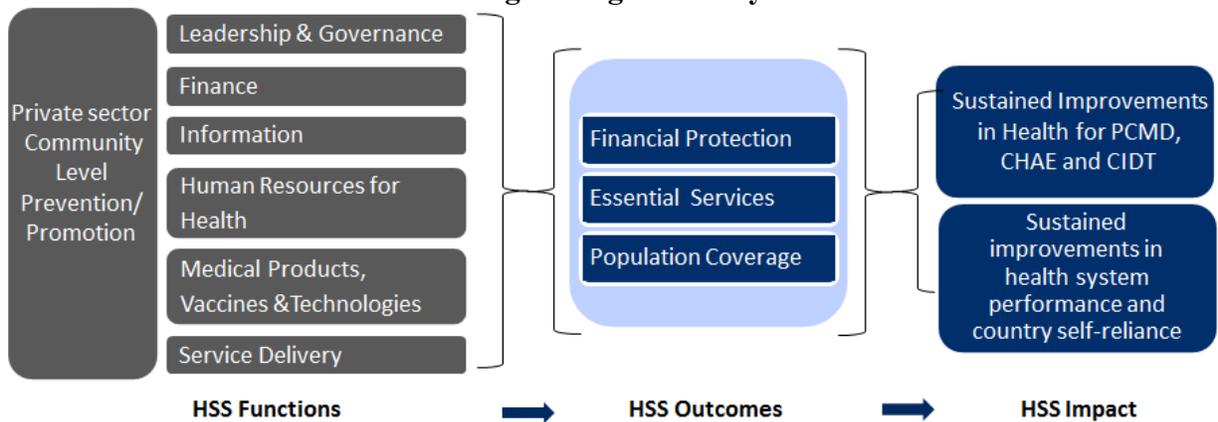
Strengthening the Public and Private Components of Health Systems is an Important Part of the U.S. Government’s Global Health Programs

U.S. Government-funded global-health programs focus on reducing preventable mortality through a focus on specific populations, specific diseases, or the potential for disease to spread on a global scale. These programs build in-country capacity and reduce disease burden. Because of investments by the American taxpayer, diseases are less likely to spread beyond national borders and countries are increasingly able to plan, fund, and manage their own continued progress toward efficient, resilient, sustainable health care and public health. Strengthening health systems is therefore integral to achievement of the U.S. Government’s global health goals related to controlling HIV/AIDS, preventing child and maternal deaths, and combating infectious diseases, as our programs promote population-level health outcomes by making health care and public health interventions more efficient, resilient, and sustainable. Investments in health systems are not an end in themselves, but must be linked to quantifiable achievements to improve the health status of people.

Ultimately, achieving the Journey to Self-Reliance in global health means a country has the capacity to meet the health needs of its population while making the commitment to reducing disease burden sustainably. Success is measured by progress in key health outcomes and increases in the overall capacity of the health system. A country’s commitment to the health of

citizen, at least in part, reflects the extent to which: (1) government and other stakeholders can direct available resources toward cost-effective, high-impact interventions; (2) the public and private sectors can implement solutions to the most-pressing disease problems, and those faced by the most-disadvantaged populations; and, (3) public and other stakeholders can address weaknesses in an overall health system. The U.S. Government’s investments in global health must produce sustainable, local change that enables countries to move away from their reliance on donor aid and technical assistance, without eroding the commitment to achieving national and international priorities. U.S. spending on strengthening health systems complement those focused on HIV, tuberculosis (TB), malaria, global health security, vaccine-preventable diseases, maternal and child health, voluntary family planning, and core public health capacity-building. The U.S. Government’s investments address system-wide constraints, while helping to improve integration and maximizing measurable impact.

USAID’s Vision Framework for Strengthening Health Systems



Global Health Priorities. PCMD: Preventing Child and Maternal Deaths; CHAE: Controlling the HIV/AIDS Epidemic; CIDT: Combating Infectious Disease Threats

A New, More Comprehensive Approach to Strengthening Health Systems

Since the 2007 publication by the World Health Organization (WHO) of the report “Everybody’s Business: Strengthening Health Systems to Improve Health Outcomes,” the global community has used six key functions (or “building blocks”) to describe the constellation of efforts included in “Strengthening Health Systems.” These functions include Human Resources for Health, Health Finance, Health Governance, Health Information, Medical Products, Vaccines and Technologies and Service-Delivery.

An approach built around strengthening the individual building blocks has greatly contributed to our understanding of the programs and conditions that are part of a well-functioning health system. However, it has the risk of fragmentation and limited ability to provide a clear path to achieve self-sustained capacity-development at the country level. For example, governance experts advise on health-sector accountability and transparency, economists seek to reform health financing, and clinical professionals are concerned about improving the type and quality of clinical interventions.

While these diverse disciplines should work together to improve health systems, greater emphasis is necessary to create and exploit linkages between components. For example, to further progress on the U.S. Government's global health goals, programs need to target the vulnerable in society who suffer from significant disparities in health status. Doing so requires helping to create financial systems to ensure resources are available at local levels, and that health providers have adequate supplies to treat these populations and understand how to address them in a culturally respectful manner. The populations themselves should understand what keeps them healthy, and be empowered to demand that institutions respond in this way to their needs. The global recommitment to primary health care at Alma Ata in late 2018 offers an opportunity to ensure that interventions to strengthen health systems address factors of both demand and supply that contribute to health by improving frontline care, while also enhancing positive individual, family, household and community behaviors and practices that produce better health outcomes. Such an approach will leverage the critical role and contribution of families and communities in delivering care, providing oversight and governance, promoting healthy behaviors, and holding health providers and institutions accountable

The U.S. Government plans to strengthen the capacity of public and private actors in developing countries to manage and finance health care. Overall, the plan requires shifting from a focus on individual building blocks to advancing improvements in measurable health-system outcomes. The approach includes investing in financial protection/resource-optimization (including new models of health insurance) and the provision and quality of essential care and public health and management services to achieve access to health care for entire populations, reduce disparities in health outcomes, and create health institutions that are responsive to the health needs of individual citizens.

Implementation of this plan will require new tools, such as complex systems analysis, behavioral economics and/or political-economy analysis, to understand the underlying causes of significant health-system problems and the key opportunities to affect them. It will also require improved analysis of the system-wide effects and consequences of specific interventions. It is important to understand, for example, whether and how the U.S. Government's efforts to improve human resources in health have an effect on service-delivery, governance or both. Interventions will help integrate the different building blocks to improve outcomes sustainably.

Interagency Examples of a Comprehensive Approach to Strengthen Health Systems

USAID is in the process of shifting its portfolio to embrace this new approach, also reflected in interagency initiatives such as the Sustainable Financing Initiative (SFI) under the President's Emergency Plan for AIDS Relief (PEPFAR) and the Global Health Security Agenda (GHSa).

SFI: Led by USAID under PEPFAR, SFI is a focused drive to increase the financial responsibility of governments for the delivery of prevention, care, and treatment for HIV/AIDS. As donor funds plateau in the near term, controlling the HIV/AIDS epidemic in developing countries is not feasible or sustainable without additional domestic resources, especially given the projected increases in patient loads as the large youth population comes of age in sub-Saharan Africa. To ensure the sustainability and local management of PEPFAR's programs, SFI

has invested \$48 million over five years to increase domestic resources for the diagnosis and treatment of HIV/AIDS, and to improve approaches to health financing. SFI is dynamic and responsive to PEPFAR's guidance through targeted investments aimed at producing measurable results, and by leveraging efficiency gains to increase available resources and better use domestic funding. This has included, for example, increasing service coverage for prevention, care and treatment; strengthening protection against financial risk for care; and improving access to care for vulnerable populations.

Solutions to develop sustainability for HIV/AIDS programs must match each country context, and involve a unique mix of health-financing approaches, broadly classified into the following areas:

- Advocacy to generate and sustain **political will** for shared responsibility, and to encourage the allocation of domestic resources to health and HIV/AIDS;
- Improvements in **financial management and tax administration**, to identify new resources and improve the use of existing resources;
- Increased **technical efficiency** to avoid waste and improve health and HIV/AIDS outcomes, within existing resources;
- Improved investment of **private-sector resources and expertise** to increase access for people who are willing and able to pay for health care; and
- The deployment of **analytics** to measure impact;

GHSA: The GHSA is a multi-sectoral, multilateral effort launched in 2014 to accelerate progress toward compliance with the International Health Regulations (IHRs), the Performance of Veterinary Services of the World Organization for Animal Health, the Biological Weapons Convention, and other international frameworks and agreements. The IHRs are a legally binding agreement, adopted by 196 WHO Member States in 2005, which established standards for each country to help prepare for health emergencies. The vision of GHSA is a world safe and secure from infectious-disease threats, whether naturally occurring, accidental or deliberately caused.

The GHSA seeks to leverage investments by host governments and donor partners to reduce morbidity, mortality, and economic loss by preventing avoidable outbreaks of infectious diseases, detecting threats early, and responding rapidly and effectively to outbreaks. The GHSA advances compliance with the IHRs by providing specific, measurable targets across 11 technical areas, referred to as "Action Packages," and supporting step-by-step plans to promote their achievement. The absence of systemic health-security capabilities means governments and civil-society partners could be more likely to miss the beginning of an outbreak and therefore delay an effective response. These necessary components include reliable, sensitive, real-time disease-surveillance systems; safe, secure, and modern laboratories; a well-trained workforce; robust information systems; a command structure to coordinate an effective and focused response; and multi-sectoral collaboration. Investments in these capabilities allow for the rapid identification of, and response to, outbreaks of new and emerging infectious diseases, before they spread around the globe. Within the U.S. Government, teams from the Departments of State, Defense, Agriculture, Health and Human Services (including the Centers for Disease Control and Prevention [CDC]), Justice (including the Federal Bureau of Investigation), USAID, the National Security Council, and other Departments and Agencies work within the GHSA with the shared

goal of keeping the world safe and secure from infectious-disease threats. Following a Joint External Evaluation (JEE), governments and other stakeholders develop National Action Plans for Health Security, which outline national priorities for improving the systemic components most central to health security over the next five years. The JEE is a voluntary, multi-sectoral external assessment process to help identify gaps in capacity, determine a country's level of health-security capacity, and measure its ability to prevent, detect, report, and respond to infectious-disease outbreaks and other public health threats. As of June 1, 2018, JEEs have taken place in 76 countries, in 26 of which governments and other stakeholders have completed national planning.

Interagency Oversight of Investments in Health Systems

Across the U.S. Government, interagency processes are in place to enhance coordination around these initiatives and actions specific to Departments and Agencies, which align with the common overall approach to strengthening health systems. Headquarters teams review programming plans and reports for PEPFAR, the President's Malaria Initiative (PMI), the GHSA, and other USAID and HHS/CDC programs on an annual basis. These programs use common, internationally recognized data sets to track progress on indicators related to improvements in health systems at the country level. For example:

- USAID has worked with host-country governments on health accounting for more than 20 years to improve decision-making on health financing. Because of this work, widely implemented and publicly available (<http://apps.who.int/nha/database>), the world has information on how much governments, citizens and donors spend on health care and whether they are spending this money at the primary or tertiary levels or in the public or private sector. Tracking the sources and spending of health financing permits countries to monitor and analyze spending in the health sector over time. By using health accounting, policy-makers can learn about past expenditures, improve the allocation of resources, inform health-sector planning, and improve the governance and accountability of a health system. USAID funds the WHO to coordinate global efforts to improve country-level health accounting;
- The U.S. Government, Finland, and other GHSA members and stakeholders have coordinated closely with the WHO to develop and implement the JEE; and
- Data related to human resources for health are available through the WHO's National Health Workforce Accounts (NHWA), and the open-source Human Resources Information Solutions (iHRIS) software developed by USAID. The NHWAs help identify the most-strategic use of resources to address constraints to the health workforce. The NHWA data set also supports stronger intersectoral engagement. USAID introduced iHRIS to analyze trends, highlight gaps, and plan for the deployment and development of the health workforce.

Annex: Agency-Specific Focus on Strengthening Health Systems

U.S. Agency for International Development (USAID)

USAID has funded programs to strengthen health systems for decades, which have provided critical resources, technical expertise, and global leadership to coordinate countries' capacities to meet population health needs and reduce the burden of disease sustainably. In our view, a "health system" is not just government-funded or -managed organizations, but consists of the people, public and private institutions, resources, and activities whose primary purpose is to improve, expand, and sustain health outcomes. The Agency's cross-cutting efforts seek to combat the spread of anti-microbial resistance; improve the sustainability and quality of all USAID global health programs, including through the elimination of disparities in outcomes; and promote mechanisms to help protect citizens from falling into poverty because of high health-care costs.

Health Financing: Building on a long history of support for health-financing efforts (most notably health accounting), the Agency funds country-level financial-management and protection systems that promote market-based solutions and efficiency and seek to reduce disparities in outcomes. USAID led the development of an agenda for domestic resource-mobilization under SFI, which is applicable to other countries and program areas.

For example, USAID is working with the Nigerian Government to use its health accounts to close resource gaps and mobilize additional domestic financing for HIV programming; provide data to improve the diagnosis and treatment of tuberculosis; and reveal the human-resources needs for maternal, newborn, and child health.

In the Democratic Republic of Congo, USAID funded efforts to help the Ministry of Health and partners track, anticipate, manage more efficiently, and be accountable for health needs across the population. The Agency helped establish the national Health-Information Management System for 481 Health Zones, which account for 93 percent of the country, to track health indicators and progress in the population. We also contributed to the Global Financing Facility for Every Woman Every Child (GFF), which encourages the investment of domestic resources for maternal and child health care, and we helped merge two national programs responsible for the country's *Integrated Management of Newborn and Childhood Illness Strategy*.

In Kenya and other countries, USAID's investments in the capacity of County governments for health-sector planning and budgeting has resulted in increased financial contributions at the local level. This approach supports the generation of evidence to inform resource-mobilization at the level of the national Ministries of Health and Finance, and also works to analyze the demand, supply, and financing aspects of the market for health care in Kenya. As of June 2018, more than 26 Kenyan Counties had mobilized approximately \$7 million of domestic resources back into their health accounts.

Pharmaceutical Management: USAID has also been a leader in the effort to improve pharmaceutical systems in developing countries through programs in pharmaceutical management, including supply-chain management, and the development of quality-assurance systems for medicines. Investments include the development of innovative approaches and tools for USAID's disease programs, as well as initiatives in medicine safety/pharmacovigilance. Ensuring an uninterrupted supply of quality-assured medicines requires an adequate number of manufacturers able to produce products according to international quality standards. USAID has

successfully helped manufacturers achieve WHO pre-qualification and meet stringent regulatory requirements, including through the approval by expert review panels of 29 medicines for multi-drug-resistant TB, maternal nutrition and child health, neglected tropical diseases, and opportunistic infectious diseases. USAID-funded programs also strengthen the capacity of national Medicines Regulatory Authorities, which enables them to provide the necessary monitoring and oversight for local industries and all medicines that enter national markets.

In Nigeria, USAID funded the development and adoption of the country's National Quality-Assurance (QA) Policy, which establishes QA and quality-control regulations for all medical products, including anti-microbials. USAID also provided financing for three laboratories under the Nigerian national regulatory authority to achieve international accreditation, which enables reliable and accurate testing for the quality of medicines and protects the public from falsified and substandard products, including anti-microbials. Additionally, support to local manufacturers is helping to increase the availability of quality-assured medicines, including the antibiotic amoxicillin.

Quality-Improvement: For over 25 years, USAID has played a global leadership role in adapting modern quality-improvement methods for health systems used in the United States and United Kingdom in lower- and middle-income countries with limited resources. In partnership with country governments, civil society, faith-based organizations and the private sector, these methods focus on assisting countries to improve the effectiveness, efficiency, patient focus, safety, and accessibility of health care. To do this, USAID's partners use a range of methods and tools to improve the quality of care in more than 40 countries around the globe, including, not limited to, the improvement and redesign of processes, collaborative improvement, licensing and regulation, and support and supervision. The approach also includes helping governments measure and monitor efforts to increase compliance with evidence-based standards and guidelines, and to improve the quality of essential health care, including by ensuring the delivery of safe, effective, quality-assured medicines that meet international standards. In addition to training and supervision activities, USAID funds the creation of a "culture of improvement" within health institutions.

In India, USAID worked with the All-India Institute of Medical Science (AIIMS) to implement a seven-step quality-improvement process for newborns and mothers, which included the development of a quality-improvement team, the identification of the most-critical health issues and their causes, and the testing and measurement of solutions. Through the process, AIIMS identified insufficient hours of "Kangaroo Mother Care" (KMC), or skin-to-skin contact between a mother and her newborn, as a major threat to infant health. Using charts and videos, AIIMS nurses counseled mothers and fathers on KMC. As a result, facilities saw a 15.6 percent reduction in stillbirth and early newborn deaths, and USAID is expanding this effort to more facilities to use quality-improvement approaches to help health workers deliver good care.

Health Workforce: USAID supports the development of a health workforce that is equally distributed and accessible to the population, with the skills and motivation required to deliver quality care that is culturally acceptable. USAID's investments in human resources for health seek to achieve our global health goals by focusing on increasing the use, distribution, and efficiency of the workforce in service-delivery; promoting the production of cadres that meet the

skill-mix needs in individual countries; and working with country stakeholders and human-resource managers to overcome recruitment, deployment, and retention challenges.

For example, an analysis of payroll funded by USAID in the Dominican Republic revealed that nearly 10,000 non-existent employees were receiving a public-sector salary. The Dominican Government used the recovered saving of about \$6 million from this finding to hire 2500 doctors, nurses and area coordinators, and provided long-overdue salary increases to improve motivation and the quality of care. As a result, Dominicans invested more of their own local additional resources in health, the management and financing of health workers improved, and new accountability of government spending improved public trust. In addition, more pregnant women learned their HIV status and began taking anti-retrovirals (ARVs) prior to delivery, and more HIV-exposed newborns initiated ARVs at birth.

Social Behavior Change: USAID promotes interventions in social and behavior change to raise awareness, reduce misinformation, and address the barriers that prevent individuals, families, and communities from making life-saving changes. The Agency’s programs do this by addressing factors such as knowledge, attitudes, and norms. These interventions not only can shape, but also improve, communication between health providers and patients, as well as within families and couples, and engage community leaders and other influencers in promoting healthy behaviors and practices.

Through the U.S. President’s Malaria Initiative (PMI), USAID has collaborated with the Government of Uganda and other partners on the “Test and Treat” campaign, which sought to build trust in malaria test results among patients and health providers and reduce the over-prescribing of anti-malarial drugs. The initiative resulted in a shift in the behavior of health providers in the 24 Health Districts where PMI rolled it out. Providers exposed to the campaign were more likely to test all children who reported with fever, and were less reliant on clinical diagnosis. Providers exposed to, and trained through, the media campaign were more likely to conduct a differential diagnosis, and less likely to prescribe anti-malarial drugs for children with fever who tested negative for malaria. Health-care workers who received clinical training that included interpersonal communication and counseling skills were more likely to tell caregivers that anti-malarial treatment was not necessary after a negative test result, and more likely to provide alternative diagnosis. Finally, the campaign also improved the availability and stocking of malarial drugs, which made them available for people who actually had malaria.

USAID’s investments help create resilient health systems by working to ensure they can adapt to changing circumstances and needs on a regular basis and during adverse events, such as civil unrest, political instability, pandemic disease, severe weather or famine. Having the capacity to detect, monitor and respond to the population’s health needs before, during, and after an adverse event can preserve the availability of health care and public health interventions. USAID works with governments and international organizations to reinforce health systems and protect vulnerable populations in advance of possible crises, as well as in the aftermath of such events to identify and correct for systemic weaknesses. Investments in health systems not only improve and maintain positive health outcomes, but also can reduce the need for future humanitarian and emergency assistance.

Transparency: In several countries around the world, USAID works with Ministries of Health, other government institutions, and civil society on e-governance initiatives that further reduce opportunities for corruption in the health sector. One such USAID-funded effort – the online public procurement system in Ukraine, ProZorro (<http://bi.prozorro.org>) and a companion tool for identifying corruption risks (<http://risk.dozorro.org>) – has saved the Ukrainian Government \$1.4 billion since 2015, including on purchases of drugs and health supplies for clinics and hospitals. In Guatemala, where one million children did not receive routine immunizations in 2015 because of mismanagement at the Ministry of Public Health, USAID paid for the development of an information technology solution through the *Fundación para el Desarrollo de Guatemala* (FUNDESA) (https://universidaddelvalle.shinyapps.io/fundesa_herramienta) for the efficient control of inventories and the smart procurement of medicines and medical supplies. Rolled out in 2017 at the seven largest public hospitals in the country, the program saved the Guatemalan Government \$20 million in just 18 months, brought order and stability to purchases and improved the quality of care. A mobile-phone application lets Guatemalan citizens track what drugs are available at each enrolled hospital, which has reduced out-of-pocket spending for patients.

The U.S. President’s Emergency Plan for AIDS Relief (PEPFAR)

Since its launch by President George W. Bush in 2003, PEPFAR has built health infrastructure and strengthened capacity through an emphasis on sustainability. This infrastructure and capacity not only support people who are living with HIV/AIDS, but also have improved the delivery of prevention and care for maternal and child health, tuberculosis and malaria; immunizations; and emergency responses to disease outbreaks.

PEPFAR invests in robust laboratories and well-trained laboratory specialists critical to well-functioning health systems, which enable clinicians and health workers to diagnose and treat a range of diseases and conditions better. PEPFAR has trained nearly 250,000 health-care workers to deliver and improve HIV care and other health interventions, which has created a lasting infrastructure that enables the public and private sectors in partner countries to address the health challenges of today and tomorrow.

Since 2015, PEPFAR has required the development and monitoring of clear metrics and milestones in its Country Operational Plans (COPs) for all horizontal health-system investments, captured in the COPs as Table 6. This is in addition to the vertical system-strengthening investments captured through site-level and above-site-level investments. In 2017 alone, through PEPFAR’s COPs/Regional Operational Plans (ROPs), PEPFAR invested nearly \$600 million in horizontal, above-site investments to strengthen health systems, including nearly \$100 million to strengthen laboratories.

PEPFAR has invested an additional \$20-30 million through Headquarters Operating Plans (HOP). These efforts have also strengthened the ability of governments and civil society in countries with sizable HIV/AIDS burdens to address other outbreaks, such as Ebola, avian influenza, and cholera, which ultimately has enhanced global health security and protected America’s borders. These critical health-systems investments have enabled PEPFAR to support the GHSA directly. The programs that PEPFAR funds are about delivering results today, but

also about creating lasting services, systems, and policies that will allow countries to be resilient, self-reliant, and successful tomorrow.

The Centers for Disease Control and Prevention (CDC) within the U.S. Department of Health and Human Services (HHS)

Through PEPFAR, since 2003 HHS/CDC has collaborated with Ministries of Health and partners to develop and strengthen tiered national public health laboratory networks and quality-management systems, and built laboratory workforces for HIV- and TB-related testing in over 35 PEPFAR countries. Through joint planning and budgeting across PEPFAR and the GHSA by HHS/CDC headquarters and country teams, these investments are further contributing to national capacity to provide high-quality, sustainable diagnostic services essential for the effective implementation of prevention, surveillance and treatment programs across disease areas.

HHS/CDC assists Ministries of Health, national public health institutes, national regulatory authorities, and other stakeholders to build workforce capacity to plan, implement, monitor, evaluate, and improve the quality of immunization programs. HHS/CDC also develops and supports interventions to increase the performance and accountability of the immunization workforce, and to strengthen public health management and leadership. In addition, HHS/CDC deploys its existing workforce-development programs (*e.g.*, the Field Epidemiology Training Program) to develop and improve the technical capacity of immunization workers, as well as to support the development and implementation of sustainable financing mechanisms for immunization, the pricing of vaccines, and procurement mechanisms.

Building on more than 70 years of experience, HHS/CDC helps establish organized, well-functioning National Public Health Institutes (NPHIs) in countries around the world to protect the public's health and contain outbreaks of disease close to the source. NPHIs consolidate public health functions at the national level, bring together data and expertise, and coordinate efforts across sectors. By offering guidance and support to existing or fledgling NPHIs, HHS/CDC helps governments become better equipped to collect and use public health data; plan, implement, and monitor public health programs; and, ultimately, save money and protect lives—both overseas and in the United States.

HHS/CDC also funds systemic activities around the globe related to controlling infections (for emerging infectious diseases) and combating anti-microbial resistance, and the Agency's experts are working on these issues in ten GHSA Phase One countries. The success of both infection-control practices and anti-microbial resistance depend, in part, on improvements in the delivery of direct health care, including how hospitals and clinics interact with, and care for patients, so HHS/CDC and its partners often work at the system level to change practices and processes in health-care facilities to prevent the spread and acquisition of dangerous infections.

Finally, HHS/CDC works with governments and other stakeholders in partner countries to improve their capacities to prevent, detect, and respond to infectious diseases and mitigate their international spread through engagement at air, land, and sea points of entry, in border regions, and among internationally mobile populations. A key focus is building public health capacities at international airports, seaports and ground crossings by developing multi-sectoral public health emergency-response plans and creating or improving system-wide procedures for tracking illness in populations. These efforts strengthen health systems by linking Ministries of Health,

healthcare facilities (hospitals, clinics, *etc.*) with other in-country systems such as border units, airports health teams, and Ministries of Transportation.