A HEALTHIER, SAFER, AND MORE PROSPEROUS WORLD

REPORT OF THE CSIS COMMISSION ON Smart Global Health Policy



COCHAIRS William J. Fallon & Helene D. Gayle

CSIS CENTER FOR STRATEGIC & INTERNATIONAL STUDIES

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Library of Congress Cataloguing-in-Publication Data CIP information available on request. ISBN 978-0-89206-597-4

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The 25 commissioners who signed this report joined together in the spring of 2009 with a sense of optimism, purpose, and engagement. We firmly believed the United States can better the lives of the world's citizens and advance its own interests by investing strategically in global health—even at a time of global economic recession and exceptional domestic challenges. One year later, we remain convinced not only of this statement's veracity, but of its urgency. But truly remarkable gains for global health will only be achieved through a smart, long-term U.S. approach that harnesses all of America's assets and expertise—in better partnerships with friends and allies.

The Commission was an experiment. At the outset, we wondered whether two dozen diverse individuals accomplished opinion leaders and high-level strategists of varied political stripes, drawn from backgrounds in business, finance, Congress, media, philanthropy, foreign affairs, security, government, and public health—could reach consensus on a long-term plan for the United States to save and enhance the lives of millions of people around the world through global health. We have not answered all the questions that emerged, nor have we devised perfect solutions. But we believe we have put forward a compelling, concrete, and pragmatic plan of action.

We owe this achievement to the dedicated commitment of our fellow commissioners, as well as the extensive and generous support we've received from countless experts. We approached this task humbly, with gratitude and respect for those who have worked long hours in hospitals and clinics, laboratories, and in the field to make this world a healthier place. Our report builds upon their knowledge and experience.

The Commission convened for full-day deliberations on June 10 and October 16, 2009. In August, some of us traveled to Kenya to view first-hand the impact of U.S. global health investments, as well as our future challenges. Over 10 months, we held numerous conference calls and expert consultations, each with a high level of commissioner participation. We also benefitted significantly from the willingness of senior officials in the White House, the U.S. Department of State, the U.S. Agency for International Development, and the U.S. Department of Health and Human Services, including the Centers for Disease Control and Prevention and National Institutes of Health, to share their perspectives with us.

Throughout the course of the Commission's work, we were determined to connect with the growing numbers of Americans, particularly students, who are passionate about global health. With the help of the staff of Blue State Digital, we created an interactive Web site, www. smartglobalhealth.org, which allowed us to exchange ideas with thousands of people who proposed questions for deliberation, anecdotes and photos from the field, and most importantly, fresh, critical insights. Their input is reflected in the report, including the stunning cover photo! We also traveled to two major centers of American global health work—the Research Triangle in North Carolina and the California Bay Area for public consultations. These honest and substantive conversations with the public informed our work as well.

The report that follows represents a majority consensus among the commissioners. We did not insist that each commissioner endorse every point contained in the document. In becoming a signatory to the report, commissioners signal their broad agreement with its findings and recommendations.

This is a good moment to pause, set aside our immediate concerns or diverse views, and reflect on just how much our nation has achieved, especially in the past decade, in saving and enhancing the lives of millions of individuals. As we examine how we can better organize and apply ourselves, make the best use of our assets, and be more effective in our actions, let us imagine what the global health outlook could be in 2025, if only we set clear and realistic goals and stay on course to achieve them.

Sincerely,

Admiral William J. Fallon (ret.)Dr. Helene D. GayleCochairCochair

CSIS Commission on Smart Global Health Policy

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Synopsis



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"We have before us the chance to accelerate our recent historic successes in advancing global health. If Americans seize this moment, take the long strategic view, make the commitment—with our friends and allies—the lives of millions will be lifted in the coming decades. The world will be safer and healthier. Our nation will have shown its best." — Helene D. Gayle

As the United States applies smart power to advance U.S. interests around the world, it is time to leverage the essential role that U.S. global health policy can play.

Americans have long understood that promoting global health advances our basic humanitarian values in saving and enhancing lives. In recent years, support for global health has also proven its broader value in bolstering U.S. national security and building constructive new partnerships.

A smart, strategic, long-term global health policy will advance America's core interests, building on remarkable recent successes, making better use of the influence and special capabilities of the United States, motivating others to do more, and creating lasting collaborations that could save and lift the lives of millions worldwide. It will usher in a new era in which partner countries take ownership of goals and programs, in which evaluation, cost effectiveness, and accountability assume vital roles, and in which a focus on the health of girls and women becomes a strategic means to bring lasting changes. And it will enhance America's influence, credibility, and reservoir of global goodwill.

The CSIS Commission on Smart Global Health Policy calls on Washington policymakers to embrace a fivepoint agenda for global health—a mutually reinforcing set of goals to achieve U.S. ambitions and partner country needs.

1. Maintain the commitment to the fight against HIV/AIDS, malaria, and tuberculosis

It is critical that the United States keep its HIV/AIDS, malaria, and tuberculosis programs on a consistent trajectory, even in the face of a grave fiscal situation and competition from other worthy priorities. Today, more than 2.4 million persons living with HIV are directly supported by the United States with lifeextending antiretroviral treatment (ART). Many others are ready to begin treatment. If we continue investing steadily in these programs, the Obama administration can realize its goal of funding antiretroviral treatment for more than 4 million people over the next five years; and our AIDS and malaria platforms can expand successfully into other health areas, in partnership with able international alliances like the Global Fund to Fight AIDS, Tuberculosis and Malaria.

It won't be easy. Over the past year, the pace of growth in treatment has slowed. Budgets have tightened. Concerns have mounted over the long-term cost of treatment, especially if resistance develops to current medications. In this difficult climate, tensions have risen among global health advocates. But compassionate, realistic, patient U.S. leadership can transcend fragmentation, ameliorate conflict across health constituencies, and ensure that immediate budgetary woes do not derail our efforts. We can leverage our existing disease-focused investments to create lasting health systems, with long-term solutions based on steady growth that reduce mortality and illness, and build partner country capacities.

2. Prioritize women and children in U.S. global health efforts

The United States should move swiftly and resolutely to bring about major gains in maternal and child health, through proven models of care prior to, during, and after birth, and through expanded access to contraceptives and immunizations. A doubling of U.S. effort—to \$2 billion per year—will catalyze inspiring results. Direct U.S. investments are best focused on a few core countries in Africa and South Asia where there is clear need, the United States can



"A smart global health policy can leverage the immense capabilities and generosity of the U.S. government and the American people. It can vastly improve the lives and personal security of millions of people and in the process, help to increase worldwide economic and political stability." — William J. Fallon

make a distinctive contribution, partner governments are willingly engaged, and there is a genuine prospect of concrete health gains and increasing country capacities. At the same time, renewed emphasis on U.S. investments through multilateral channels can enable us to reach a broader population in need.

Closing gaps in the critical services and protections provided to mothers and children is a smart, concrete, and effective means to strengthen health systems and lower maternal and child mortality and illness. Affordable tools exist to reduce infant deaths in the first month of life; expanded immunizations can improve child survival; and expanded access to contraceptives can bolster women's health.

U.S. leadership in collaboration with others will lift the lives of the next generation of girls and women, strengthen families and communities, and enhance economic development worldwide. It will also accelerate progress toward the major Millennium Development Goal (MDG) of improving maternal mortality, where efforts during the past two decades have yielded scant gains.

3. Strengthen prevention and capabilities to manage health emergencies

Disease prevention offers the best long-run return on investment. Millions of children die from the effects of malnutrition; greater investments in nutrition can save them. Behavior changes can significantly lower the rate of new HIV infections, curb tobacco use, and reduce premature death from chronic disorders, which are rising steeply in developing as well as middle-income countries. Better lifestyle choices can be advanced through sustained education. Now is the time for the United States to share expertise, best practices, and data, and advance the newly launched Global Alliance for Chronic Disease. Meeting emerging threats requires long-range collaborative investments: building preparedness among partner countries to prevent, detect, and respond to the full range of health hazards, including infectious diseases; and creating reliable opportunities for poor countries to access affordable vaccines and medications that will be crucial in combating pandemics. Strengthening the shared oversight of food and drug safety is also essential in an increasingly integrated global marketplace.

4. Ensure the United States has the capacity to match our global health ambitions

In an era where much more is possible in global health, and much more is at stake, the U.S. government needs greater predictability, order, evaluation, leadership, partnerships, and dialogue with the American people.

An essential step is to forge a global health strategy, organized around a forward-looking commitment of about 15 years, careful planning, and long-term funding tied to performance targets. Such an approach could preserve our gains and provide the long-term predictability and time to achieve substantial progress in reaching our core goals: improving maternal and child health, access to contraceptives, preparedness capacities, control of infectious diseases, and means to address chronic disorders. Strengthening skilled workforces and infrastructure around these objectives typically requires 15 to 25 years. The Commission recommends that a deputy adviser at the National Security Council (NSC) be charged with formulating global health policy; overseeing its strategy, budget, and planning; and ensuring a strong connection between the president, the NSC, the Office of Management and Budget (OMB), and the diverse agencies and departments responsible for implementation. The

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Commission further recommends that an Interagency Council for Global Health be established, reporting to the NSC deputy adviser. Leadership for this Interagency Council should be provided by the Departments of State and Health and Human Services—the two departments that account for the overwhelming majority of global health resources and programs—and should facilitate coordination by setting benchmarks, reviewing progress, improving data, and building accountability.

The Commission recommends that a senior global health coordinator, located in the Office of the Secretary of State, coordinate day-to-day operations and implementation of the president's six-year, \$63-billion Global Health Initiative. The Department of State has been performing this role to date and has shown commendable progress in persuading relevant agencies and departments to work together.

Our in-country ambassadors, as "honest brokers" at ground level, should lead the integration of our health, climate change, food security, and other development programs.

In the face of our current fiscal constraints, we will need to stay on course to fulfill the president's Global Health Initiative (FY2009–FY2014). Over the longer period, 2010 to 2025, a reasonable growth target is for U.S. annual commitments to global health to be in the range of \$25 billion (inflation adjusted) by 2025.

There is much to be gained if the administration and Congress both alter their practices to allow for multiyear budgeting of long-term global health programs, as well as for support of innovative financing methods. The Commission recommends that Congress establish a House/Senate Global Health Consultative Group for the next three years to advance long-range budgeting, promote the implementation of an integrated, longterm U.S. global health strategy, and improve crosscommittee congressional coordination.

For the first time, the National Institutes of Health (NIH) has made global health one of its top five priorities. NIH is now poised to better leverage the exceptional science and research strengths of our nation to benefit U.S. global health programs through operational research, cultivation of the next generation of scientists in partner countries, and accelerating the development and delivery of new vaccines and treatments. These efforts will achieve maximum benefit if they are closely integrated into a U.S. global health strategy.

Congress is in the midst of overhauling the authorities and resources of the U.S. Food and Drug Administration (FDA), which regulates all U.S. drugs and 80 percent of the U.S. food supply. Congress should give the FDA the means to work with our trading partners, particularly developing countries, to improve inspection and quality control of food closer to its place of origin and better coordinate food and drug safety efforts with regional and multilateral health and economic institutions.



Information technology can be applied in several ways to assess and enhance health programs. A new measurement paradigm, using proven methods to document "hard" health outcomes-in terms of lives saved, diseases and disabilities prevented, and increased partner government capacities to deliver health services-will be essential. This step is necessary to build confidence, generate better data, and strengthen a culture of measurement and accountability, for the U.S. and partner governments and other health organizations. Well-planned evaluations of ongoing health programs can also provide information that program managers could use to improve implementation. The U.S. government can more systematically tap the special competencies of the U.S. private sector to strengthen the performance of U.S. global health programs-for example, through better utilization of expertise in systems design (supply chains, workforce training and retention, marketing campaigns, use of information tools); the placement of talented business leaders onto boards; and the development of health insurance in developing countries. This will build on the results-oriented approach and private-sector best practices that imbue the Millennium Challenge Corporation (MCC).

Cabinet officials and other U.S. leaders of global health programs should more regularly and actively communicate with—and convey U.S. achievements with more certainty to—university and faith communities, philanthropies, leaders in industry and science, and health implementers. These constituencies are eager to join a richer and more active two-way dialogue and to acquire a greater voice and ownership of U.S. global health approaches. Moreover, they are fundamental to building an enduring American base of support for global health.

5. Make smart investments in multilateral institutions

The Commission recommends that the United States bolster its collaboration with partner institutions capable of achieving significant health outcomes: the World Health Organization (WHO); the World Bank; the GAVI Alliance; the Global Fund to Fight AIDS, Tuberculosis and Malaria; and traditional UN agencies such as UNICEF. The United States will continue to put a strong focus on its direct investments, since such a bilateral approach affords greater control and accountability and strengthens bilateral partnerships and goodwill, but multilateral approaches offer a vital and necessary complement. By pooling resources and efforts with others, the United States is better able to build health systems, extend the reach of vaccine and infectious disease programs beyond U.S. partner countries, devise alliances to meet trans-sovereign challenges, and mobilize resources and leadership among our partners. By championing the achievement of the Millennium Development Goals by 2015, the United States can demonstrate both its leadership and the heightened value it places on multilateralism. At the same time, we need to look realistically beyond 2015 to the considerable additional work that will likely be required over the following decade to consolidate and sustain MDG progress.

Enhanced U.S. leadership and engagement multilaterally will be crucial in three areas: finance, coordination, and strategic problem solving.

Finance: It is in our long-term interests to make substantial financial commitments and to make a stronger diplomatic effort to improve these organizations' performance and governance. The Commission recommends that the United States increase the share of global health resources dedicated to multilateral organizations from 15 to at least 20



"When the U.S. devotes resources to global health, we are establishing global partnerships. These are not only humanitarian investments; we are ensuring the security and prosperity of nations around the world." — Representative Kay Granger



"Public health conditions in developing countries are critical not only to those countries but, in an increasingly inter-connected world, to the industrial countries as well. Disease can spread rapidly with modern transportation, trade and travel; and the industrial country economies are ever more dependent on developing country supply chains, with a corresponding interest in minimizing disruptions or productivity losses due to disease. The Commission's report sets forth a plan for thoughtfully increasing health care assistance and for making that assistance more effective." — Robert E. Rubin

percent, while also enlisting commitments from other donors, recipient partner governments, and emerging powers—working bilaterally, through the G-8, and increasingly through the G-20. The United States should press the World Bank to significantly step up its role in building health systems. Finally, the United States should support, both materially and politically, promising innovative financing options that could enable the future mass-scale delivery of life-saving vaccines or other innovations.

Coordination: The United States' commitment to work with others is essential to untangle the counterproductive proliferation of uncoordinated donor demands for data. This obstacle to efficiency, in part exacerbated by U.S. programs, results in duplicated effort and wasted resources. The United States could work more closely with other governments, donors, and organizations in support of strengthened national health plans aiming for greater efficiency and streamlined efforts.

Strategic problem solving: The United States can join with key world leaders, possibly through fresh global health summits, to seek concrete solutions to challenges such as the health workforce deficit, drug resistance to existing therapies, global pricing of commodities, metrics, and long-term financing. High-level leadership can pragmatically tie health investments to improved water, sanitation, and nutrition. U.S. leadership can also substantially accelerate efforts to curb global tobacco use: by ratifying and advancing the Framework Convention on Tobacco Control; sharing best practices through the WHO; encouraging partner governments to make regulatory reform a high priority; and spotlighting the burdensome long-term health costs of tobacco use versus the short-term economic gain of increased production, domestic sales, and exports.

If we pursue these steps, we can accomplish great things in the next 15 years.

We can cut the rate of new HIV infections by twothirds, end the threat of drug-resistant tuberculosis, and eliminate malaria deaths.

We can significantly expand access to contraceptives, which will substantially improve the health of mothers and their families.

We can reduce by three-quarters the 500,000 mothers who die each year in pregnancy; save over 2.6 million newborn babies from perishing in their first month of life; and significantly reduce the more than 2 million deaths of children under five years of age caused each year by vaccine-preventable diseases.

Using existing medicines, we can control or eliminate many neglected diseases that affect billions of people in the developing world.

We can help build the basic means to detect and respond to emerging health hazards and build a better system for ensuring access to essential vaccines and medications when severe pandemics strike.

And with U.S. assistance, developing and middle-income countries alike can greatly reduce the premature death and illness associated with diabetes, cardiovascular disease, tobacco use, and traffic accidents.

Put simply, we can give global public health an excellent prognosis for lasting progress.

I | A Quantum Leap Forward



"Smart power is neither hard nor soft—it is the skillful combination of both. Smart power means developing an integrated strategy, resource base, and tool kit to achieve American objectives, drawing on hard and soft power. It is an approach that underscores the necessity of a strong military, but also invests in alliances, partnerships, and institutions at all levels to expand influence and establish the legitimacy of American action. Providing for the global good is central to this effort because it helps America reconcile its overwhelming power with the rest of the world's interests and values." — CSIS Commission on Smart Power, 2007

Over the past decade, the United States has jump-started an historic health transformation in poor villages, communities, and countries worldwide. American engagement, in partnership with others, has saved and lifted human lives on a scale never known before. In the past, such impressive humanitarian gains might have been seen merely as "soft," yet we now understand their benefits include advancing economic development and regional stability. More than ever, we realize that U.S. global health programs are a vital tool in a smart power approach to promoting U.S. interests around the world.

We have come a long way. In 2000, Washington policymakers were debating whether the United States could muster even a \$100-million contribution to the global fight against HIV/AIDS. Today, the United States is investing more than \$8 billion each year to protect poor people from HIV, malaria, tuberculosis, and other threats to a healthy life. If we include U.S. clean water, sanitation, and other investments, U.S. commitments exceed \$10 billion per year.¹

Today, owing to sustained antiretroviral treatment (ART), more than 4 million mothers, fathers, daughters, and sons have escaped premature death from HIV and returned to productive lives. The United States can proudly and accurately claim that it directly supports over 2.4 million of these individuals.² Millions of Zambians, Rwandans, Ethiopians, and Tanzanians now also live free of the threat of malaria, thanks to rapidly expanded distribution and use of bed nets, medications, and insecticidal sprays. Millions of poor children around the world have been immunized against measles and polio this decade with support from the United States. They now have an opportunity to live full lives, free of these crippling diseases.

But the United States did not bring about these changes just by injecting aid dollars. High-level, persistent U.S. leadership has been indispensable.

Through that leadership, America has rallied global opinion behind the moral call to reduce the stark health inequities that divide the world's rich from its poor. It has helped the world to confront the reality that unchecked disease can threaten global stability. It has catalyzed a new global will for action and shattered the old conventional wisdom that ART is too expensive and too difficult to administer in remote communities. It has sparked unprecedented investment in the science and research that can lead to new vaccines and medications for the world's deadliest and most costly diseases. And it has helped spur other donors and international organizations to do far more: today, the total external investment in global health exceeds \$22 billion per year-still less than needed, but 20 times more than was available in 2000.³

It has also revealed how U.S. health investments advance America's standing and interests in the world. In the 2007 Pew Global Attitudes Survey, for example, 8 of the 10 countries with the most favorable opinion of the United States were African states where the United States has made the greatest health efforts.⁴

Meanwhile, deaths related to HIV declined by over 10 percent in 12 countries targeted by the President's Emergency Plan for AIDS Relief—the majority in eastern and southern Africa.⁵ These health gains have bolstered regional stability and economic growth, demonstrating the interdependence of human security and state stability in fragile regions, and the powerful impact of "soft" health investments.

The Roots of Success

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Recent gains were built on the remarkable achievements of earlier decades. The eradication of smallpox in the 1970s, advances in prevention and treatment of common childhood illnesses, and the dramatic progress in controlling polio since the late 1980s inspired many to ask: why can't we do more?

But the tipping point came earlier this decade through new commitments and financial support from traditional donor countries and new leadership in the countries most burdened by ill health and poverty. Across Africa, Asia, and in many other developing areas, a new generation of leaders, activists, scientists, and health experts rose to meet the challenge. Within the G-8 and the UN General Assembly, among wealthy donors, across civil society groups and through new global alliances—most importantly the Global Fund and the GAVI Alliance—it became possible to leverage political will and resources, create a new understanding of the acute burden of infectious diseases, and open new channels to prevent and control them.

Most significantly, the American people came to believe that global health is a worthy, collective good that must include strong U.S. engagement and that U.S. leadership on global health is among the best uses of U.S. smart power—one that can generate dynamic new partnerships that encompass more than the health arena. Across presidential administrations and in the Congress, global health has been largely immune to political polarization and indeed has become a zone of exceptional bipartisan consensus. The President's Emergency Plan for AIDS Relief (PEPFAR) and the President's Malaria Initiative (PMI) are two signature White House initiatives launched by President George W. Bush and now sustained by President Barack



Obama through his administration's emerging six-year, \$63-billion Global Health Initiative. Through these endeavors, the United States proved that multiyear plans, geared to achieve concrete results—and calculated in billions versus millions—create powerful credibility, momentum, and leverage.

America's nongovernmental, philanthropic, and faith communities also embraced the cause of global health. Many prominent opinion leaders made innovative, substantive contributions, while also shaping Americans' outlook: Bill and Melinda Gates, backed by their foundation and now supported by Warren Buffet, have been an especially powerful force, along with Bono and the One Campaign; the Reverend Rick Warren and the Saddleback Church; former president Bill Clinton and the Clinton Global Initiative; former president Jimmy Carter and the Carter Center; and Ted Turner and the UN Foundation. Across America, countless small nonprofit health and development groups and grassroots activists acquired a new voice, advocating expanded U.S. engagement in global health and a two-way dialogue between the U.S. government and engaged citizens on future strategies.

On American campuses, interest surged among youth and faculty alike, and promising global health programs proliferated.⁶ In the private sector, biotech firms and pharmaceutical companies forged dynamic alliances with universities to create knowledge, innovation, skills, jobs, and long-range global partnerships. Their impact can be seen in New York City and Atlanta, North Carolina's Research Triangle, California's Bay area, the Seattle metro area, and the Boston corridor, to name the most prominent.

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In 2008–2009, the prestigious U.S. Institute of Medicine, with support from diverse U.S. agencies and private funders, assembled a cross section of the world's leading global health experts that critically affirmed U.S. global health achievements during the past decade and provided a set of concrete recommendations that informed the design of President Obama's Global Health Initiative.⁷

The American public applauded these efforts. Surveys affirmed that in good economic times and bad, Americans believe U.S. investments in global health are a worthy use of scarce U.S. dollars and generate results that enhance human lives. In early 2009, even as U.S. unemployment was accelerating, a Kaiser Family Foundation survey showed that two-thirds of Americans supported maintaining or increasing U.S. funding to improve health in developing countries.⁸

Keeping Our Eyes on the Prize

Now, as we look to the next 15 years, the challenge is to solidify and expand the progress we have made. If we succeed, we will see historic gains not just in reducing mortality and illness but also in building resilient, competent health systems—as well as major advances in gender equity, economic development, and human security.

Ensuring that women have full access to AIDS treatments and are empowered—economically, legally, and politically—can enhance their access to other health services and enable them to be more successful mothers and wage earners. Preventing malaria can unlock economic productivity by liberating parents to work full days at full strength. The world will continue to surprise us with threats like H1N1, avian influenza, SARS, extensively drug-resistant tuberculosis, and more. Yet, creating laboratories and surveillance systems will help communities and nations shield themselves against the pathogens of the future, before these invisible threats do irreparable harm. But taking the next leap forward will not be easy.

First, disease treatment alone will not create the longlasting solutions the world so desperately needs. In the case of HIV, for example, new infections will continue to far outpace the numbers of people receiving treatment unless prevention becomes a true priority and more effective programs are in place. Prevention is just as crucial with many other diseases; new vaccines against diarrheal disease and pneumonia and access to clean water can avert millions of childhood deaths, and public education programs can significantly reduce countless millions of deaths and illness due to smoking and alcohol abuse. Better safety efforts will reduce contamination of both food and drugs.

Second, while the past decade has seen tremendous progress, many gaps and disparities persist. Thanks to a strong global effort, a mother and her family in Kenya might now be able to go to a clinic and receive tests and treatment for HIV. But that same family might still lack access to bed nets and medications for malaria or the treatment and care required for tuberculosis. They might still lack access to basic prevention and treatments for the parasitic diseases and diarrhea that so disrupt and limit the lives of the poor. And while deaths from AIDS and malaria have gone down, other health issues-maternity care, for example-have been neglected. To families around the world, the consequences are all too real: every minute, one mother dies giving birth, while another 30 suffer serious complications as a result of their pregnancy.⁹ Each year, 4 million newborns die in their first month of life—roughly the number of all babies born in



"Investing in the health of women and girls around the globe is one of the most effective, yet under-utilized, tools for encouraging social stability and economic prosperity in the developing world. When women are empowered and healthy, families and communities will thrive. A strong commitment to addressing maternal and child health will save countless lives and is one of the smartest development investments we can make." — Senator Jeanne Shaheen



"The president's six-year, \$63 billion Global Health Initiative promises broad developmental benefits that extend well beyond important health services. Its success will be enhanced through broad-based expert advice—of the kind this Commission has gathered—and by adopting a business mindset of accountability, systems planning and careful measurement of true health impacts. I am very hopeful." — Rex Tillerson

the United States. All of these outcomes are largely preventable with existing tools.

Third, the world will not wait. The earth's population is projected to rise faster than ever before, from 6.8 billion today to 8.1 billion in 2025, and possibly stabilize at 9.1 billion in 2050. Most of that growth will be in poor, densely populated urban areas that are prone to infectious disease outbreaks. As we witnessed in early 2008, when food riots erupted in over 33 countries, these overburdened cities can be flashpoints for political violence. And whereas industrialized countries will see their populations aging and their birthrates declining, developing countries will continue to have the world's highest birthrates and most youthful populations.¹⁰ In Africa, South Asia, and other low-income regions, women's health status and that of their families will benefit directly and considerably from better access to contraceptives.

The poorest 2 billion people are also likely to experience high rates of traffic deaths and injuries and to have rising premature death rates from diabetes and cardiovascular disease, connected to tobacco use, poor diet, and obesity.

Fourth, there is no guarantee that the consensus that enabled our current progress will last. At home, we face a weak economy, stubbornly high unemployment, division over reform of our own health system, record deficits, and a swiftly rising national debt. The dire fiscal situation is leading to an intensifying discussion of possible tax increases and spending cuts. Bipartisanship has frayed on multiple fronts; bipartisan unity on global health could be the next casualty. The ongoing debate over the future of U.S. foreign aid may distract policymakers from health priorities, even as American global health advocates are fragmented, anxious, and engaged in a polarizing competition for funding.

Americans firmly support U.S. investments in global health, yet they are relatively unaware of the actual impacts of the more than \$30 billion the United States has expended on HIV/AIDS and malaria since 2003. Advocates struggle to find compelling language to describe the global health challenges, opportunities, and risks that lie ahead. And while experts acknowledge the need for a new evaluation paradigm that ties goals to measurable results, they are hampered by a lack of agreed methods and standards, quality data, and established analytic capacities.

Internationally, we face potentially daunting longterm carrying costs for ART, influenced in part by rising rates of drug resistance to current medications. Improving maternal and child health, another global imperative, is a complex, long-term project that will require patience, perseverance, and new models that succeed. Economically strapped countries may not be able to fulfill their pledges to commit more of their budgets to health. At the same time, many face internal political barriers to better governance and resist changing laws to guarantee gender equity, to better protect women and girls, and to end discrimination and stigma.

The Time to Act

These challenges are formidable. And yet, if we act now, we know they can be overcome.

First, we have more interventions today than ever before. We have learned a vast amount about how to deliver treatment, especially for those living with HIV, tuberculosis, and malaria.We are learning more

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about how to effectively prevent disease through changes in behavior and links with other development challenges. New vaccines have become available, and several others are expected to become available in the next few years. Critical health messages are now reaching remote communities through the use of new low-cost technologies such as cell phones and simple computers. Operational research is showing us how to deliver interventions more effectively. And, especially in a time of budgetary restraint, global public health is a "best buy"—one that can bring preeminent benefits to the larger U.S. development and poverty-alleviation agenda, buoying education, agriculture, infrastructure, and sanitation priorities.

Second, we know the long-term, strategic, integrated use of U.S. smart power has a multiplier effect. Investments in global health bring greater shared global security. Consistent, high-level U.S. leadership can inspire other donors and partner governments to reach their targets, convince private industry to create and deliver low-cost vaccines and medications, and spur greater efficiency in programs funded by multiple donors such as the GAVI Alliance and the Global Fund. To give just one example, in October 2009, when the United States committed 10 percent of its H1N1 vaccine stockpiles to the developing world, 10 other countries joined with similar pledges.

Third, the international health community increasingly recognizes the need to streamline crosscutting donor demands and to create new evaluation tools that better track performance and build accountability. There is also a new understanding that national governments must shoulder higher responsibilities, while donors must make greater



"On U.S. college campuses we're finding that our students have an unconsummated desire for sacrifice and service. They want to make a difference in the world. It's the role of universities to develop global health education, research and service-learning opportunities that meet this desire while also adding value to communities in which students serve." — Michael Merson

CONSORTIUM OF UNIVERSITIES FOR GLOBAL HEALTH

The Consortium of Universities for Global Health (CUGH) comprises more than 50 schools with global health programs, working collectively to define the field, standardize curricula, expand research, influence policy, and coordinate projects in less-developed countries.

A CUGH study shows that the number of students enrolled in U.S. and Canadian global health programs doubled from 1,286 to 2,687 between 2006 and 2009. Spurred by this surge in interest, 20 universities from the United States and Canada came together in September 2008 to form a coordinating entity.

The Consortium held its first annual meeting at the National Institutes of Health in September 2009, attracting 250 representatives from 58 universities. The meeting featured panels on public engagement and global health financing, a conversation among five university presidents, a keynote address by the Office of Management and Budget's special adviser on health policy, Ezekiel Emanuel, and a briefing for Congress organized by CSIS on the powerful opportunities for students to do health work abroad.

The CSIS Commission was impressed by the Consortium's potential capacity to organize a critical and excited constituency—future global health leaders—operating at the intersection of research, education, and volunteerism. The collective passion, commitment, and knowledge it embodies will make CUGH an important partner in shaping global health policy. 20

"As important as it is for the U.S. to increase its investments in global health, it's equally important to direct these resources to programs and interventions that will have the greatest impact. Childhood immunization, antenatal care and other approaches to prevention stand out as "best buys" in health, and should be core elements of any U.S. strategy. " — Rajeev Venkayya



direct investments in their partner countries' staff and infrastructure.

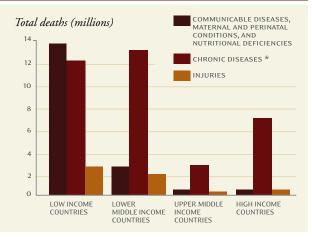
If the United States commits now to a 15-year leadership plan, imagine the results:

Our leadership and engagement can help the world's countries cut the rate of new HIV infections by twothirds, end the threat of drug-resistant tuberculosis, and eliminate malaria deaths.

We can end the chronic neglect of women and girls and nurture a new generation of adolescent girls and young women who are healthy, in control of their lives, and fully able to contribute to their communities.

PROJECTED DEATHS BY MAJOR CAUSE

and World Bank income group, all ages, 2005



* Chronic diseases include cardiovascular diseases, cancers, chronic respiratory disorders, diabetes, neuropsychiatric and sense organ disorders, musculoskeletal and oral disorders, digestive diseases, genito-urinary diseases, congenital abnormalities and skin diseases. We can significantly expand access to contraceptives that can substantially improve the health of women and their families.

We can cut maternal deaths by three-quarters and newborn deaths by two-thirds. And we can significantly reduce the more than 2 million deaths of children under five years of age caused each year by vaccine-preventable diseases.

Using existing medicines, we can control or eliminate many neglected diseases that affect billions of people in the developed world.

We can share with developing nations the basic means to detect and respond to new disease threats, engage them in open information exchange when new pathogens emerge, and win their participation in global deliberations over access to essential vaccines and medications when severe pandemics strike.

With U.S. assistance, developing and middle-income countries alike can greatly reduce the premature death and illness associated with diabetes, cardiovascular disease, tobacco use, and traffic accidents.

Put simply, we can give global public health an excellent prognosis for lasting progress. And 15 years from now, in 2025, we could celebrate a world where public health has become the norm, not a luxury—and developing countries have risen from aid dependency to balanced cooperation with donors in creating health systems that are accessible, effective, and built to last.

II | A U.S. Global Health Strategy



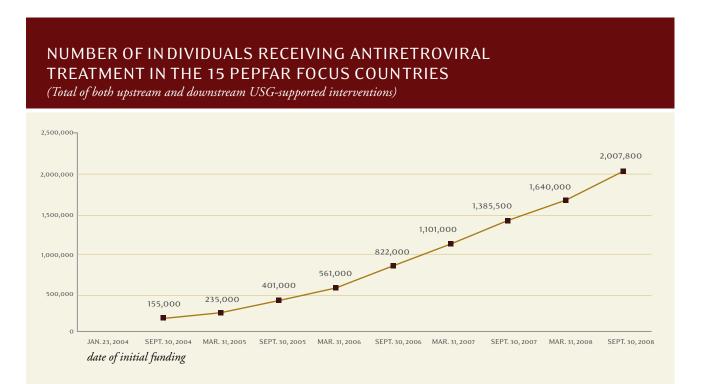
The smart use of U.S. power matters profoundly to millions of men, women, and children around the world. During the previous decade, we expanded the realm of the possible in saving and bettering the lives of the poor. If the United States pursues a long-term strategic approach to global health, in concert with others, the future is bright. But what exactly should that approach look like? How can we turn these ideas into action?

The first step is to develop and fund a U.S. global health strategy for 2010–2025 that advances smart power's dual mission of improving the health of the world's poor and bolstering U.S. interests and standing in the world.

The strategy should be rooted in the following principles.

• Match our ambitions with long-term commitment at the highest levels of U.S. leadership. We need to be certain that we have sufficient, predictable resources to sustain our efforts over the long haul. We also need confidence that we are making true progress in enhancing the health of individuals and strengthening the institutions and services that are to keep people healthy. If we only prepare for the short term, securing lasting global health improvements will be impossible.

• "Trust but verify." We have learned that partner countries usually know what is in their best interests and that by listening to what countries need, and by making direct investments over a long period, we can lift the lives and health of families in the developing world. We know that developing countries, given the right conditions, can improve their own governance, commit more of their own resources over time, and escape dependency. But we also need a new evaluation framework rooted in realism and patience, concrete "hard" health outcome goals to measure progress, mutual accountability, and new evaluation tools to verify progress. This framework will need to be built sequentially over a number of years, but important building blocks can be put in place now, and existing measurement and evaluation competencies within the U.S. government can be leveraged more strategically and effectively. If we are to have reciprocal relationships that bear fruit over time, we must hold both ourselves and our partner countries truly accountable.



(Celebrating Life: The U.S. President's Emergency Plan for AIDS Relief 2009 Annual Report to Congress, http://www.pepfar.gov/documents/organization/113827.pdf)



- Build on existing successes. This means reinforcing America's new assets-PEPFAR, PMI, and the Millennium Challenge Corporation (MCC)while leveraging critical global partnerships with the GAVI Alliance, the Global Fund, the World Health Organization (WHO), and other UN agencies. It also means championing the Millennium Development Goals (MDGs) that we and the world embraced in 2000, the best agreed framework for organizing conversations among partner governments, independent groups, other donors, and international agencies. In 2010, as we enter the final five years of the MDG compact, attention will turn increasingly to taking stock of progress and disappointment. While much progress has been made since 2000-for instance in battling infectious diseases-high rates of maternal death and complications from birth remain unchanged across most developing countries. The United States should play an active role in the evolving global deliberations over a new shared vision that will strengthen accountability and maximize progress toward full achievement of the MDGs by 2015.
- Prioritize prevention. Averting disease and disability through behavioral choices is the most effective and affordable tool for building healthy futures. Yet, too often, emphasizing prevention is mistakenly perceived as a trade-off with treatment. We must push back against that false argument. We can and must prevent and treat simultaneously. But there

is no better way to save lives and resources than to prevent people from getting sick in the first place.

- Be targeted. We need to focus the majority of our resources on those developing countries where the suffocating burden of bad health, today and into the future, is concentrated; where the United States is best positioned to contribute, directly and through partners, in reducing premature death and undue illness and suffering; and where the United States can build lasting partnerships. In other developing and middle-income countries that are not U.S. focal countries, we should use U.S. expertise, data, and influence to help public health officials reverse the rising tide of premature death associated with diabetes and cardiovascular diseases, tobacco use, alcohol abuse, and road accidents.
- Embed our global health investments within the larger development enterprise. A dollar directed toward health should not stand alone in its own stovepipe; it should be spent in ways that reinforce a united U.S. effort to promote development. In each country, there should be careful planning with partner governments to link health dollars to the dollars that go to nutrition, water, and sanitation; to empowering women; and to building health systems and human security against the toll of droughts and floods, surprise pathogens, and conflict.

With these principles in mind, our national strategy should have the following five key elements.

1. Maintain our commitment to the fight against HIV/AIDS, malaria, and tuberculosis

We should use existing vehicles, most notably PEPFAR, PMI, and the Global Fund, to accelerate treatment while stepping up internationally coordinated prevention efforts, especially in southern and eastern Africa. If we continue steadily investing in these programs, the Obama administration can realize its goal of increasing the number of people receiving U.S.-supported treatment to 4 million over the next five years,¹¹ and our AIDS and malaria platforms can branch successfully into other health areas.

A top priority should be ending mother-to-child transmission of HIV, expanding male circumcision, and acquiring the data and implementing approaches to prevent new infections, especially among girls and women.¹²

Ensuring a consistent trajectory is essential, even in the face of a grave fiscal crisis and competition from other worthy health priorities; stalled progress will only risk regression across these three major infectious diseases. AIDS advocates are particularly anxious: the steep growth rates in AIDS treatment are now slowing, and concerns are mounting over the long-term costs of treatment and the risk that future resistance to medications could send those price tags higher. The United States will need to be simultaneously compassionate and realistic, with a can-do commitment to long-term solutions for reducing mortality and illness overall-including by achieving greater efficiencies and better long-term pricing and financing. Fragmentation and conflict across global health constituencies will serve neither these constituencies nor the people who desperately need their help.

2. Prioritize women and children in U.S. global health efforts

Building on the rising tide of global awareness and will, the United States should act immediately to bring about major gains in maternal and child health, together with expanded access to contraceptive commodities. A doubling of U.S. effort—to \$2 billion per year—will have a catalytic impact.¹³ To be most effective, we need to focus patiently and deliberately on a few core countries in Africa and South Asia. This new priority for the United States will address a glaring global gap, directly contribute to building health systems, motivate others to do more, significantly enhance the well-being of the next generation of girls and women, and strengthen families, communities, and economic development.

Maternal mortality remains a profound challenge and represents a shocking global health disparity: in the industrialized world, a woman's risk of dying in pregnancy or childbirth is 1 in 7,300; in Asia, it is 1 in 120; and in sub-Saharan Africa it is 1 in 22. In many cases, preventive solutions are clear, but access problematic. Improving maternal mortality requires a complicated and interlinked set of interventions that are supported and sustained over time, including heightened efforts to improve local transport.

Existing, effective models for managing prenatal and postnatal care need to be expanded and deepened. The U.S. Agency for International Development (USAID) and the Centers for Disease Control (CDC) should form a joint initiative to expand the availability of proven models for prenatal care, emergency services for pregnant women, and interventions that minimize post-birth complications. At the same time, they should significantly expand access to contraceptives, so women can be empowered to decide family size and when they wish to have their next child.



"It is difficult to imagine the public health needs of the 300,000 Somalis in the Dadaab refugee camp in northeastern, Kenya which I visited in August 2009. The United States should continue to engage in successful partnerships to bring health care to this fragile, conflict-prone region and to build sustainable infrastructure that will meet the challenges faced by such a vulnerable population." — Representative Keith Ellison

COMMISSION TRIP TO KENYA

In August 2009, a delegation of CSIS commissioners, led by Cochairs Gayle and Fallon, traveled to Kenya. Kenya has been the recipient of multiple U.S. investments in health. Over the course of its threeday visit, the delegation focused on the impacts of these health partnerships; the possibilities for greater integration of U.S. support; and Kenyan perspectives on planning for long-term sustainability.

The Kenyan case vividly illustrates the many significant gains of recent years, as well as the tough work that lies ahead. Among the delegation's key impressions:

- Combined U.S. investments in health have dramatically improved HIV treatment and prevention, advanced gender equality, and helped build incipient indigenous capacities. These achievements reflect the hard work of an integrated and innovative U.S. mission team that has been creative in building partnerships and coordinating investments.
- Governance issues continue to inhibit an effective national approach to public health. Too few Kenyan leaders are committed to health; 35 percent of the health budget goes unused each year; and the internally divided Health Ministry—a political consequence of the 2007 postelection violence—has increased costs, confused local health officials, and lessened accountability. Current and future efforts will only be sustainable with more effective Kenyan governance.

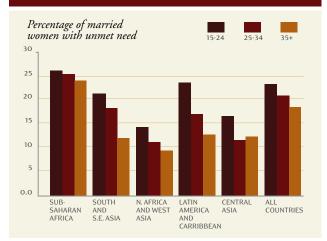
- Though U.S. resource flows are dominated by HIV assistance, integration of efforts has successfully bolstered non-HIV services as well, particularly family planning and tuberculosis; but long-term management and expansion of integration efforts remain uncertain on both the U.S. and Kenyan sides.
- U.S. partnerships have also created a growing surveillance network and base of epidemiological analysis—achievements that will be critical to ongoing efforts to respond to health challenges and measure outcomes.
- U.S. partnerships have helped train a growing cadre of technical and health professionals, but retaining health personnel, including through incentives and adequate pay, remains difficult.
- The donor community currently shoulders 98 percent of the HIV treatment burden, raising serious concerns about the sustainability of the growing "HIV mortgage."
- Multiple human security challenges affect health outcomes and compete for Kenyan policymakers' attention and resources. These include severe food insecurity, chronic water scarcity, spillover from regional conflicts, and a growing humanitarian crisis among refugees.

Access to safe, affordable, and voluntary family planning has been shown to profoundly affect the health of mothers and their children. For every \$100 million invested in family planning, 4,000 maternal lives are saved, 70,000 infant deaths are prevented, and 825,000 abortions are averted.¹⁴

Infant and child health are obvious companion elements. Every hour, more than 1,100 children under the age of five perish—nearly 500 of them infants in their first month of life. This is unacceptable. It is estimated that a package of 16 simple, known, and cost-effective measures could prevent nearly 3 million of the estimated 4 million deaths in the first month of life. These interventions include the promotion of breastfeeding, early detection of complications, extra care of low-weight babies, and warming the newborn.¹⁵ An additional 2 million children under the age of five could be saved each year through expanded access to immunizations against the major causes of vaccinepreventable deaths, including pneumonia, diarrhea, and measles. Pneumonia, the single largest cause of death in children under five, is responsible for onefourth of all child deaths. Rotavirus, the most common cause of severe diarrhea in children, is responsible for 500,000 childhood deaths and 2 million hospitalizations each year. Averting these deaths, and achieving the MDG of reducing childhood mortality by two-thirds, can only be achieved with increased support for immunization programs.

Beyond its most obvious benefits, immunization also provides opportunities for program integration within and across the health sector. New innovations and partnerships are already expanding access to vaccines. The GAVI Alliance, for example, has reached an additional 256 million children with life-saving

UNMET NEED FOR CONTRACEPTION AMONG MARRIED WOMEN BY AGE AND REGION



(Center for Global Development, "Start with a Girl," http://www.cgdev.org/content/publications/detail/1422899) Source: Sedgh, Hussain et al. 2007 (Rosen 2009)

vaccines over the last nine years.¹⁶ While at present there is no effective vaccine against malaria, promising clinical trials are under way. A sustained U.S. effort that focuses on decreasing maternal and neonatal deaths, expanding access to family planning, and increasing the availability of essential immunizations is achievable, would have dramatic health impacts, and would set the stage for better integration and strengthening of country health systems.

3. Strengthen prevention and health emergency response capabilities

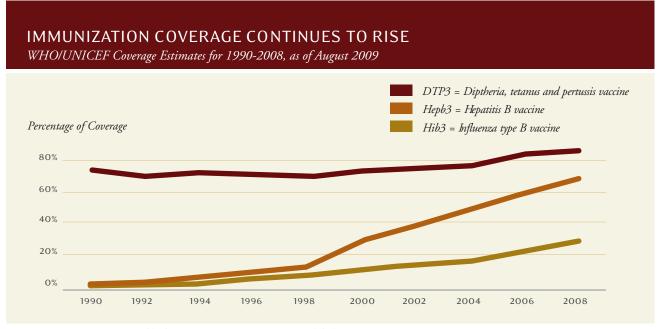
Prevention of disease and illness offers the best return on investment. Behavior changes and changing societal norms can significantly lower the rate of new HIV infections, curb tobacco use, and reduce premature death from chronic disorders.

There is no time to waste. Tobacco deaths are projected to rise from 5.4 million in 2005 to 6.4 million in 2015 and 8.3 million in 2030. Projections suggest that by 2015, 50 percent more people will die of tobacco than of HIV/AIDS.¹⁷ Premature death from cardiovascular diseases, diabetes, and cancer is rising steeply in both developing and middle-income countries. The moment for the United States to share expertise, best practices, and data is now.

Meeting emerging threats requires long-range U.S. collaborative investments: building preparedness among partner countries to detect and respond to pandemic diseases and other dangerous pathogens; and creating reliable opportunities for poor countries to access affordable vaccines and medications that will be crucial in combating various diseases. Strengthening the shared oversight of food and drug safety is also essential in an increasingly integrated global marketplace.



"Despite recent progress in expanding global access to vaccines, over 2.3 million children under the age of 5 die every year due to vaccine-preventable illnesses. Supporting immunization is one of the most cost-effective approaches to improving the health of individuals and the economic development of low-income countries." — Margaret G. McGlynn



Source: WHO vaccine-preventable diseases: monitoring system 2009 global summary (Living Proof Project, Immunization Progress Sheet, http://www.gatesfoundation.org/livingproofproject/Documents/progress-against-immunization.pdf)

The emergence in this decade of SARS, H5N1 (avian), and H1N1 (swine-origin) influenza has increased our awareness of the interdependence of human and economic security, the moral and ethical questions surrounding the equitable distribution of critical health commodities, and the need for more systematic global preparation for sudden-onset public health crises. Creating capacities in developing countries to respond to emerging disease threats is simultaneously an investment in the well-being of the world's poorest individuals and in America's self-interest.

Ultimately, decreasing the time required to recognize and respond to emerging health problems within developing countries will improve the overall health of the entire global community.

To reach this goal, the United States should draw systematically on its domestic preparedness experience and its expertise in training field epidemiologists and other public health workers. In particular, the CDC should expand its Field Epidemiology and Laboratory Training Program (FELTP) in priority developing countries to enhance the collection of surveillance data to guide long-term policy formulation, further the use of communication technology to share essential data among field partners, improve the planning and evaluation of disease control efforts, and sharpen detection of—and response to—newly emerging threats to health. At the same time, the MCC should launch an initiative focused on three critical dimensions of health systems: financial management, program management, and procurement.

4. Ensure that the United States has the capacity to match our global health ambitions

Improve the U.S. organizational structure

The U.S government is already exceptionally well equipped to pursue an ambitious long-term global health strategy.

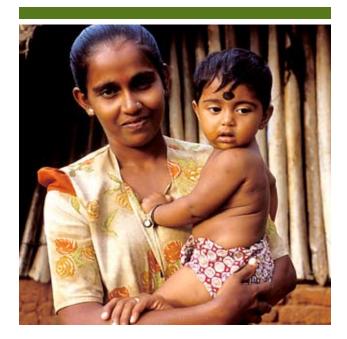
For decades, the Department of Defense's network of overseas medical research laboratories has carried out quality research on infectious diseases. The CDC has earned an unparalleled reputation for technical expertise across a full spectrum of public health challenges, and in the past decade, it has expanded its international contributions, including training in disease surveillance, and become the trusted counsel to many health ministries. USAID has helped introduce health services in impoverished communities, promoted the reform of health systems, and cultivated extensive ties to civil groups integral to community empowerment and development.

The National Institutes of Health (NIH) has been a global locomotive for scientific research and has quietly underwritten the careers of many talented scientists from the developing world. The Department of Agriculture has a key role to play in promoting nutrition, as does the Food and Drug Administration (FDA) in promoting the safety of food and drugs.

Yet, paradoxically, despite these abundant assets, the U.S. government is constrained organizationally from pursuing a common, integrated approach to global health.

Until now, there has not been a single, coherent U.S. global health strategy around which to align different efforts. U.S. agencies have underinvested in impact evaluation, and they often operate side by side with each other and with other major bilateral and multilateral agencies with no common set of outcome measures.

None of the U.S. agencies responsible for implementing our global health agenda embraces global health as its predominant mission. Within our government, we have seen the clear advantages to the success of PEPFAR in concentrating authority in the Office of the Global AIDS Coordinator, beginning in 2003. Similarly, the U.S. interagency team charged with coordinating



the U.S. response to pandemic influenza and other emerging threats has performed increasingly well since early in this decade, when there was a special, post-9/11 mobilization to deal with anthrax, and subsequently SARS and avian influenza. But despite these gains, considerable fragmentation persists.

U.S. agencies compete with one another, backed by separate mandates, authorities, hierarchies, and legislative ties. In any given program or country, USAID and CDC are just as likely to pursue separate and uncoordinated priorities as they are to cooperate. The NIH and its researchers are typically disconnected from the U.S. agencies that operate programmatically on the ground. Military and civilian agencies are often uncomfortable cooperating with each other, even while they each separately attempt to track and prepare for emerging disease threats in the same vulnerable regions, and even as they each puzzle over how to use health investments wisely to pull countries out of conflict. Senior leaders in Washington may have one set of global health priorities, while U.S. ambassadors and aid officials posted abroad may have another. Likewise, there has been no clear definition of the optimal division of responsibilities between U.S. agencies and international or multilateral organizations.

Efforts to bolster government efficiency rarely excite or inspire the media or the public. But until we address our current organizational weaknesses, no U.S. global health strategy is likely to succeed. If our government remains poorly organized to deal with global health challenges, we will not be able to prepare effectively for contingencies, make mid-course corrections, or respond to unforeseen threats.

We do not need to create entirely new agencies or institutions to manage these problems, as most of the building blocks are already in place. Instead, we should organize ourselves more logically and efficiently, strengthening our planning, coordination, and communications systematically across the full range of government players.¹⁸ While there is a striking need, for instance, for an independent evaluation group, it need not be a new government entity per se. More



"If we take the next step to build a truly integrated U.S. senior leadership team focused on global health, we will substantially advance our ability to save and enhance lives." — Donna Shalala

important is that it be sufficiently resourced and have the mandate and means to carry out objective analyses.

Organizational reform of the U.S. approach to global health could take place at a time when a broad debate is unfolding over the ultimate purposes of U.S. foreign assistance, writ large: to whom it should be accountable, how it should be structured, and how best it should be modernized and streamlined. That debate has recurred at many different points over the past several decades, and it continues to weigh heavily in shaping an effective U.S. foreign policy and development approach that can best serve U.S. national interests and lift people's lives worldwide.

Currently, two important reviews are under way: one led by the White House, in the form of a Presidential Study Directive; and one by the State Department, the first Quadrennial Diplomacy and Development Review (QDDR). Each is expected to issue findings in 2010. Yet, reordering how the U.S. government's global health business gets done need not await the larger quest to upgrade U.S. foreign aid. Indeed, efforts undertaken now to bring greater unity, rigor, and clarity of purpose to global health programs can spur broader foreign aid reform.

Reform should begin with the creation of a global health management team charged with translating national policy goals into an interagency planning process. Its leadership should rest in the Executive Office of the President, where a deputy adviser at the National Security Council should be charged with formulating U.S. global health policy; overseeing its strategy, budget, and planning; and ensuring a strong linkage between the highest levels responsible for policy—the president, the NSC, and the Office of Management and Budget (OMB)—with the diverse operational departments and agencies responsible for implementation.

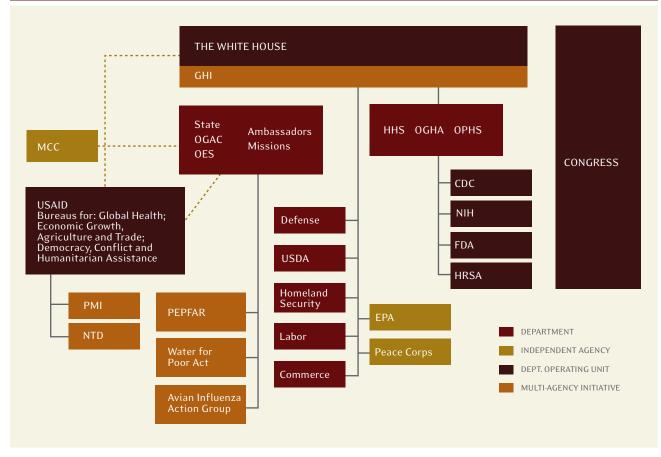
The Commission further recommends that an Interagency Council for Global Health be established, reporting to the NSC deputy. Leadership of this Interagency Council should be provided by the Departments of State and Health and Human Services—the two departments that account for the overwhelming majority of global health resources and programs¹⁹—and should facilitate coordination by setting policy benchmarks, reviewing progress, improving data, and building accountability.

In addition, the Interagency Council should work to improve cooperation at all levels. It could encourage better collaboration between U.S. military and civilian organizations, enhance coordination between scientists and health practitioners, and encourage and coordinate private-sector support for global health initiatives.

The Interagency Council could further elevate international food and drug safety into the global health fold, better link ambassadors and their country teams with Washington policymakers, and align health investments with broader development aims, such as nutrition, access to water and sanitation, and empowerment of women and girls.

The Interagency Council should be composed of senior coordinators from each relevant agency individuals with the highest trust and confidence of their respective cabinet secretaries and agency administrators and empowered with appropriate budget authorities to execute the council's decisions. Given the substantial funding and programmatic responsibilities currently residing at the Department of State, USAID, the Department of Agriculture, and the Department of Health and Human Services and its constituent agencies (NIH, FDA, and

SCHEMATIC OF THE U.S. GOVERNMENT'S GLOBAL HEALTH ARCHITECTURE



PEPFAR: President's Emergency Plan for AIDS Relief; PMI: President's Malaria Initiative; NTD: Neglected Tropical Diseases Initiative; MCC: Millennium Challenge Corporation; OGHA: Office of Global Health Affairs; OPHS: Office of Public Health and Science; OGAC: Office of the Global AIDS Coordinator; OES: Bureau of Oceans, Environment, and Science. ("The U.S. Government's Global Health Policy Architecture," Kaiser Family Foundation, April 2009)

CDC), it will be particularly important that these representatives report directly to their relevant cabinet secretary. The Interagency Council will need also to reach beyond this core to the Departments of the Treasury, Homeland Security, and Defense, the Office of the U.S. Trade Representative, and the National Intelligence Council. The Commission recommends that a senior global health coordinator, located in the Office of the Secretary of State, coordinate day-today operations and implementation of the president's \$63-billion Global Health Initiative. The Department of State has been performing this role to date and has shown commendable progress in persuading relevant agencies and departments to work together.



"Our report provides a roadmap to help catalyze a new era in global health as we build on the remarkable success of existing initiatives such as the President's Emergency Plan for AIDS Relief and the Global Fund. By increasing coordination, cooperation and accountability—and prioritizing such goals as improving the health of women and children—we can not only improve the health of millions, but also foster economic development and security." — Senator Olympia Snowe At the Department of Health and Human Services, a priority should be to ensure that the Office of Global Health Affairs is fully staffed with senior talent.

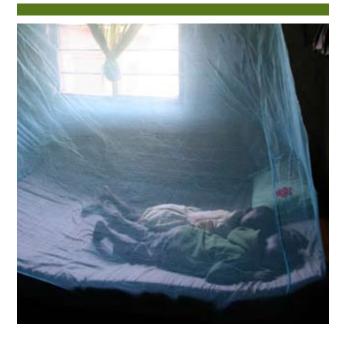
Our in-country ambassadors, as "honest brokers" at ground level, should lead the integration of health, climate change, food security, and other development programs. Embassy planning teams, led by ambassadors, should be responsible for developing individual country strategies with our partner governments, formalizing them through country compacts, and securing the ongoing political support of senior partner government officials. This will be particularly important as PEPFAR proceeds with its aim of working more actively through ministries of health and other public-sector partners on the ground. In our key partner countries, the U.S. ambassador will increasingly be expected to make promoting the U.S. health agenda a top concern.

At home, cabinet officials and other U.S. leaders of global health programs can more systematically and actively reach out—and convey U.S. achievements with more certainty—to university and faith communities, leaders in industry, science, the media and foundations, and health implementers. These constituencies are eager to join a two-way dialogue and to acquire a greater voice and ownership of U.S. global health approaches. That will require a conscious and sustained effort by the U.S. government to nurture, build up, and leverage public support for U.S. leadership on global health.

Ensure adequate long-term financing

Long-term planning for U.S. funding is as important as better internal organization and, like measurement, must be part of a more formal accountability framework. We have seen that a dollar invested in global health benefits us in multiple ways. Sustained, predictable financing can secure those benefits, spur other donors, and motivate partner governments to make larger, long-term investments of their own. But achieving that goal will require care and realism that takes account of the current very difficult budgetary constraints, while at the same time laying the groundwork for a stable trajectory of long-run funding.

In the first and second phases of PEPFAR and now through President Obama's Global Health Initiative, the United States has started to budget over an extended multiyear framework and to distinguish between funds that sustain and consolidate existing priorities and those that enable programs to grow. This promising new approach should now be expanded to include multiyear funding of programs (such as ongoing antiretroviral treatment) where current uncertainty is problematic and counterproductive.



"The time has come for a new long-term global partnership and improved coordination between the U.S., other bilateral and multilateral agencies, and developing countries. The new partnership should ensure local ownership, leadership and capacity for sustainable health and development programs." — Peter Lamptey



Specifically, the Obama administration should push past its current five-year planning horizon and develop a framework for setting program and budget targets through about 2025. Such an explicit commitment, even though it would extend well beyond the tenure of any single administration, can help consolidate the attention of the American people and sustain the bipartisan political support that will be necessary in the decades ahead.

Such an approach will provide the long-term predictability and time to achieve substantial progress in reaching our core goals: improving maternal and child health, access to contraceptives, preparedness capacities, control of infectious diseases, and means to address chronic disorders. Strengthening skilled workforces and infrastructure around these objectives typically requires 15 to 25 years.²⁰

Ample, predictable long-term funding, tied to performance targets, is essential to U.S. effectiveness. In the face of the current fiscal crisis, we should preserve our gains and stay on course to fulfill the president's six-year, \$63-billion Global Health Initiative (FY2009–FY2014). Over the longer period, 2010 to 2025, we should aspire for U.S. annual commitments to global health to be in the range of \$25 billion (inflation adjusted) by 2025.

Funding allocations should focus dollars where the United States can have the greatest impact—that is, countries with the heaviest disease burdens and the greatest willingness to make their own public health investments. Clear agreement on mutual goals as well as funding levels to be invested should be spelled out in mutual accountability compacts with partner governments. Our multilateral partners have a critical role to play. Currently, 15 percent of U.S. health aid is provided through multilateral channels.²¹ This level should rise to at least 20 percent over the next three years and be concentrated on U.S. core programmatic priorities—maternal and child health, infectious diseases, prevention, and preparedness. Even as it earns credibility and goodwill, this modest increase will help achieve greater coordination, streamline effort, and promote efficiency at the country level, providing a further incentive for multilateral institutions to work more closely with the United States.

The United States will achieve far greater predictability and integration of U.S. funding if Congress increases its focus on global health as a new, interdisciplinary foreign policy priority. To achieve this goal, Congress should establish a House/Senate Global Health Consultative Group for the next three years, with membership including the chairs and ranking minority members of relevant committees. This Consultative Group should be charged with reviewing progress in implementing an integrated, long-term U.S. global health strategy, generating concrete options for longrange budgeting, and otherwise improving crosscommittee congressional coordination.²² It should have its own small budget and staff and be empowered to hold hearings, travel, issue reports, and liaise closely with the Obama administration, but not to alter existing committee jurisdictions.²³

The United States should also systematically explore how it can contribute to innovative approaches to raise additional revenue for global health. Over the next decade, one or more of these approaches might succeed on a significant scale.²⁴



"Having spent the week after the January 12 earthquake in an operating room in the Baptist Mission Hospital in Haiti, I have been immersed in the needs of patients who are suffering from lack of proper health care and access to basic needs such as food and water. This disaster is a clarion call to the immediate needs of all those who are suffering from disease and extreme poverty around the world." — William H. Frist

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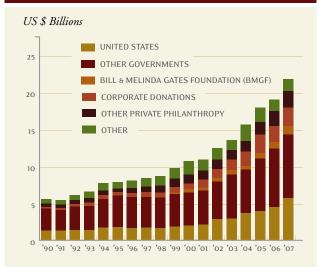
For example, the first advance market commitment (AMC) was developed earlier in this decade as a collaborative effort across a number of governments and other partners, including the World Bank and the GAVI Alliance. The core concept was to line up donor funding, amounting to \$1.5 billion, to stimulate the pharmaceutical sector's research and development of a new childhood vaccine against pneumonia. That initial effort has just become operational and is projected to save the lives of millions of children under the age of five over the next two decades.

A second AMC is now under discussion, potentially focusing on either tuberculosis or malaria. U.S. support could potentially accelerate this process, but legislative action would be required, including the creation of a reserve fund within the U.S. Treasury or the establishment of a financial guarantee by the World Bank or other international organization, before the United States could make a legally binding multiyear commitment.

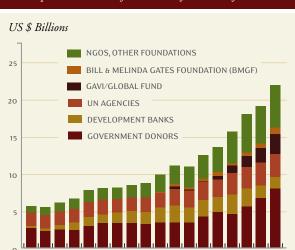
Other new finance mechanisms have also gained momentum and are worthy of serious U.S. consideration. Under the International Financing Facility (IFF), for example, bond financing backed by donor governments provides access to funds to pay for the distribution of important health products such as childhood vaccines, while spreading the costs to donors over a 20-year period. An initial IFF focused on the introduction of childhood vaccines through the GAVI Alliance was launched in 2006 with the support of a number of European governments and the Bill & Melinda Gates Foundation. In September 2009, another coalition of European governments launched a subsequent IFF valued at \$1 billion to support the strengthening of health systems. As with the AMC,

RAISING IT

Development Assistance for Health, by funding source



SPENDING IT



Development Assistance for Health, by channel of assistance

Source: The Institute for Health Metrics and Evaluation, University of Washington; The Economist 2010



"The nature of our world has changed. Emerging challenges are forcing us to rethink our approach to global affairs. If we can capitalize on U.S. health leadership and build the right types of alliances with partners around the world, we can make a tremendous difference in people's lives and also create a model for how to tackle many of the trans-sovereign challenges of this century." — John Hamre



"The global media and technology revolution presents new opportunities for innovative strategies in global health. Global connectivity means more accurate and relevant information sharing in the field; new technologies enable new solutions to many global health challenges; and better and more broad-based media attention helps build a base of American popular support for long-term global health policies." — Patricia E. Mitchell

U.S. support for an IFF mechanism would require adjustments to longstanding U.S. financial regulations, as well as careful consideration of the specific health programs that would benefit and what their long-term recurrent costs might be.

In the past, a combination of legislative, bureaucratic, and philosophical barriers prevented the IFF and the AMC concepts from being seen as feasible in the United States. Both mechanisms require some modification of the current budget process to allow the U.S. government to enter into multiyear financial commitments. In addition, in order to build congressional support, the pharmaceutical industry would need to commit—as part of an innovative financing scheme that includes incentives for industry participation—to make the types and levels of contributions that would ensure affordable and wide access to the target vaccines and other medications.

But the time has come for the United States to reexamine its ability to engage with both approaches. The AMC could play a pivotal role in ensuring that the next generation of childhood vaccines achieves its full potential in reducing childhood illness and death. Likewise, given the U.S. commitment to the strengthening of health systems, it will be important to fully explore how the new IFF could help support this common goal.

In 2007, with French leadership, 13 countries launched the UNITAID program, a modest tax on individual airline ticket purchases that has generated over \$1.2 billion for medications for HIV/AIDS, tuberculosis, and malaria. UNITAID, now housed at the WHO, has used its considerable spending power to lower prices, reformulate medicines to be more easily used by children, and ensure long-term financing of treatment. Beginning in 2010, Americans will be able to make voluntary contributions whenever they make travel reservations with Expedia, Opodo, or Travelocity, among others.²⁵

As a complement to generating new funds through innovative mechanisms, performance-based financing holds the promise of "getting more health for the money" by increasing efficiencies and results in global health programs. Put simply, performancebased financing provides financial and other types of incentives to patients for seeking essential care and to health care workers for achieving good health outcomes. USAID has obtained dramatic improvements in system performance in several countries in awarding bonuses to clinics that serve poor families with vaccinations, nutritional supplements, and deliveries, and it should expand on this experience by offering support for such programs in country compacts.

Finally, in view of the proliferation of promising new approaches that have emerged in recent years to make health dollars go further, it is important that the U.S. government organize itself to better understand its options and systematically act in this area. Just as the Commission has recommended a new governmentwide approach to health metrics, it advocates a similar approach for introducing innovative financing mechanisms and practices in program design. The deputy adviser at the National Security Council and the Interagency Council should form a committee to examine the feasibility of establishing a U.S. Center for Innovative Financing and Practices in Global Health, which could operate in cooperation with external partners, review the most promising ideas and experiences, develop clear U.S. policy positions, and engage with partners on implementation. That same

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committee could engage with Congress beginning in 2010 to advise on how to feasibly structure U.S. support of the next AMC and whether similar support for the IFF is warranted and possible.

Bring U.S. science and safety into the U.S. global health strategy

Another top priority in the next 15 years should be to take full advantage of the United States' exceptional assets in science and research, closely integrating them within the U.S. global health strategy to support health field programs and strengthen developing country health systems.

For the past few decades, the NIH's Fogarty International Center has quietly and skillfully stewarded a generation of developing-country research scientists. That invaluable training effort should be expanded substantially to underwrite the next generation of skilled scientists in the developing world, preparing them to carry out research that will bring forward the next generation of medicines, prevention, and diagnostic tools for both infectious disease and chronic disorders. In early 2009, the head of NIH announced that global health would be among the five top priorities in the coming years. This is a major, welcome change in policy, with the potential to significantly strengthen the United States' longrange global health strategy, but it still remains to be seen how much of the NIH's annual budget of more than \$30 billion will be committed to global health, through which institutes, for which precise objectives, and guided by what long-term strategy.

One promising development came in mid-2009 with the announcement by the NIH's National Heart, Lung and Blood Institute of active support for the new Global Alliance for Chronic Disease. As NIH further develops its plans, one priority should be to support applied research that examines the downstream efficacy of U.S.-supported programs. More broadly, NIH plans should closely align with the U.S. global health strategy.

Food and drug safety are now recognized to be global health issues. Unsafe food and drugs exact a significant human and economic toll across the board-in developed, middle-income, and developing countries. Given the increasing complexity and volume of international trade, no single national regulator alone can ensure the safety of food and drugs used by its citizens. There is, however, an enormous opportunity for U.S. leadership in addressing the issue. Congress is in the midst of overhauling the authorities and resources of the FDA, which regulates all U.S. drugs and 80 percent of U.S. food supply. Congress should give the FDA the means to work more effectively with our trading partners, particularly developing and middle-income countries, to improve their foodinspection and quality-control capacities-close to the place of origin-and better coordinate food and drug safety efforts with regional and multilateral health and economic institutions. As with NIH, FDA's plans should be integrated within the U.S. global health strategy.²⁶

Build a new measurement framework

Putting in place a new measurement framework must also be prioritized—not as an end in itself, but as part of greater accountability architecture among donors and partners. That step will require creating an authoritative group within the U.S. government charged with overseeing the evaluation of the outcomes of U.S. investments in global health, promoting measurement capacity in partner countries, and sharing



"Technology and innovations are key to smart global health. In the future, the use of novel diagnostics and the application of mobile phones and handheld computers will transform the system to one where patients are informed and empowered, and physicians and health systems are engaged in understanding broad-based interventions for a wide spectrum of diseases, including sexually transmitted infections, pandemics like H1N1 and chronic diseases." — Surya N. Mohapatra

its findings with Congress and the administration. This group should have access to expertise from outside the U.S. government, be staffed by a small, skilled core of professionals, and have the ability to field mobile teams for first-hand, in-country assessments.

To be effective, this group will need to be linked directly to the Interagency Council. There are several possible models, including placing an independent group within the Institute of Medicine or the Government Accountability Office; creating a standing consortium of independent experts managed by a small secretariat; relying on a competitive bidding process to contract for specific assessments; or establishing a freestanding independent entity in concert with a small number of like-minded donors.

The Epidemiologic Intelligence Service (EIS) of the CDC has demonstrated over several decades how to recruit, train, and retain local personnel with the competencies and skill sets to conduct epidemiologic investigations and surveillance. That experience could be translated into a new initiative, led and staffed by appropriate experts, to train a cadre of program monitoring and evaluation experts. This effort could be extended to train overseas partners, much as CDC's Field Epidemiology and Laboratory Training Programs already do. Focused initiatives in selected highinvestment African countries could create greater data collection and analysis capacity.

Harness the expertise of the U.S. private sector

The private sector has special competencies that the U.S. government could tap to strengthen the performance of U.S. global health programs over time. The Office of the Global AIDS Coordinator and the PMI have each in recent years launched innovative collaborations, including PEPFAR's supply chain management contract and accelerated work to strengthen partner country laboratories, joint businessgovernment country planning on malaria and HIV control, and the AIDS Free Generation initiative to advance HIV prevention among youth using media and game technology.²⁷ The Millennium Challenge Corporation has also gone a considerable distance to incorporate a results-oriented approach and privatesector best practices into its operations. These provide a very promising foundation; manifold opportunities for private-sector collaboration are still to be developed.

Initiatives will be most effective if they are practical and deliver concrete measurable outcomes; if they enable African and other developing-country private sectors to expand their delivery of health services and commodities; if they hold the promise to be scaled and sustained over time; if they focus on programmatic areas where performance has been chronically weak; and if they truly leverage business models, processes, and special attributes such as leadership, organizational and managerial skills, and marketing, negotiating, and financial acumen. Core business competencies and the business mindset align closely with the Global Health Initiative's objectives of building accountable, self-reliant health services, tracked through "hard" outcome measures.

The administration could place more business leaders into key positions in the U.S. government and multilateral organizations—as board members, special advisers, and department and agency leaders. As with other senior appointed and confirmed positions in the U.S. executive branch, special care will be needed to match an individual's skills and leadership style with the critical needs and culture of the organization in question.



"Encouraging a full pipeline of new vaccines, diagnostics and treatments will require the ability to craft new and complex partnerships between the private and public sectors in the U.S. and the developing world that balance sustainability, accessibility and health impact." — Christopher J. Elias



"Our report emphasizes the importance of global health both for people all around the world and as a central feature of our foreign policy. A serious initiative by the United States and others, perhaps at a summit during the annual United Nations General Assembly meeting, to assure that the Millennium Development Goals will be met, particularly on health, would make an invaluable contribution." — Thomas R. Pickering

The U.S. private sector can contribute substantially to the design and strengthening of systems—in both the public and private sectors. This approach might involve programs to train and retain a skilled workforce; supply chains for medical commodities; expanding the economic scale of private rural clinics and pharmacies; marketing campaigns; integration of databases into a workable national architecture; and full use of emerging technology, including information tools for remote diagnostics, clean water filtration, and disposable needles and syringes.

Developing countries, bilateral donors, and multilateral organizations-especially the World Bank-are increasingly keen to develop health insurance in developing countries, as a means of creating greater sustainability for health programs. Insurance mechanisms, if successful in the future in developing societies, can create higher market demand for health services, spread risk and promote health equity through increased coverage, stimulate private-sector responses, and in the end contribute substantially to self-reliance. Circumstances vary dramatically across Africa, Latin America, and South Asia. The United States, despite weaknesses in our own system and ongoing debate over domestic health reform, can actively contribute, with private business input, to ongoing deliberations on future options to advance health insurance over the long term in developing countries.

An advisory group (like that for the Export-Import Bank and the Overseas Private Investment Corporation) might usefully bring a business perspective into discussions of how better to incorporate business sector approaches to meet the Global Health Initiative's evolving goals. The advisory group might also help consolidate a global health fellows program through which critically needed business personnel such as health economists could be detailed to a U.S. agency, or U.S. government personnel could be assigned to a business to become more skilled, for instance, in logistics.

The State Department's existing Franklin Fellows Program could be expanded to bring mid- and upperlevel professionals from the private sector into one-year fellowships within the State Department, with a special focus on global health policy and programs. Similarly, American Association for the Advancement of Science (AAAS) science and technology policy fellowships might be used to place scientists and engineers from the private sector into the Departments of State and Health and Human Services and key agencies like NIH and CDC. USAID's Global Development Alliance could be used to bring additional business expertise into USAID.

One important job for the Interagency Council on Global Health would be to better integrate and coordinate existing efforts and create a long-term vision of the support that business can provide to strengthen U.S. global health programs. There is at present no single entity in charge of private-sector cooperation, though the Office of the Global AIDS Coordinator and USAID each has staff responsible for managing partnership initiatives with the business sector. There is also the U.S. Advisory Council on Foreign Assistance, which draws advice from heads of the major nongovernmental organizations that implement U.S. development and emergency programs. At the Department of State, there is the newly established ambassador-at-large with responsibility for global partnerships.



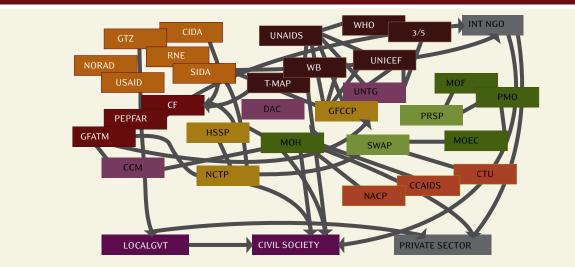
"The individuals charged with delivering health care on the ground in some of the poorest parts of the world are faced with such a jumble of objectives and criteria from different donors that their jobs are made almost impossible. We need to focus seriously on remedying this problem." — Debora Spar

5. Make smart investments in multilateral institutions

A critical dimension of how we organize ourselves as a government is whether we are equipped adequately to advance our global health agenda through multilateral channels. Multilateralism matters profoundly to global health outcomes, for health challenges have no respect for national boundaries. Likewise, meaningful global health solutions are by definition collaborative.

Fortunately, in the field of global health, there are proven, trusted international institutions that can bring solutions to scale, and mobilize the broad, sustained resources required for success. Fortunately, too, the United States enjoys a measure of cachet in this realm; the Obama administration's stated preference for multilateral approaches to the world's most urgent problems has raised the hopes of the global health community for U.S. leadership. Over the last decade, the United States has helped build innovative, effective alliances on behalf of global health. With active U.S. support, the G-8 mobilized high-level political energy and money around solving the poor world's health problems and provided the strategic push to create the GAVI Alliance and the Global Fund. In 2000, the UN General Assembly adopted the Millennium Development Goals, which contain the critical global health targets. That in turn inspired a UN special session in 2001, which set ambitious new targets for HIV/AIDS treatment, prevention, and care.

Over its six-decade history, the WHO has struggled to reach its true potential. It has been less than fully effective in setting standards and norms, and it has often had a weak and underfinanced headquarters staff whose mandate has been stretched over too many priorities, often reflective of donor earmarking. In recent years, it has migrated into health systems strengthening,



THE TYPICAL SPAGHETTI CHART

A map of multiple, uncoordinated donor requirements of partner country governments

From a presentation to the CSIS Commission on Smart Global Health Policy, June 10, 2009, CSIS, by Joy Phumpahi, World Bank

humanitarian response, human rights, and trade—areas better led by other international institutions.

At the same time, over the past decade, the WHO has assumed a strengthened leadership role in updating norms and standards for essential health services, advanced polio eradication and tobacco control, put a spotlight on drug-resistant tuberculosis, and sought to lower prices for essential medicines.

Much to its credit, the WHO has also rallied countries to better prepare for global disease threats. In the era of HIV, SARS, avian influenza, and most recently H1N1, the WHO has proved its value as a lead international organization committed to advancing health security. A wide consensus has emerged over the need to bring about, with WHO leadership, the timely sharing of biologic specimens, put a spotlight on strengthening basic surveillance and response capacities across the spectrum of countries, and press for a coordinated international diplomatic effort to assure low- and middle-income countries have affordable access to the vaccines and antiviral medications that will avert a human catastrophe, if and when a severe pandemic strikes.

There is more the United States can and should do to improve its multilateral approach to saving lives and helping establish self-reliant, resilient health systems.

Past U.S. diplomatic efforts—even the most successful—were often ad hoc. They often suffered from insufficient staff, weakly articulated goals, and too shallow a bench of senior diplomatic talent skilled in multilateral health issues.

Greater U.S. investments in focused diplomatic leadership, in the long-term cultivation of relations, and in building knowledge of multilateral institutions will make it easier to improve these institutions' performance, moving us nearer to our national and collective global health goals. First, the United States should enhance its strategic global health leadership at established fora such as the G-8, G-20, and UN General Assembly. It should also promote special annual summits dedicated to strategic global health dialogue and focused on forging pragmatic solutions to chronic problems such as how to ensure affordable pricing of vaccines and medications; how to cope with rising resistance to medications; how to allow for the global exchange of health information through common data standards and interoperable technologies; how to bring more rigor and accountability to the MDGs; how to ease the health workforce deficit; and how to better coordinate donor engagement toward common goals.

U.S. leadership can substantially accelerate efforts to curb global tobacco use by ratifying and advancing the Framework Convention on Tobacco Control; sharing best practices through the WHO; encouraging partner governments to make regulatory reform a high priority; and spotlighting the burdensome longterm health costs of tobacco use versus the short-term economic gain of increased production, domestic sales, and exports.²⁸

In addition, through its board membership with the World Bank, the GAVI Alliance, the Global Fund and WHO, and UNICEF, the United States should press for a strategic coordination of effort across the four institutions and a greater concentration on the core competencies of each. The World Bank should become more engaged over the long term in strengthening health systems. The GAVI Alliance should remain tightly focused on vaccines, while the Global Fund should do the same in the delivery of services on HIV/ AIDS, tuberculosis, and malaria. To the extent that the GAVI Alliance and the Global Fund venture into health systems, it should be explicitly in support of their respective missions.



"A key aspect of the modern world is the globalization of health. Therefore health must be part and parcel of the foreign policy of any country. This groundbreaking report will hopefully be followed by similar efforts in other countries." — Peter Piot

The United States can simultaneously support health systems strengthening and promote a greater unity of effort among the World Bank, the GAVI Alliance, the Global Fund, the WHO, and other donors by engaging seriously in the International Health Partnership (IHP+) process. Through the IHP+ process, country governments and development partners sign a compact in support of a national health plan that aims for greater efficiencies and a streamlining of donor requirements. Eighteen countries have signed onto the IHP+ process, 16 of which will revise their national plans in 2010. Although there is understandable skepticism and uncertainty that this process will leverage meaningful change in donor and partner country behaviors, the attempt to harmonize donor funding commitments, focus efforts around country-led health strategies, and clarify health goals is potentially quite valuable. The United States, in good faith, should test the proposition that this approach can bring significant gains by actively supporting IHP+ compacts in select African countries where the United States is a major health sector donor.

The World Bank is well-positioned to play a stronger role in building robust health systems, owing to its wide-ranging expertise outside the medical field, its ability to work across sectors, its existing health programs in many key African countries and its regional hubs in Dakar and Nairobi, and its record of designing integrated frameworks. Health systems development requires the combination of skills and approaches that the Bank can assemble: systems managers, procurement, supply chain and finance experts, communications systems, monitoring and evaluation capacity, and long-term planning for human resource needs.

Currently, the Bank meets ad hoc financing requests from ministers of health; supports specific disease campaigns such as river blindness, HIV/AIDS, and malaria; and supports the reform of health systems in accordance with its July 2007 health systems strengthening strategy, which emphasizes performancebased financing and maternal and infant health. An expanded Bank role will require careful diplomatic effort to build a strategic alliance between the Bank and WHO and bring the GAVI Alliance and Global Fund into a common approach. It will be critical that an expanded Bank role signal new resources directed toward health systems strengthening and not substitute for resources from other programs.

The United States should also spur timely action to improve performance of both the Global Fund and the GAVI Alliance. Each is well beyond its start-up phase, and each still faces unresolved issues of mandate, governance, and financing. In 2010, donors will need to replenish their Global Fund pledges for the next three years and address a serious resource shortfall at the GAVI Alliance that could prevent countries from introducing life-saving vaccines against causes of pneumonia and diarrhea. More thought and effort are needed on country eligibility requirements and steps to graduate countries, especially those in the middle-income tier. In addition, both the GAVI Alliance and the Global Fund need to focus attention around long-term financial planning and the best means to compare costs and returns and to bring about higher efficiencies in pricing and procurement.

With respect to the WHO, the United States should make targeted, expanded investments in WHO's core functions—especially health security and norm setting/guidelines plans—and link that shift to the streamlining of WHO's Geneva operations. As part of that new compact, the United States should increase the numbers of experts it details to the WHO. Over the last few decades, this sharing of U.S. talent has provided a vital service to the WHO and fortified the U.S.-WHO relationship.



"The rapid spread of H1N1 influenza infection to all corners of the earth this year brings home the need for international surveillance networks. The health of Virginians is tangibly and integrally linked to the health of people of many countries, as we face the realization of infection spread through travel in our increasingly mobile world." — Karen Remley



"Two-way engagement—especially with those whose lives and experience intersect with global health issues—is the right way to craft better policy. This Commission has already established a toehold in the minds of today's influencers and tomorrow's leaders. Through the essay contest we've seen that there is deep passion among this critical constituency. It's my hope that this community will work together to realize the changes we recommend in this report." — Joe Rospars

SMARTGLOBALHEALTH.ORG

From its inception, the Commission wanted a new approach to the challenge of improving global health. To that end, instead of looking to a narrow panel of health practitioners and policymakers, CSIS recruited 25 diverse opinion leaders from public health, foreign policy, Congress, business, and media, and then looked outward to the general public. To bolster transparency, CSIS built an online forum, www.SmartGlobalHealth. org, with the assistance of BlueStateDigital, facilitating the exchange of ideas between commissioners and a broader public audience interested in global health.

To expand the Commission's work beyond Washington, the site offered users access to Commission meetings, recorded interviews with global health leaders, and videos of CSIS events. Two-way conversations on metrics and evaluation, pandemic preparedness, global health gaps, and public health in Kenya provided a forum for users to share their ideas with experts and receive detailed feedback in response. Throughout the Commission's trip in Kenya, photographs, blogs, and a frequently updated Twitter feed allowed site visitors to travel alongside commissioners and react to the mission in real time. Four powerful micro-documentaries exposed the human side of the Commission's work to an audience that ranged from public health professionals to high school students. More than 3,000 people joined the site as regular users.

One highlight of the Commission's public outreach and exchange was an essay contest, inviting people to answer the question, "What is the most important thing the United States can do to improve global health in the next 15 years?" Over 1,000 responses arrived from all 50 states and 43 countries, with contributors sharing compelling personal narratives ranging from field work in Sudan to the view outside the writer's window. Common themes emerged on water and sanitation, food security, vaccination, education, good governance, and transformative volunteer experiences. The exercise highlighted the growing interest in the global health field, especially among students, and the respondents' desire to participate actively in finding and delivering global health solutions.

The four winning essays can be found in the Appendix on page 45.



Geographic spread of entrants to the essay contest

III | Closing Thoughts





"At a time of tremendous need and increased urgency, this seminal document charts a clear course of action that provides greater focus and more leveraged investment in global health." — Judith Rodin

During the last decade, the United States devoted high-level leadership and billions of dollars to improve the lives of the world's poorest individuals. Our global health endeavors have enabled us to create new partnerships, advance fundamental humanitarian goals, and pursue key strategic objectives—raising aspirations about what is achievable in global health and inspiring other nations and leaders to step up their own efforts.

The United States' bold commitment was based on sound evidence of the effectiveness of health interventions and the wisdom that investments in global health have a multiplier effect on our development dollars. Today, global health has the potential to become a critical component of the United States' smart power approach and a valued, conspicuous element of U.S. foreign policy.

The world's expectations for U.S. leadership are high, but we can and should rise to meet them. Huge gains are within reach if we organize around a smart strategy that looks ahead 15 years, focuses our resources on core countries where we can have the greatest impact, and streamlines our efforts both internally and multilaterally. We will be most successful if we sustain and build on our successes in HIV/AIDS, tuberculosis, and malaria; adhere to a rigorous measurement framework; better harness the private sector's expertise; prioritize the prevention of new threats rather than emergency responses to them; and put the needs of women and children first.

The powerful engagement of the U.S. public particularly the nongovernmental, business, philanthropic, faith-based, and university communities, as well as individual Americans—will remain critical in driving our response. Policymakers should build new, two-way dialogues with the growing numbers of Americans who care passionately about our role in promoting health in the world. The noble goal of reducing death and disease among the world's poorest, and creating more resilient and self-sufficient partner countries, reflects America at its best.

Our Commission was proud to come together across sectors, disciplines, and party lines—to map a course to a healthier global future. We are convinced that goal is achievable. We hope all Americans will help to make it so.

"As citizens of the world, global health must be a concern to everyone. In today's environment, we are all one and must align and act immediately to advance improvements. This report outlines a plan that can be used as a roadmap to improve the health of those most in need—those most vulnerable—and help rewrite the future health status and lives of so many, especially our children." — Rhona Applebaum



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Appendix

"What is the most important thing the United States can do to improve global health in the next 15 years?"

In its search for fresh ideas, the Commission put this question to the visitors of its interactive Web site, www.smartglobalhealth.org, and received over 1,000 responses from all 50 states and 43 countries. The personal narratives the Commission received are testament to the passion, insight, and pioneering ideas of those in the United States and throughout the world who wish to improve health across geographic and socioeconomic boundaries. *The contest's four winning essays are below.*

STUDYING AND PRACTICING MEDICINE OVERSEAS

Annie Dude MD/PhD Student at the University of Chicago

When I recall my time studying medicine overseas-in India, the Dominican Republic, and Mexico-what I remember are the vivid faces. Of patients, yes, but the ones that stand out most are the faces of my colleagues: the animated laugh of the man who runs a disease surveillance lab in the Dominican Republic, who taught me about malaria; the serious expression on my fellow medical student Brahma's face as he translated for me on the wards, guiding my hand as I palpated a woman's tumor; the tears in my friend Marisela's eyes as she tells me how a patient of hers died in her arms after a car accident because her hospital had run out of blood. Having learned so much from them, I ask if there is anything I can do in return. Almost all of these young doctors give the same answer: "Give me the books you used to study for the U.S. Medical Licensing Exam." Rather than remain in their countries, the dream for most is to emigrate to the United States or to Europe as quickly as possible.

Part of me judges: Shouldn't you stay here, take care of your people? I can put up with cold showers for a summer, can't you? While some of my friends mention money, for most they seek to practice medicine in the United States for reasons beyond creature comforts. They are faced with the terrible conundrum of realizing that, like me, they receive excellent medical training, but unlike me, their hands are often tied: they lack medicines, supplies, facilities, sometimes even electricity or clean water. They have the knowledge to recognize the illness but not the means to impart the cure. To me, it might seem a waste to a nation to have trained a physician whose main goal is to leave, but I morally can't ask someone to do something I won't do myself. I am not poring over yellowing copies of the Journal of the American Medical Association in a dank medical school library, by flashlight when the power is out, wondering if I will ever get the opportunity to employ the treatments described therein. I am not wringing blood out of old sheets between surgeries. I am not choosing which of my patients gets the last vial of antibiotic. I too could get used to sweltering wards, third-hand textbooks, stepping over patients on my way to work because of overcrowding, but I will never face the dilemma my sister's friend in Uganda described when he elected not to go into pediatrics: "I could not stand to watch other children die because their parents couldn't pay me, and I couldn't bear to watch my own children starve, because I gave away my services for free."

What doctors in other countries need to stay are the means to make a decent living, the supplies to allow their patients to get well, or at least to die with dignity, and opportunities to participate in the larger medical community through education and research. The United States might supply all the money and all the drugs, but what we really need in order to accomplish anything useful overseas are partners. Partners that speak the local language, that have the trust of the local population, that can tell us as outsiders the best way to go about solving problems. The most important thing the United States can do to improve global health in the next 15 years is to invest in long-term partnerships with medical professionals and institutions overseas. Hundreds of these partnerships already exist on a small scale among universities, churches, and community groups here and abroad. In India, I lived at a hospital envisioned, funded, and built by a cardiologist raised in Hyderabad, but who now works at the University of Pittsburgh. Local people, who previously shunned hospitals as "the places where people go to die," had begun coming in droves once they realized the pharmacy always had drugs and the operating room lights stayed on. This partnership benefits us too: I went with a team from Pittsburgh to learn about implementing vaccination and safe motherhood campaigns in rural villages. The goal was to start a similar program in a housing project back in Pennsylvania.

Will this strategy entice doctors and other professionals to remain in their own countries? In the words of my colleague in India, Dr. Ravi Himagalore, who trained along with his wife in Chicago but had just returned to Hyderabad: "10 years ago I would have stayed away. These opportunities did not exist. Now I can come back, take care of my patients in the way I was trained to do, write research papers. Best of all, I can live near my mother—she watches my daughter while I am at work!"

IMPROVING GLOBAL HEALTH THROUGH SCIENTIFIC DEVELOPMENT

Andrew S. Robertson JD Student at the University of California, Berkeley

In late 2005, I traveled to Entebbe, Uganda, to participate in the first of a series of H5N1 influenza regional training workshops for African scientists. At the time, the U.S. government was engaging the developing world to educate scientists about the pathology, epidemiology, and detection of the growing H5 threat. During my presentation on the U.S. international bird flu strategy, I grew concerned that many in the audience looked skeptical. Finally, a doctor from south Sudan stood and asked, "Why is it that the U.S. considers H5 to be a priority for African countries?" I answered with mortality statistics from past influenza pandemics, but the purpose behind the question was clear. Bird flu was important, but it was a Western priority. The workshop participants came from countries with their own health crises, such as endemic disease, famine, drought, poverty, and conflict, and wanted to learn how to confront these challenges head-on. They hadn't come to Entebbe that week to learn about U.S. policies on bird flu-they had come to learn about the science.

Strengthening scientific research capacity in low- and middle-income (LMI) countries is the single best way for the United States to improve global health over the next 15 years. Currently, building research infrastructure—including institutional and regulatory frameworks, academic institutes, and sufficiently skilled people to conduct and publish research—is overlooked by a majority of global health programs. Most programs in LMI countries are planned and operated by developed nations and reflect the donor country's priorities, values, and politics. Programs that develop local research capacity and scientific infrastructure are desperately needed, and over 15 years can create a powerful, sustainable weapon against global disease.

The benefits of scientific development have been widely acknowledged. Increased science capacity will, for example, strengthen neglected disease research and drug development, boost human capital and infrastructure, build up disease surveillance capabilities, and develop scientifically sound health care policies. Significantly, increased science capacity also allows developing countries to determine their own health priorities. While the past decade has seen an increase in funding for a few specific diseases—most notably HIV/AIDS, tuberculosis, and malaria—these initiatives left traditional health indicators such as maternal and child health and vaccination coverage underfunded and understaffed. As new health challenges emerge due to factors like overpopulation and climate change, a local, educated infrastructure, in coordination with established global health authorities, can help countries identify their own funding priorities and increase the impact of their global health programs.

But critically, a long-term investment in science capacity within developing countries will also help address the root causes of global health disparities. Research programs can build a developing nation's economy by driving social and technological innovation. The diplomatic effects of cross-border research programs have been shown to strengthen international ties and help mitigate regional conflict. Developing a strong science program will help retain a nation's best thinkers, adding to the next generation of social advocates and political leaders.

These advantages extend from the collaborative and thesis-driven nature fundamental to scientific research. Scientific development addresses both the immediate challenges in global health as well as the underlying conditions in which those challenges emerged.

There are signs that many developing countries are making deeper investments in national science, but progress is mixed. Countries such as Cuba, India, and China have seen notable growth in national research programs over the past 10 years with impressive results, yet most developing countries invest less than 1 percent of their GDP in R&D (versus 2.5 percent in the United States). While the number of researchers in developing countries has increased by 45 percent over the past decade, per capita this number is only one-tenth that of developed nations. Universities in countries such as Nigeria and Kenya are struggling to keep talented scientists from emigrating to developed nations, and often faculty vacancies can reach as high as 40 percent. Sustaining a science program capable of impacting health issues is nearly impossible under these conditions.

At the end of the Entebbe workshop, a Nigerian scientist shocked me by mentioning that her research department could not afford access to many important science and medical journals. As a former geneticist, I knew that access to scientific literature is crucial, and barriers could cripple research through academic isolation. The United States has made some contribution to building science overseas, but more must be done. Developing scientific capacity requires long-term political commitment, national research strategies, budget lines, skills development, incentives for private investment, the ability to use external knowledge, and a culture of inquiry. Genuine partnerships between the United States and LMI countries can train young researchers, build basic and applied research institutes, and link developing countries to the global medical, scientific, and public health communities. But through significant, sustained investment by the United States, in-country scientific research programs will emerge as the single most effective tool in global health.

REDUCING GLOBAL HEALTH DISPARITIES THROUGH RESEARCH, EDUCATION, AND INTERNATIONAL COLLABORATION

Michael Strong

Postdoctoral fellow at Harvard Medical School

Throughout the past century, great strides have taken place in our ability to both recognize and treat diseases affecting global health. As a community, we have progressed from knowing very little about the etiological agents of diseases such as tuberculosis and malaria to understanding much about the biology and the causative agents of disease. Such efforts have culminated with the elucidation of the genome sequence of a host of deadly human pathogens including those that cause tuberculosis (M. tuberculosis), malaria (P. falciparum), and AIDS (HIV). Such efforts promise to provide clues to better combat these deadly diseases in the coming years.

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Although we have learned much about the causative agents of infectious diseases as well as methods to combat them, there remains a vast chasm separating the quality of health care for individuals in developed countries versus developing countries. There are many factors contributing to these disparities including inadequate access to medical facilities, physicians, and medications; poor nutrition; misinformation about disease and prevention; environmental and economic factors; cultural attitudes; and living conditions. Diseases such as AIDS, tuberculosis, and malaria are ravaging many parts of the world, and as a result, there is immediate need to address these diseases using a three-tiered approach, focusing on research, education, and international collaboration.

Research

There is no doubt that research has led to innumerable breakthroughs in our efforts to combat disease. Breakthroughs have ranged from the discovery of new antibiotics to the development of vaccines. Even so, there are huge challenges that remain to be adequately addressed. We still do not have an effective vaccine or drug regimen to eradicate AIDS; drugs that were once effective for fighting tuberculosis are rendered ineffective with the emergence of multidrug-resistant (MDR) and extensively drug-resistant (XDR) tuberculosis, and millions of individuals are still dying from dehydration-related diseases, often attributed to contaminated water or food sources.

An increased commitment to research is greatly needed in order to guarantee the discovery and development of the next generation of antibiotics, vaccines, diagnostics, and therapeutics. Funding for basic science research, as well as clinical and translational research, is essential, for it is the basic science research that serves as the foundation on which medical breakthroughs are built. We must also be committed to funding research efforts beyond the borders of our own country, particularly in countries that are most affected by endemic disease affecting global health, because it is in these areas where we will learn the most about these diseases and have the greatest potential for discovery and impact.

Education

Second, we must do more to educate individuals regarding global health issues at home and abroad. Most of our citizens care deeply about health issues, but need to be reminded about the prevalence and devastation of disease outside of our borders. A renewed global health educational campaign will have great impacts, ranging from increasing the number of people wanting to be involved in global health projects to increasing the funding for global health projects through philanthropy and government-sponsored projects. We can learn lessons from other successful awareness campaigns and should strive to educate and involve a larger segment of the U.S. population in regard to global health issues. In turn, these endeavors will increase education and awareness abroad, since these efforts will help infuse both people and funds into international global health programs.

International Collaboration

Third, we must encourage more people to become involved in international collaborations, particularly with individuals in countries most affected by global health disparities. This can be done through increased funding for multinational endeavors as well as increased opportunities in which individuals can connect. These efforts can be stimulated by holding more scientific symposiums in developing countries and by creating Internet-based platforms where people can connect with like-minded individuals across the globe. Collaboration can take many forms, ranging from shared scientific pursuits to a common interest in global health, but we must increase the frequency of international exchanges in order to more rapidly achieve the overall goal of finding solutions to combat global health disparities and disease.

As a scientist conducting research on tuberculosis for the better part of a decade, I have been struck by the dedication and hard work put forth by those pursuing solutions to combat devastating diseases affecting global health. I have been most impressed by those individuals who have made an effort to bridge geographic boundaries to collaborate and work in countries where diseases such as tuberculosis, malaria, and AIDS are rampant. It is my hope, that in the next 15 years, more individuals will become involved in the global health movement, to help reduce global health disparities and to devise solutions to raise the quality of life and health care for all individuals, unrestrained by geographic boundaries.

SWIMMING AGAINST THE TIDE IN BOLIVIA

Rodrigo Arnez Rojas

Attending clinical psychiatrist at the Center for Mental Health San Juan de Lios, La Paz, Bolivia

The most important thing the United States can do to improve global health over the next 15 years is to help people realize that health is not only a human right in an abstract sense but a daily reality—with numbers and figures both in health indicators and statistics as well as in economic expense that have a direct impact on their lives. People must gradually come to terms with the reality that their actions can have meaningful effect not only on their own health but on health policy, governance, and accountability.

I live and work in Bolivia, one of South America's most troubled countries in terms of child and maternal health, life expectancy, general access to health care of any type, and health infrastructure and resources. I cannot say that I am among those who felt destined for medicine from childhood, but I do remember the emotional impact and admiration the first time I saw Eugene Smith's photo essay "Country Doctor." I didn't think then of becoming a doctor, that would be later, but I felt that somehow I wanted to be like that man. Being a doctor means different things to different people, and the reasons why one decides to become one vary accordingly. Yet I've found good doctors tend to have a common desire and willingness to make a difference and will strive in that direction tirelessly. It's the same with nurses, therapists, social workers, and many other people involved in health-that same dogged persistence to go the extra mile, to try and "save" someone. Nationality, race, professional degree, experience, and field of work may vary, but eventually one will find the same basic feeling and determination to help others. Sadly, after a while, one will also find the same frustration and anger at not being able to do more, not because it couldn't be done, but because someone wouldn't let you or because things "just don't work that way in the system."

I've been up the Madidi River and into the jungle to places where people accept the death of a child as a circumstance of life that has to them the same inevitability as poverty or abandonment or floods. I've seen people in need of help be turned away from hospitals because they could not afford a minimal cost, and I've also asked medical students, nurses, or strangers to donate blood for someone they had never met but needed it. I've had to tell patients and their families that even though much more could be done if we lived in a different country, we'd do what we could with what we had and hope for the best. I've tried desperately, many times in vain, to convince patients not to abandon their treatment when the cost was so high it was running the entire family into the ground. I've seen my colleagues grow tired and jaded, accepting the inevitability of preventable death or disease in our people as endemic and beyond their power to change. Now, I am at a midpoint in my life and career-and also a crossroads. I have concluded a medical specialty, have returned to my country, and have worked side by side with others to try and change things for the better. The road so far has not been easy, and I've already had more than my share of dealing with negligent or corrupt authorities. I've listened to the endless promises of dubious politicians, realizing how fast one can become skeptical and cynical after being used by them to promote their agendas.

So, how can one change this? How can one fight and reign in a corrupt and failed administrative system that has historically served to enrich a few in countries such as my own across the globe? At this point in time I think the best solution, the smartest and most powerful one, is to make information truly transparent and accessible to the people. At present, the average Bolivian citizen would have great difficulty knowing how much aid money the United States has sent to our country, how and for what this money is being used, and what the decisionmaking processes are in regard to these resources. If this information was made available and accessible, people would eventually start asking where all the money is going and what results are being obtained—as well as who is responsible for administering these resources. If government functionaries are identifiable, if invested financial figures are accessible, and if health impact indicators are available, society as a whole is then empowered to approve or reject government action. We can make a difference by helping people realize their true potential and right to make a difference for themselves.

Acknowledgments

The CSIS Commission on Smart Global Health Policy was codirected by J. Stephen Morrison, senior vice president and director of the CSIS Global Health Policy Center, and Lisa Carty, deputy director and senior adviser with the CSIS Global Health Policy Center. Together they authored this report with guidance and substantial input from the commissioners.

There are too many other debts to account for! By definition, we cannot adequately register our gratitude to the many friends and colleagues who came to our aid.

First in line is the staff of the CSIS Global Health Policy Center, indefatigable in making the Commission succeed: Karen Meacham, Emily Poster, Daniel Porter, and Elizabeth Morehouse. The Commission is especially indebted to Suzanne Brundage for her ingenuity, insights, and tireless efforts to facilitate its work and keep its deliberations on track. Not far behind are Andrew Schwartz and Louis Lauter of CSIS and Vinca La Fleur and David Litt of West Wing Writers.

This was a busy Commission. Between April and December 2009, the Commission convened for two full-day sessions in Washington, D.C.; traveled to Kenya to examine the impact of U.S. global health investments and to New York and Geneva for expert consultations with multilateral institutions; and held public consultations in Research Triangle, North Carolina, and in the California Bay Area. In addition to these meetings, the Commission cochairs and codirectors directly engaged with senior Obama administration officials, congressional staff, and representatives from academia, nongovernmental organizations, the private sector, and the broad and rich global health policy and advocacy community. Across this spectrum, we sought out the best thinking on how to craft a long-term U.S. global health strategy. At each encounter, we were blessed with generosity, expertise, and wisdom.

The Commission is especially indebted to the stalwart allies of the CSIS Global Health Policy Center: Katherine Bliss, senior fellow and deputy director of the CSIS Americas Program; Jennifer Cooke, director of the CSIS Africa Program; Janet Fleischman, senior associate of the CSIS Global Health Policy Center; Jennifer Kates, vice president and director of HIV policy at the Henry J. Kaiser Family Foundation; Ruth Levine, vice president and senior fellow at the Center for Global Development; Allen Moore, distinguished fellow at the Stimson Center; Phillip Nieburg, senior associate of the CSIS Global Health Policy Center; James Peake, former U.S. secretary of veterans affairs; Steven Phillips, medical director for global issues and projects at the Exxon Mobil Corporation; Ed Scott, founder and chairman of the Center for Interfaith Action on Global Poverty; and Jeffrey Sturchio, president and CEO of the Global Health Council.

The Commission reached out to several experts to prepare careful analytical work to inform its deliberations. Two of our commissioners joined the fun: Christopher Elias authored "Policies and Practices to Advance Global Health Technologies"; and Michael Merson, with Kim Chapman Page, authored "The Dramatic Expansion of University Engagement in Global Health." Other authors/papers include: Katherine Bliss, "Enhancing U.S. Leadership on Drinking Water and Sanitation and Health in Latin America and the Caribbean"; Jennifer Cooke, "Public Health in Africa"; Harley Feldbaum, "U.S. Global Health and National Security Policy"; Janet Fleischman and Allen Moore, "International Family Planning: A Common-Ground Approach to an Expanded U.S. Role"; Charles Freeman and Xiaoqing Lu Boynton, "China's Health Amidst the Global Economic Crisis"; Robert Hecht, Amrita Palriwala, and Aarthi Rao, "Innovative Financing for Global Health: A Moment for Expanded U.S. Engagement?"; Kathleen Hicks, Eugene Bonventre, and Stacy Okutani, "U.S. National Security and Global Health"; Jennifer Kates, Julie Fischer, and Eric Lief, "The U.S. Government's Global Health Policy Architecture: Structure, Programs, and Funding"; and Gaudenz Silberschmidt, "The European Approach to Global Health." All of these analyses are available online at www.smartglobalhealth.org.

Fortunately for us, senior members of the Obama administration were very open to engage on future choices for U.S. global health approaches. We wish to single out for thanks Jacob Lew, deputy secretary of state for management and resources; Ezekiel Emanuel, special adviser for health policy to the director of the White House Office of Management and Budget; Gayle Smith, special assistant to the president and senior director at the National Security Council; Thomas Frieden, director of the Centers for Disease Control and Prevention; and Eric Goosby, U.S. Global AIDS Coordinator. We are also grateful for the support received from Dana DeRuiter of the National Security Council; Sarah Handy and Anne Yu of the Centers for Disease Control and Prevention; and Dana Hyde and Jennifer Klein of the Department of State.

Many prominent individuals took time out to share their extensive reflections: Mark Dybul, codirector of the Institute for National and Global Health Law at Georgetown University and former U.S. Global AIDS Coordinator; Laurie Garrett, senior fellow for global health at the Council on Foreign Relations; David Lane, president and CEO of the ONE Campaign; Chris Murray, director of the Institute for Health Metrics and Evaluation at the University of Washington; and Joy Phumaphi, former vice president for human development at the World Bank. We all benefited from the insights of Caroline Reynolds of the World Bank; British Robinson of the Office of the Global AIDS Coordinator; and Rachel Wilson of PATH. The Bill and Melinda Gates Foundation is a pivotal partner of the CSIS Global Health Policy Center—and the Commission. We were delighted that Rajeev Venkaaya agreed to be a commissioner and are grateful as well for the support of Tachi Yamada, Joe Cerrell, Sally Canfield, Todd Summers, Dan Kress, Deb Derrick, and Owen Ryan.

For several years CSIS has also had a close and flourishing relationship with the Henry J. Kaiser Family Foundation. The Foundation provided innovative background analyses to the Commission, under Jennifer Kates's direction. Drew Altman, president and CEO, and Mollyann Brodie made a highly compelling presentation to the Commission in June on evolving American opinion. Matt James and Peter Long facilitated a rich evening of dialogue with Bay Area experts.

Our colleagues in North Carolina and California were key to the Commission's public outreach efforts. Special thanks are owed to Mike Merson and Geelea Seaford of the Duke University Global Health Institute; Representative David Price (D-NC); David Hartman, former host of Good Morning America; Haile Debas and his colleagues Paula Murphy, Chuck Smukler, and Robert Mansfield of the University of California, San Francisco, Global Health Sciences; and Martin Brennan, executive director of the International House at the University of California, Berkeley.

Jodee Winterhof and Sarah Lynch of CARE went the extra distance in partnering with us on the Kenya trip. Also ready to help on the ground were Ambassador Michael Rannenberger; Rob Breiman and Kayla Laserson of the Centers for Disease Control and Prevention in Kenya; and Warren "Buck" Buckingham, director of the President's Emergency Plan for AIDS Relief (PEPFAR) for Kenya. We are deeply grateful to the many Kenyans who took the time to share their personal stories and convey to us how U.S. health investments have impacted their lives.

Many in Geneva gave generously of their time during a Commission visit in November, including David Hohman and Simon Bland at the U.S. and UK missions, respectively. At the GAVI Alliance, we owe special thanks to Tony Dutson and Carole Presern; and at the World Health Organization, to Andrew Cassels, Ian Smith, Ala Alwan, Keiji Fukuda, and Daisy Mafubelu, among others.

We held rich conversations on the role of multilateral institutions in global health with Michel Kazatchkine, executive director of the Global Fund to Fight AIDS, Tuberculosis, and Malaria, and his colleagues Christoph Benn and Rifat Atun; and with Julian Lob-Levyt, CEO of the GAVI Alliance, and his colleague Alex Palacios.

Our congressional commissioners were vital and ably supported by their talented and committed staff: Chad Kreikemeier with Senator Jeanne Shaheen (D-NH); Theresa Vaughter, Rachel Carter, and Catherine Knowles with Representative Kay Granger (R-TX); Kari Moe and Zahir Janmohamed with Representative Keith Ellison (D-MN); and Bill Pewen with Senator Olympia Snowe (R-ME).

Our ongoing dialogue with the broad base of Americans passionate about global health would not have been possible without the assistance of BlueStateDigital staff: Gene Koo, Emily Murphy, Stephen Muller, and Sam Graham-Felsen. The Glover Park Group was also very helpful: Beth Tritter, Jason Boxt, Sam Hiersteiner, and Nicholas Stark.

Within CSIS, credit is due to Jon Alterman, Alison Bours, James Dunton, Michelle Holder, Russ Oates, and Teresita Schaffer, as well as to CSIS Global Health Policy Center interns Rebecca Auerbach, Seth Gannon, Brittany Goettsch, Marguerite Lauter, Marie Ridoff, Katie Steckler, and Cathryn Streifel.

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