

2019 IMPACT BRIEF

CENTER FOR INNOVATION AND IMPACT



USAID | Global Health
FROM THE AMERICAN PEOPLE

CONTENTS

			
			THE LANCET
			
			
		FORTUNE	

OUR MISSION 1
 HOW WE WORK & PARTNER.....3
 CII WORKS ACROSS KEY HEALTH PRIORITIES.....5



CATALYZE INNOVATION..... 7
 OPEN INNOVATION.....9
 INNOVATOR SUPPORT.....25
 SPEED ADOPTION OF CUTTING-EDGE APPROACHES.....27
 AMPLIFY THE USE OF INNOVATION.....29



SCALE FOR IMPACT31
 STRATEGIC PLANNING FOR INTRODUCTION & SCALE.....33
 MARKET SHAPING37
 INNOVATIVE FINANCING43



STRENGTHEN AND APPLY CROSS-CUTTING ENABLERS.....45
 DIGITAL HEALTH.....47
 PUBLIC GOODS51
 PARTNERSHIPS.....55
 HUMAN-CENTERED DESIGN.....61

OUR GLOBAL IMPACT.....65
 LOOKING AHEAD.....67
 WORK WITH US69

OUR MISSION

INNOVATION REALIZED

The **Center for Innovation and Impact (CII)** in USAID's Bureau for Global Health encourages business-minded approaches and accelerates impact against some of the world's most important health issues. The Center invests seed capital in the most promising ideas and applies a rigorous, market-oriented approach to cut the time it takes to transform discoveries in the lab to impact on the ground.



OUR
WORK AT
A GLANCE:

FUNDED
>150
Innovations

CULTIVATING AN
INNOVATION PORTFOLIO
targeting the causes
of over 2M neonatal
and maternal deaths

25 Innovations
SCALING OR
TRANSITIONING
TO SCALE

COLLABORATING
ON PROJECTS IN
40+
Countries

OPEN INNOVATION
PLATFORM GENERATED
>6500
Applications

COLLABORATING
WITH INITIATIVES
AIMING TO SAVE
2-3M Lives

REDUCING COST OF KEY HIV
& MALARIA COMMODITIES
\$400M+
Procurement Spend

LEVERAGED
\$300M+
Outside Capital

HOW WE WORK & PARTNER



CATALYZE INNOVATION

We partner across USAID's Bureau for Global Health to source groundbreaking solutions and strengthen the capacity to innovate by:

- **Open innovation** – Sourcing “game changers” and new partners through Grand Challenges, Prizes, Hack-a-thons, and Incubators
- **Innovator support** – Accelerating the development and scale up of the most promising innovations through a range of support
- **Adoption of cutting-edge approaches** – Developing acceleration strategies, testing, and using new and promising solutions, from innovative finance to artificial intelligence, to ensure USAID is an early, not late, adopter
- **Amplify the use of innovation** – Partnering with our technical colleagues to apply new approaches, building innovation capacity through training and tools, and supporting stronger local health innovation ecosystems in country



SCALE FOR IMPACT

We support accelerated introduction and scale-up through:

- **Strategic planning for introduction and scale** – Planning comprehensively and early to accelerate the launch and uptake of a product or service
- **Market shaping** – Developing market-based incentives to create healthy, efficient markets that increase access to health products or services
- **Innovative financing** – Leveraging non-traditional financing tools to crowd in new funding and utilize donor funds more effectively, to help achieve health outcomes



STRENGTHEN & APPLY CROSS-CUTTING ENABLERS

We amplify our work, and the work of our partners, through the application of several key cross-cutting practices:

- **Digital health** – Applying a strategic lens to the implementation of digital health tools and approaches
- **Public goods** – Creating practical guides and actionable tools to apply best practices and share learnings across health sectors
- **Partnerships** – Developing transformative partnerships that leverage the strengths of both the public and private sector to create greater and more sustainable impact
- **Human-centered design** – Applying human-centered design in our global health work as a complementary approach in addressing challenges

CII's work spans from the identification and support of early-stage innovations to the introduction and scale of market-ready products and services. These approaches do not work in isolation, but rather complement and build off of each other based on the need at hand.



CII WORKS ACROSS KEY HEALTH PRIORITIES

In line with our Bureau for Global Health priorities, CII works to support progress towards our shared health goals. While significant progress has been made, especially over recent decades, we recognize that we still have work to do. CII works in partnership across the Bureau to ensure we stay on the cutting-edge; solving the right problems with the best and most cost-effective solutions. As such, innovation – both incremental and disruptive – remain essential components of USAID’s global health work.

Health-related Sustainable Development Goals (SDGs) for 2030

3 GOOD HEALTH AND WELL-BEING

Ensure healthy lives & promote well-being for all at all ages

5 GENDER EQUALITY

Achieve gender equality & empower all women & girls

6 CLEAN WATER AND SANITATION

Ensure availability & sustainable management of water & sanitation for all

17 PARTNERSHIP FOR THE GOALS

Strengthen the means of implementation & revitalize the global partnership for sustainable development

Challenges

46/46 Countries in Sub-Saharan Africa that moved farther away from – not closer to – achievement of SDG 3 in 2018

E Grade for current progress on SDG 5 in SDG Scorecard 2030

-\$134B Annual financing gap to achieve SDG 3 by 2030

BUREAU FOR GLOBAL HEALTH

OFFICE OF THE ASSISTANT ADMINISTRATOR | AA

Center for Innovation & Impact



By working in the Bureau for Global Health’s front office, CII is able to share learnings and best practices across health areas, identify commonalities, and leverage economies of scale. These are a few examples of how we partner with our technical colleagues.

SOME EXAMPLES:



MALARIA – CII supports USAID’s Office of Infectious Disease (ID) through efforts such as partnering with the President’s Malaria Initiative (PMI) to explore market shaping and other market access opportunities. This collaboration includes analyzing the market to expand next-generation indoor spraying to more than 50 million homes, and helping assess the potential role of semi-synthetic artemisinin in stabilizing and reducing the cost of treating the over 200M malaria cases every year.



MATERNAL AND CHILD HEALTH – CII works closely with USAID’s Office of Maternal and Child Health and Nutrition (MCHN), as well as external partners, to explore new financing and partnership approaches to tackle maternal and child health challenges. USAID, in partnership with other funders and implementers, recently launched the largest development impact bond to date. The bond aims to reduce the number of maternal and newborn deaths by improving the quality of maternal care in private health facilities in Rajasthan, India. In addition, working in partnership with UNICEF and USAID/MCHN, CII helped create an investment case to catalyze investment in pneumonia as a means to strengthen overall child health outcomes through an integrated lens.



CATALYZE INNOVATION

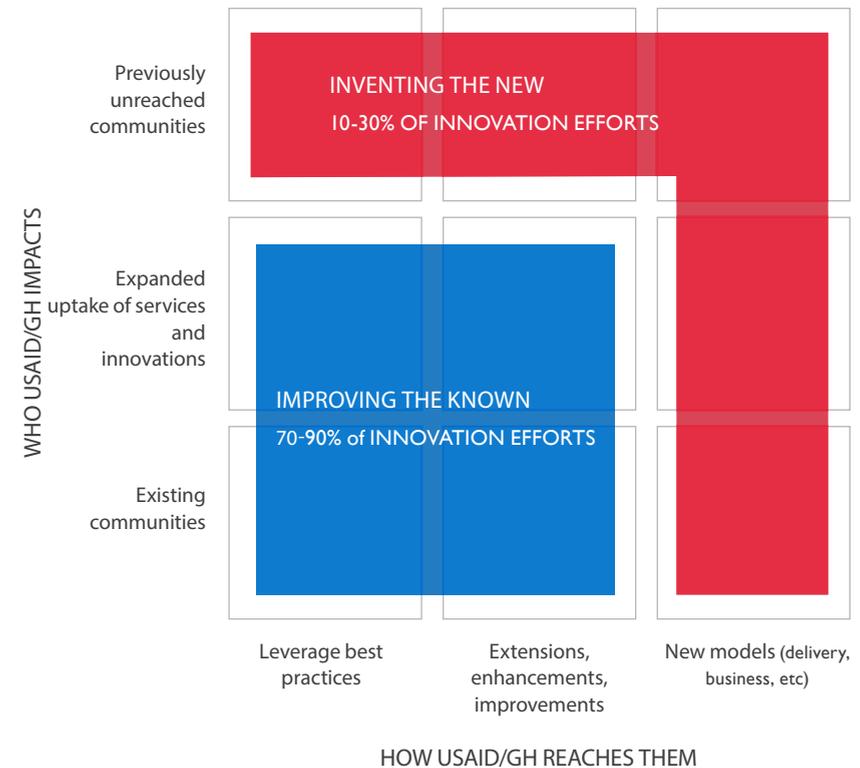
The pace of progress in global health is determined by our ability to seed, nurture and spread innovation. The global health community has set ambitious goals — from preventing child and maternal deaths to controlling the HIV/AIDS epidemic to combating infectious diseases. By sourcing and supporting the development, introduction, and scale up of breakthrough innovations that use cutting-edge technology, we ensure that we can achieve these goals. CII catalyzes and promotes innovative solutions for global health in the following ways:

- Open innovation
- Innovator support
- Speed adoption of new approaches
- Amplify the use of innovation

INCREMENTAL AND DISRUPTIVE INNOVATION

CII believes that innovation requires finding game-changing solutions as well as improving and building on the great work being supported across USAID's Bureau for Global Health.

A STRATEGIC INNOVATION PORTFOLIO



USAID's Bureau for Global Health is well positioned to support innovation:

- Cutting-edge technical expertise across high-priority global health challenges
- More than 60 country and regional missions with connections to political leaders
- Partnerships with leading global universities and corporations to facilitate collaboration



OPEN INNOVATION

Grand Challenges call on the brightest minds across the globe to share their bold ideas. Here at USAID, we've seen their power to:

- Demonstrate that revolutionary ideas can come from anyone and anywhere
- Increase the diversity of USAID's partners by streamlining our application process
- Accelerate impact through the traditionally long global health R&D and commercialization process
- Form communities of problem-solvers, starting new collaborations
- Create or shape markets
- Encourage further investment

Through Global Health Grand Challenges, USAID and its partners have cultivated a pipeline of over 150 innovations that are poised to deliver significant health impact.

For more information, visit www.usaid.gov/ghgrandchallenges.

WITH OUR GRAND CHALLENGES, WE FUND AND SUPPORT
A BROAD RANGE OF GLOBAL HEALTH INNOVATORS



Supporting **120 innovations** aimed at saving the lives of mothers & newborns, with potential to save 150 thousand lives by 2030



Rapidly sourced **14 innovations** in the midst of the Ebola crisis, developing and testing solutions to address key gaps in our outbreak response



Supporting **26 innovations** aimed at curbing the spread of Zika and stopping future global health threats from becoming global crises





OPEN INNOVATION

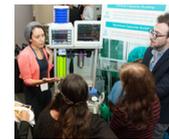
Every two minutes, a woman dies in childbirth. The onset of labor marks the start of a high-risk period for both mother and baby that does not ease until at least 48 hours after birth. Almost all the deaths during this high-risk period occur in low- and middle-income countries. **Saving Lives at Birth: A Grand Challenge for Development (SL@B)** calls on the brightest minds across the globe to identify and scale groundbreaking approaches to save the lives of mothers and newborns in poor, hard-to-reach communities around the time of birth. The Saving Lives at Birth partners — USAID, the Government of Norway, the Bill & Melinda Gates Foundation, Grand Challenges Canada, UK’s Department for International Development, and the Korea International Cooperation Agency — have committed nearly \$100 million to support the scale up of innovative tools and approaches to improve the lives of mothers and newborns during their most vulnerable hours.

TO DATE:

+ \$150M ADDITIONAL FUNDING LEVERAGED

120 Promising Innovations FUNDED

SOME EXAMPLES:



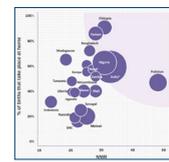
With support from SL@B, **Gradian Health Systems** is improving access to emergency childbirth care for pregnant women and newborns in four Zambian provinces by scaling up their Universal Anesthesia machine in 33 districts and regional hospitals and strengthening the skills of those hospitals’ anesthesia providers and biomedical technicians.



Through SL@B, **INMED Partnerships for Children** is filling the gaps at each of the touchpoints in newborn jaundice management by scaling the Bilikit, a comprehensive package of three innovations previously validated by SL@B awards, including screening with the Jaundice Ruler, diagnosing using Bilistick®, and treating with the Bili-Hut™.



Elizabeth Glaser Pediatric AIDS Foundation (EGPAF) is introducing and scaling up the Pratt Pouch in antenatal care services in over 400 health facilities in 22 districts throughout Central and South West regions of Uganda to reduce Mother to Child Transmission and reach 40,000 infants in three years.



Using CII’s tool, Ready Set Launch, **Monash University** developed a rigorous country selection process for the first launch of their formulation of inhaled oxytocin in parallel with further development of their product to save the lives of mothers in childbirth.





SPOTLIGHT:



RICE UNIVERSITY

BUBBLE CONTINUOUS POSITIVE AIRWAY PRESSURE

Students from Rice University in Texas developed a low cost technology which helps small and sick babies breathe. Using a shoe box and an aquarium pump, these students created the Pumani bubble continuous positive airway pressure (bCPAP) prototype that, at one-tenth of the traditional CPAP cost, is now providing life-saving technology in many hospitals throughout Malawi. With USAID support, a clinical trial demonstrated that the Pumani bCPAP increases newborn survival rates by 27 percent. 3rd Stone Design now manufactures and exports the device, which is being scaled up across other countries around the globe.

Rice University was one of four finalists named in the MacArthur Foundation's I00&Change competition in 2017 and received a \$15 million award from the Foundation for their NEST360° program and a verbal commitment of additional leveraged funds of \$75 million. This program has the potential to halve the 1.1 million annual newborn deaths in Africa over the next 10 years with its package of lifesaving technologies. Saving Lives at Birth has supported the development of several NEST360° innovations for newborn care and continued to provide tailored technical support, positioning them for further funding as they develop and scale.



THE JOURNEY FROM IDEA TO IMPACT:

- 2010** Initial bCPAP prototype developed by senior design students at Rice University
- 2011** SL@B awards Rice University a seed award for further development and testing of the bCPAP prototype
- 2012** Clinical trials for the student-designed bCPAP machine start at the Queen Elizabeth Central Hospital, Malawi
- 2013** After a successful clinical trial, Rice receives a transition-to-scale award from SL@B to scale-up the bCPAP in Malawi
- 2015** Hadleigh Health Technologies LLC, a 3rd Stone Design company, complete the industrial design, mechanical engineering, design for and transfer to manufacture for the Pumani; receives CE Mark and can be sold in global markets
- 2016** USAID/Malawi, ELMA Philanthropies, GSK and other donors support further scale up and expansion of bCPAP
- 2017** Rice conceptualizes NEST 360 – a bundle of 17 newborn health technologies and solutions to equip nurseries across sub-Saharan Africa
Rice named a finalist in the MacArthur Foundation's I00&Change competition and received a \$15 million award
- 2018** In partnership with the Ministry of Health, CPAP devices and training programs installed in all four public central and 24 public district hospitals in Malawi; 8 CHAM hospitals. Almost 800 Pumani CPAP units in use in 35 countries around the world





OPEN INNOVATION

In 2014, the world faced the largest Ebola epidemic in history. In response, USAID issued **Fighting Ebola: A Grand Challenge for Development** with the White House Office of Science and Technology Policy, the Centers for Disease Control and Prevention, and the U.S. Department of Defense to identify solutions to address barriers faced by healthcare workers in West Africa. International experts reviewed over 1,500 ideas and rapidly selected 14 promising innovations, identified for their potential to reinforce the response to the Ebola outbreak and future epidemics. While each of these tools is useful in the midst of a crisis, they also have applications for business-as-usual care. This helps speed clinician adoption, and ensures that people know how to use the innovations when the next outbreak arises. Twelve of the innovations have been tested in West Africa, and over half are in use or available for purchase today.

TO DATE:

OVER
1500 Ideas
SUBMITTED

14 PROMISING
Innovations

12 have been tested on the ground in West Africa
Over half are in use or available for purchase today

2 SOLUTIONS
in use in the 2018 Ebola outbreaks in the DRC

SOME EXAMPLES:



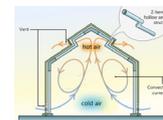
Shift Labs' DripAssist is an FDA approved, battery-powered infusion monitor that converts the number of drops falling from an IV fluid bag into an accurate and actionable flow rate. The monitor helps deliver IV fluids with precision to patients, which is particularly important when treating children or elderly patients as it eliminates the risk of fluid overload. The DripAssist has become a product staple for WHO, MSF, and ZMapp, the life-saving medication developed to treat Ebola patients, and is now in use in twenty developing countries.



Baylor College of Medicine developed the Emergency Smart Pod, a portable, lightweight healthcare setting that can be expanded to a full-size unit in less than five minutes with just four people. In 2017, the Emergency Smart Pod was deployed to ELWA Hospital in Liberia, where it is used as an isolation unit for infectious patients.



IntraHealth adapted and deployed mHero, a two-way SMS platform that enhances existing national health information systems by connecting healthcare workers with the Ministry of Health. mHero was included in Guinea's health information system strategic plan, and continues to be used by the Liberian Ministry of Health at national scale.



Makerere University designed the Epitept, a humanitarian tent with improved mechanisms for heat and air exchange, creating a cooler environment for both patients and healthcare workers. Several of the Epitepts are now in use in Northern Ugandan refugee settlements, and the product was included in the WHO's 2016-2017 Compendium of Innovative Health Technologies for Low Income Countries.



SPOTLIGHT:



During the Ebola epidemic, decontamination was critical for protecting healthcare workers and their patients. Decontaminants can be difficult to use correctly, however, because they are transparent, require a specific contact time to be effective, and form droplets on waterproof surfaces, leaving gaps in coverage. In response to this challenge, Kinnos developed Highlight, a colored, powdered additive that is mixed into bleach at point-of-use to improve visualization and coverage during decontamination. The color is designed to fade after the contact time of the disinfectant has elapsed, which signals to the user that the decontamination process is complete and improves feelings of safety and confidence among healthcare workers. In 2018, Highlight was used in the Ebola outbreak in the Democratic Republic of Congo. In addition, Kinnos launched a new product, Highlight Wipes, which aims to combat healthcare-associated infections and antimicrobial resistance in hospitals and other healthcare settings.



A healthcare worker is sprayed with a bleach solution containing Highlight during field tests at an Ebola treatment unit in Guinea.

THE JOURNEY FROM IDEA TO IMPACT:

- 2014 Initial prototype of Highlight developed by students at Columbia University
 Fire Department of New York adopts Highlight for HazMat/HazTec decontamination protocol and Kinnos Inc. is founded by the students to commercialize Highlight
- 2015 USAID awards Fighting Ebola Grand Challenge grant to Columbia University and Kinnos to further develop and test the technology
 Highlight is field-tested in Ebola Treatment Units in Liberia with Project Concern International
- 2016 After revisions to the formula, Highlight was brought to Guinea for another round of field-testing with International Medical Corps to validate performance
 Highlight is field-tested by International Medical Corps in Haiti for the cholera outbreak
 Kinnos raises \$1M seed round from investors to commercialize technology and expand product platform
- 2017 Highlight is stockpiled by a large medical NGO for hemorrhagic fever scenarios and deployed to DR Congo for the Ebola outbreak
 Highlight is implemented in wide-scale epidemic preparedness training program in Uganda
- 2018 Kinnos is issued its first patent on Highlight and wins the USPTO Patents for Humanity Award
 Kinnos begins pilots of Highlight in US hospitals to tackle healthcare-associated infections and antimicrobial resistance



COMBATING **ZIKA** AND FUTURE THREATS

A GRAND CHALLENGE FOR DEVELOPMENT

As the threat of Zika grew at an alarming rate in early 2016, it was clear that countries did not have the necessary tools to effectively stop its spread. In response, CII launched **Combating Zika and Future Threats: A Grand Challenge for Development**, which called upon the global community to generate cutting-edge approaches to fight the Zika outbreak and help strengthen the world's ability to prevent, detect, and respond to future infectious disease outbreaks. Within two months, nearly 900 innovators from around the world submitted their ideas. Following a rapid and rigorous review process, 26 solutions were selected for accelerated development, testing, and deployment. These innovations address key challenges in vector control, personal and household protection, vector and disease surveillance, community engagement, diagnostics, and unmanned aerial vehicles.

TO DATE:

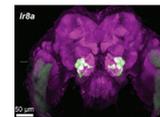
OVER
900 Ideas
SUBMITTED

26 PROMISING
Innovations



OPEN INNOVATION

SOME EXAMPLES:



Johns Hopkins University is looking to identify the specific components of the human scent that are actively perceived by olfactory centers in the *Ae. Aegypti* mosquito brain and drive mosquito attraction towards humans. With this knowledge, they will develop a powerful chemical lure that mimics the signature profile of human scent for the targeted trapping of *Ae. Aegypti* mosquitoes.



WeRobotics developed a canister that allows for the aerial release of novel vector control technologies by drone. They partnered with the International Atomic Energy Agency to release sterilized male mosquitoes in Brazil, and are currently collaborating with the World Mosquito Program to optimize the canister for the release of *Wolbachia*-infected mosquitoes.



Premise Data is working in Cali, Colombia to deploy their mobile application, which optimizes vector surveillance and control workflows conducted by public health workers and allows them to respond to on-the-ground operations with increased timeliness, granularity, and accuracy. Premise recently expanded to two additional cities in Colombia, where they are leveraging the mobile phones to engage citizen scientists and shape their behaviors through financial and social incentives.



BluSense is developing one-drop-of-blood quantitative point of care diagnostic tests to quickly and accurately diagnose dengue, Zika, and chikungunya using Blu-ray technology.



COMBATING ZIKA AND FUTURE THREATS

A GRAND CHALLENGE FOR DEVELOPMENT

SPOTLIGHT:



INSTITUTE FOR GLOBAL ENVIRONMENTAL STRATEGIES
THE MOSQUITO CHALLENGE COMMUNITY CAMPAIGN

The global health crisis posed by vector-borne diseases is so great in scope that it is insurmountable without the active help of tens or hundreds of thousands of individuals working to eradicate risk in communities around the world. Through their Mosquito Challenge Community Campaign, the Institute for Global Environmental Strategies used the GLOBE Program's Mosquito Protocol and mobile application to engage students as citizen scientists to collect and share mosquito data, and develop local mitigation strategies to reduce the risk of diseases in their communities. Over the course of the pilot study, over 1300 observations were inputted into the GO Mosquito Habitat Mapper mobile application, and there was a 22% increase in the number of households who indicated that they were taking measures to prevent Zika. The mobile application has been incorporated into the Smithsonian Science Education Center's "Mosquito!" curriculum, which will be translated into 30 languages and rolled out for middle school students worldwide.



IGES conducting a training with teachers on how to identify mosquito specimens collected by citizen scientists in Lambayeque, Peru

OPEN INNOVATION

THE JOURNEY FROM IDEA TO IMPACT:

2016

USAID awards Combating Zika and Future Threats Grand Challenge grant to IGES to develop Mosquito Community Challenge Campaign

Version 1 of the GLOBE Observer Mosquito Habitat Mapper released

2017

Teacher trainings conducted in 7 cities across Peru and Brazil

Student data collection campaign resulted in 475 observations reported

Version 2 of the GLOBE Observer Mosquito Habitat Mapper App released, which, improved compatibility with older mobile phones

39 Classroom science fair submissions and Community Action projects submitted and judged
1318 observations submitted

2018

GLOBE Observer Mosquito Habitat Mapper featured in Smithsonian Science Education Center's Mosquito! Curriculum

National Institute of Environmental Health Sciences includes GLOBE Observer Mosquito Habitat Mapper in high school and college-level curricula

2019

Survey of households who participated in the initial pilot finds that the project had a positive impact on awareness and behaviors of both students and their families



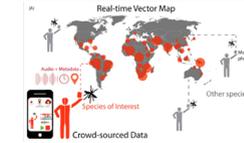
SAVING LIVES AT BIRTH:
A GRAND CHALLENGE FOR DEVELOPMENT

FIGHTING EBOLA:
A GRAND CHALLENGE FOR DEVELOPMENT

COMBATING ZIKA AND FUTURE THREATS
A GRAND CHALLENGE FOR DEVELOPMENT

OPEN INNOVATION

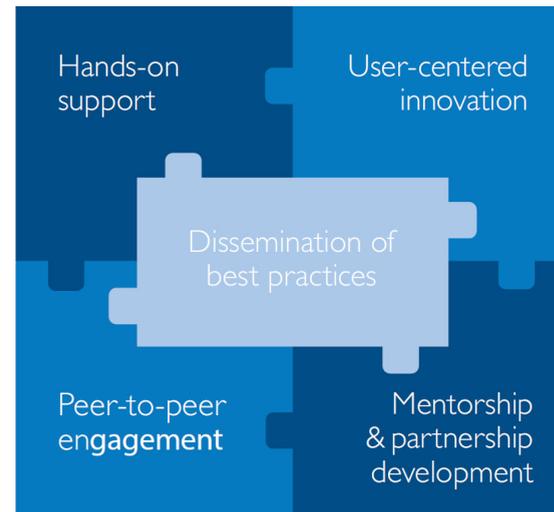
Our Global Health Grand Challenges include a portfolio of over 150 innovations. Getting the most promising and cost-effective solutions to scale remains our ultimate goal.



INNOVATOR SUPPORT

THROUGH A RANGE OF SUPPORT, WE PARTNER WITH OUR INNOVATORS TO CREATE BUSINESS MODELS THAT HELP THEM TO SUSTAINABLY SCALE

- Hands-on support with product introduction, scale up, and business model design
- Integration of design thinking to keep the end-user in mind
- Curated in-person networking and community of practice development
- Connections to partners, technical experts, and key influencers
- Developing and sharing best practices in global health innovation and acceleration



Our Partners:

Duke

VENTUREWELL

VIA GLOBAL HEALTH

OPEN CAPITAL ADVISORS

We Scale Impact

villgro possible.



SPOTLIGHT:

2018 DEVELOPMENTXCHANGE

Each year, the Saving Lives at Birth (SL@B) partners host the DevelopmentXChange, an event that brings together some of the most cutting-edge innovators in the sphere of maternal and newborn health. This year's event included:

- Capacity building sessions (e.g. finance 101, navigating regulatory pathways, etc.)
- Networking with technical experts and potential collaborators
- Inspirational "TED" talks and panels featuring voices from the field

2018 at a glance:

- 50+ innovations represented
- 200 curated partnering and mentoring meetings
- 40+ partner organizations representing academia, NGOs, ministries of health, and the private sector

(Off) Broadway comes to DevX:

The 2018 DevelopmentXChange featured performance of scenes from **BUMP**, a mainstage production of the EST/Sloan Project, inspired by Jorge Odón, the Argentinian car mechanic and innovator behind the SL@B-supported Odon Device, the first innovation in assisted vaginal delivery in decades.

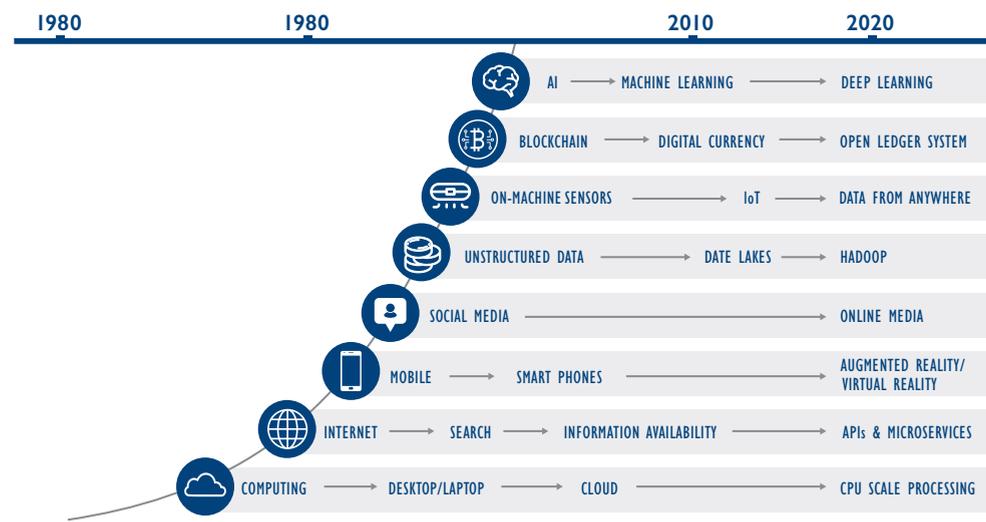


SPEED ADOPTION OF CUTTING-EDGE APPROACHES

The wave of new approaches and technologies can at times seem overwhelming. Over just the past few years, we've seen a wave of emerging solutions, from development impact bonds (DIBs) to artificial intelligence (AI), demonstrate significant potential to alter and disrupt healthcare. All too often, though, the global health community is a late adopter of these promising new approaches.

We believe that as these new approaches and solutions are still early-stage and rapidly evolving, we have an obligation to accelerate the appropriate and effective use of these new, potential game-changers to create health impact at scale.

An illustrative example below shows how fast the technology landscape moves.

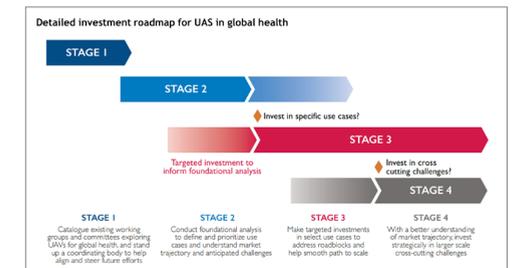


SOME EXAMPLES:



Unmanned aircraft systems in global health:

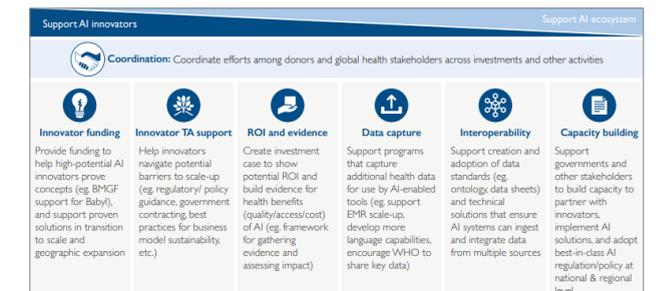
Unmanned Aircraft Systems (UAS) have the potential to make significant impact in global health, but funders, innovators, and implementers must work together to address the most pressing challenges and support promising use cases. In July 2018, USAID/CII joined donors such as the Bill & Melinda Gates Foundation and UNICEF to form a UAS Coordinating Body. This mechanism serves to align stakeholders and accelerate progress towards a cost-effective and sustainable role for UAS in global health. The coordinating body is now conducting foundational analyses to better inform future investments, such as identifying the most promising use cases and their technology, infrastructure, and regulatory requirements. To learn more, visit www.isg-health.org.



Artificial intelligence in global health:

Recognizing the huge potential of AI in global health, the Bill & Melinda Gates Foundation,

The Rockefeller Foundation, and USAID/CII have partnered to identify opportunities for donors, governments, investors, the private sector, and other stakeholders to accelerate the development and cost-effective use of AI at scale in global health. With *AI in Global Health: Defining a Collective Path Forward*, we 1) explore the current state-of-the-art of AI in healthcare to determine use cases with the highest potential in the global health context, 2) assess the most critical challenges to scaling AI in LMICs to understand which barriers may require more strategic and deliberate intervention, and 3) recommend potential investments to further explore as part of a coordinated approach to funding.



AMPLIFY THE USE OF INNOVATION

We partner with our technical colleagues to apply new approaches, build innovation capacity through training and tools, and support stronger local health innovation ecosystems in country.

SOME EXAMPLES:

Innovation Realized: the Path to Health Impact: Building upon USAID's strong foundation in innovation as well as ongoing efforts to further innovation across the agency, we have developed a suite of resources to support the appropriate use of innovation. "Innovation Realized: A Path to Health Impact" takes stock of our successes, more clearly defines innovation in the context of USAID's global health work, and, most importantly, practically lays out ways that USAID staff can identify opportunities and then apply innovation to solve real problems.



The Innovation Realized framework is organized around both understanding and applying innovation.

Strengthening local health innovation ecosystems: CII is working to provide guidance to countries to strengthen local global health innovation ecosystems. Governments and donors can work together to support all relevant local stakeholders, from research institutions and incubators/accelerators to government regulatory bodies and venture capital actors, to better enable locally-driven innovation and health impact at scale.



Photo: USAID



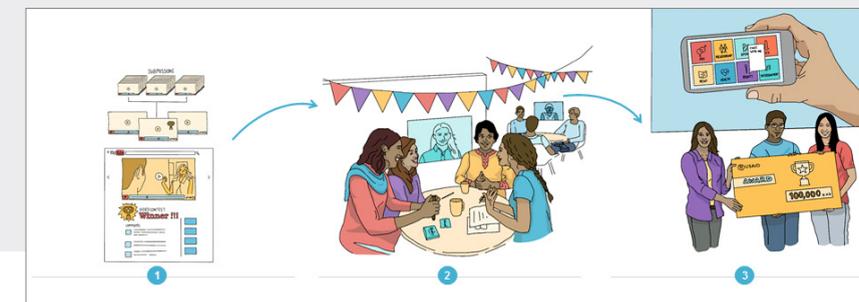
Photo: USAID

SPOTLIGHT:

FERTILITY AWARENESS INNOVATION

Many adolescents lack the knowledge, agency, or resources to avoid or delay pregnancy. CII worked in partnership with USAID's Office of Population and Reproductive Health on a human-centered design project looking to identify some of the most effective ways to reach adolescents (ages 15-19) in low- and middle-income countries with fertility awareness knowledge and family planning methods through a wide range of direct-to-consumer channels in partnership with private sector actors.

As a result, USAID issued a call for innovations and facilitated a co-creation process to develop and support projects in India and Rwanda that are using avatar-based games, digital safe spaces, and other direct-to-consumer approaches. By leveraging new channels and non-traditional partnerships, these projects aim to provide more accessible information on fertility awareness and family planning for previously unreached adolescents.





SCALE FOR IMPACT

To accelerate and magnify the impact of priority global health innovations, CII pairs the most successful private sector principles and practices with decades of experience scaling global health innovations. But operating in markets in low- and middle-income countries presents a host of new challenges. Tackling these challenges requires not only good delivery planning but innovation in how we address market inefficiencies. We partner across USAID's Bureau for Global Health to support accelerated introduction and scale-up through:

Strategic planning for introduction and scale

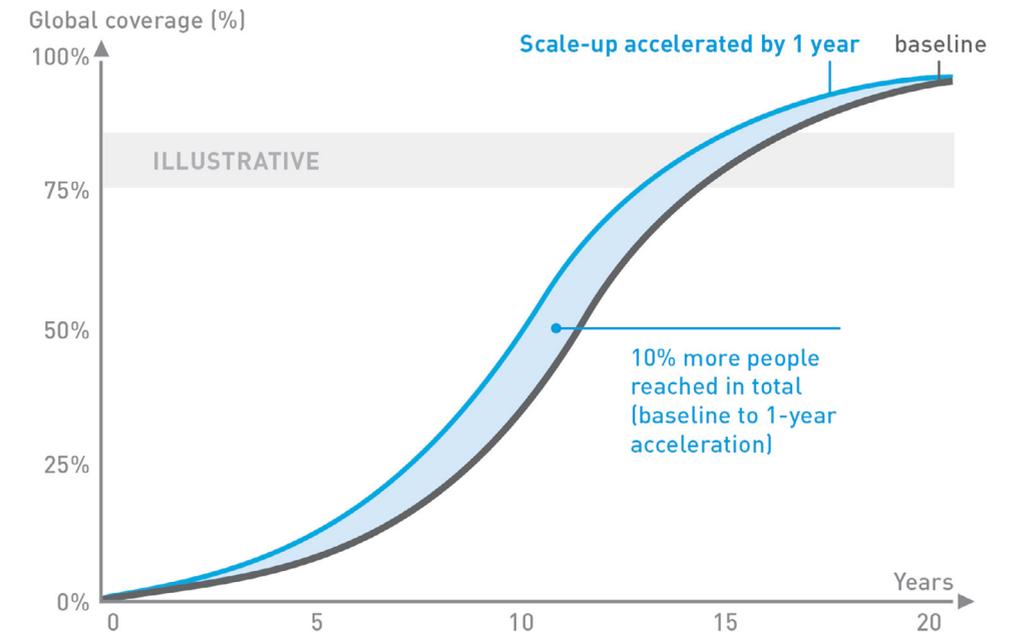
Market shaping

Innovative financing

For a typical global health launch, accelerating the scale-up of critical health interventions by even one year can result in an increased reach of 10% of the target population.

Global health practitioners know that introducing and scaling new innovations is a complex process. There is no shortage of factors to consider when developing a product and delivering it to the world's hardest to reach populations.

BENEFITS OF ACCELERATING UPTAKE



STRATEGIC PLANNING FOR INTRODUCTION & SCALE

Whether introducing new products or scaling proven lifesavers, strategic planning is crucial to ensure that products reach those who need them, and thus translate innovation in the lab into impact on the ground. Strategic planning is a complex process that involves evaluating market feasibility, assessing end-user acceptance, analyzing supplier dynamics, developing and executing an operational launch plan, and optimizing the execution of that plan. This process is even more complex because it requires support from many public and private sector contributors and thus depends on smooth coordination across these activities.

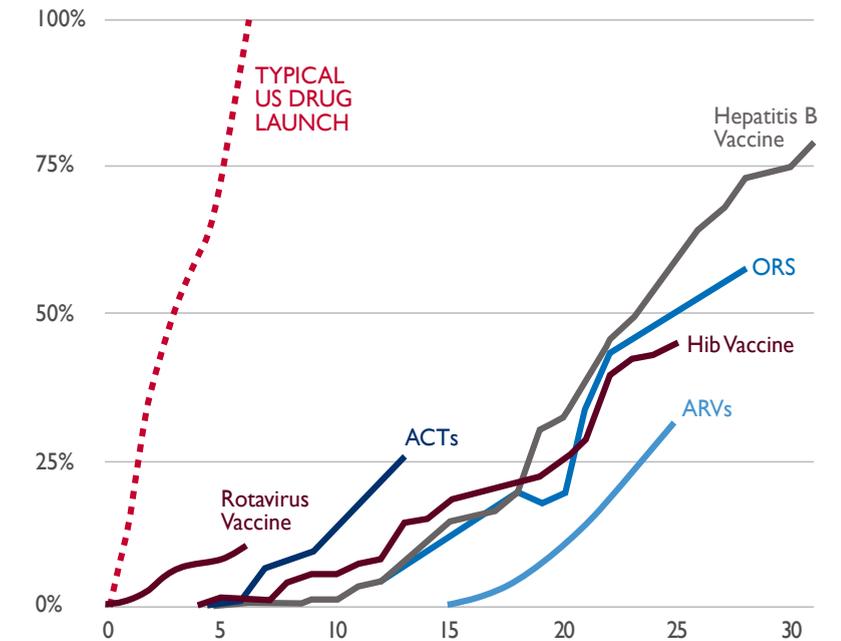
As a result, global health innovations often take decades to reach their intended users in low resource settings. In contrast, products launched by pharmaceutical companies in the United States and other high-income countries often reach their coverage targets in less than five years. CII is adapting these private sector practices to support strategic planning in low-resource settings across a wide range of health areas to cut the time it takes for innovations to reach impact.



CRITICAL HEALTH INTERVENTIONS HAVE HISTORICALLY EXPERIENCED SLOW UPTAKE AND LOW COVERAGE IN LOW- AND MIDDLE-INCOME COUNTRIES

New health interventions have historically experienced slow uptake and low coverage in low- and middle-income countries, especially compared to new drug launches in high-income countries. While there are many differences between these situations, early launch planning practices that are common in the US pharmaceutical sector can be adapted and similarly applied to global health interventions.

COVERAGE OF TARGET USERS (%)



ACT: Artemisinin-based combination therapy
 Hib: Haemophilus influenzae type b
 ARV: Antiretroviral
 ORS: Oral rehydration solution

Source: Adapted from analysis by The Bill & Melinda Gates Foundation, Dalberg Global Development Advisors, and the Boston Consulting Group



STRATEGIC PLANNING FOR INTRODUCTION & SCALE

SOME EXAMPLES:



Pricing agreement & advance order for HIV treatment: As part of PEPFAR's engagement, USAID's Office of HIV/AIDS (OHA) and CII provided active support and guidance on a transformational and historic ceiling price agreement that is accelerating the availability of the first affordable, generic, single-pill HIV treatment regimen containing dolutegravir, called TLD, to public sector purchasers in low- and middle-income countries. The agreement represents a multiparty partnership including the governments of South Africa and Kenya, together with UNAIDS, CHAI, the Bill & Melinda Gates Foundation as well as PEPFAR and USAID. Having learned from past challenges to ensure a sufficient global supply of new ARVs, CII worked with OHA and other partners to enable a PEPFAR Emergency Commodity Fund purchase for 2 million 30-day packs of TLD (costing ~USD \$15M) to send a strong market signal to accelerate TLD production.



HIV self-testing strategy in the private sector in 3 countries: HIV self-testing is a critical tool to reach untested populations, such as men and adolescents, to achieve the UNAIDS 90-90-90 targets. In close collaboration with the Office of HIV/AIDS, CII worked with SHOPS+, USAID's flagship initiative for private sector health, to develop sustainable market-based strategies to increase private sector uptake of HIV self-testing and condoms in the Dominican Republic, Kyrgyzstan, and Uganda. This project identified major market obstacles for the private sector introduction of these commodities and worked across supply and demand functions to improve market health for key customer segments.



Photo: Charlie Forgham-Bailey / Save the Children

SPOTLIGHT:

DEVELOPING A NIGERIAN MINISTRY OF HEALTH LED PNEUMONIA CONTROL STRATEGY

Pneumonia is the leading infectious disease killer of children under age five. In Nigeria, it accounts for approximately 127,500 deaths annually. Effectively tackling pneumonia mortality and morbidity requires a multi-sectoral, integrated approach, spanning an array of interventions across protection (e.g., nutrition), prevention (e.g., immunization), and treatment (e.g., appropriate antibiotics). CII, USAID/Nigeria, and USAID's Office of Maternal and Child Health and Nutrition are supporting the Nigerian Federal Ministry of Health to develop the first-ever integrated pneumonia control strategy and implementation plan, in line with the FMOH's broader approach towards reducing newborn and child mortality. Under the leadership of the FMOH, this work is being developed in partnership with the Every Breath Counts Coalition – the first public-private partnership to support ten national governments to end preventable child pneumonia deaths by 2030.

The strategy outlines strategic priorities including:

- Community prevention and care-seeking
- Delivery of clinical services
- Supply and distribution
- Policy and financing
- Data and information systems
- Coordination and partnerships



MARKET SHAPING

Health impact is inextricably linked to the health of the marketplace that delivers life-saving products to low-income populations. Efficient markets motivate suppliers to manufacture, wholesalers to distribute, and retailers to sell. But markets in developing countries are hampered by inefficiencies; a single breakdown in this complex system can keep life-saving products from those most in need.

Market shaping can disrupt current practices or transform existing market structures, creating efficiencies that lead to better health outcomes for the poor. In collaboration with donors, national governments, advocates, and other stakeholders, CII applies principles from its Healthy Markets for Global Health: A Market Shaping Primer to increase access to and use of life-saving commodities or services to realize better value for USAID investments and address previously insurmountable market barriers at scale.



3 TYPES OF LEVERS TO ADDRESS MARKET SHORTCOMINGS:



REDUCE TRANSACTION COSTS

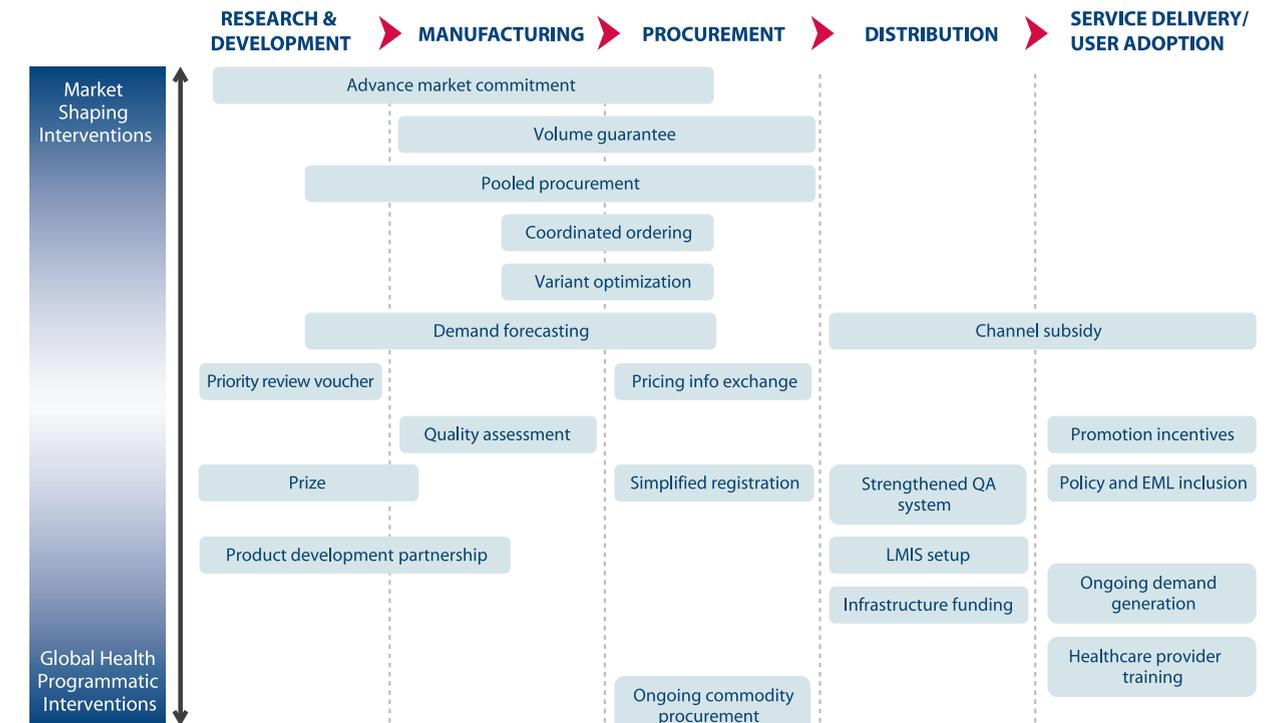


INCREASE MARKET INFORMATION



BALANCE SUPPLIER AND BUYER RISKS

MARKET SHAPING SPECTRUM ACROSS THE VALUE CHAIN



This schematic, from CII's Market Shaping Primer, illustrates a rough mapping of interventions along the market shaping/programmatic continuum and the product value chain.



MARKET SHAPING

SOME EXAMPLES:

Cervical cancer: Approximately 280,000 women die of cervical cancer each year, of which 90% are in LMICs. Almost all of these deaths are preventable with appropriate and timely screening and treatment of pre-cancerous lesions. CII is supporting USAID's Office of Population and Reproductive Health and the US National Academies of Science, Engineering, and Medicine launch projects in Malawi and Mozambique that integrate cervical cancer screening and treatment into broader women's health programs. CII is scoping market shaping opportunities that can introduce and scale up emerging technologies that enhance screening and treatment to LMICs faster.



Leapfrog to Value (L2V): CII, in partnership with USAID's Office of Health Systems, the Bill & Melinda Gates Foundation, The Rockefeller Foundation, UN Special Envoy, and the Global Development Incubator, is leading a project on value-based care (VBC). VBC aims to build patient centered innovations in measurement, delivery, and payment models that improve outcomes and lower costs and align incentives across the health marketplace and broader ecosystem. This work includes a landscape report on the current volume-focused health system, opportunities from value-based innovations, and the strategy for how LMICs can facilitate more experimentation and scale up of these innovations.



SPOTLIGHT:

OXYGEN MARKET SHAPING OPPORTUNITIES IN ETHIOPIA AND GLOBALLY

Better access to oxygen could help reduce the 100,000 newborn, child, and maternal deaths that occur in Ethiopia each year. Working hand-in-hand with USAID/Ethiopia and USAID's Office of Maternal and Child Health and Nutrition, CII identified market shaping opportunities to strengthen safe and quality delivery of oxygen in Ethiopia. Opportunities, including those to address information asymmetries and risk aversion, were identified to optimize private-public collaboration, increasing availability of safe and quality oxygen delivery. Based on this analysis, the FMOH in Ethiopia convened stakeholders to better understand how to optimize oxygen delivery and accelerate access to this life-saving medicine.



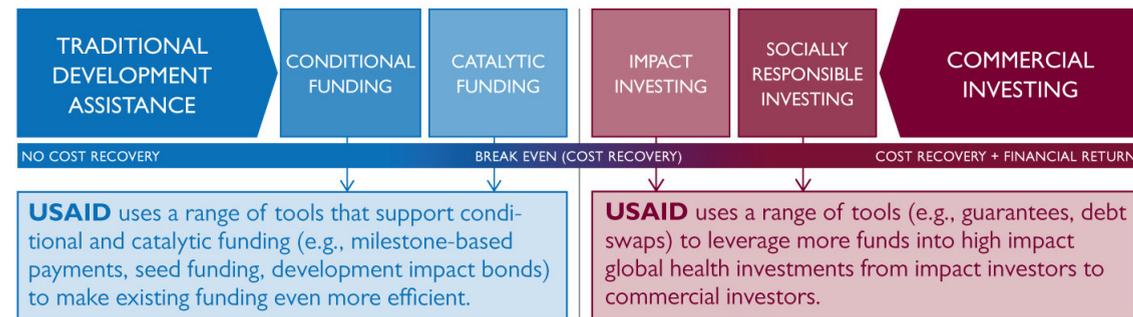
INNOVATIVE FINANCING

USAID is at the forefront of developing innovative and blended finance transactions that support countries on their journey to self-reliance. The increasing interest of the private sector in investing in health creates new opportunities for USAID and countries to mobilize additional, more sustainable resources to improve health outcomes.

CII works to support USAID's Bureau for Global Health and Missions be more strategic and embed innovative and blended finance in our daily work. To that end, CII is:

- Exploring opportunities to scale outcomes-based financing models and reducing the transaction costs associated with their design and implementation
- Empowering Missions to identify opportunities for innovative and blended finance
- Identifying challenges in the broader global health financing ecosystem that USAID can help overcome, in order to catalyze private investment in health

GLOBAL HEALTH FINANCING ACROSS A DIVERSE SPECTRUM OF CAPITAL



CII's report Investing for Impact outlines practical tools across this spectrum.

SOME EXAMPLES:



Utkrish Impact Bond: The Utkrish Impact Bond was launched in November 2017 and in December 2018 completed the first six months of implementation. It aims to reduce the number of maternal and newborn deaths by improving the quality of care in private health facilities in Rajasthan, India. In this financing structure, private capital from the UBS Optimus Foundation covers the upfront costs of improving the quality of care in private facilities in Rajasthan, incurred by HLPFPT and PSI. As the outcomes funders, USAID and Merck for Mothers pay back this investment if certain targets are met, as determined by the independent verifier, Mathematica.



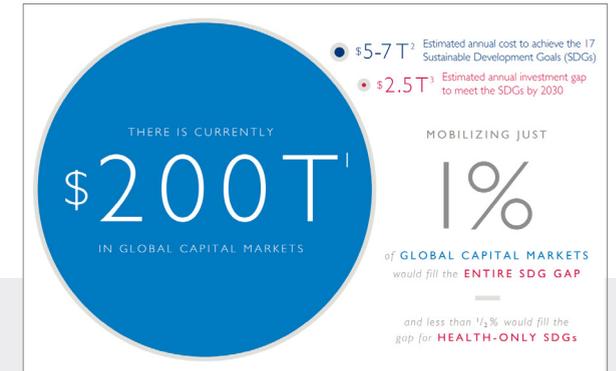
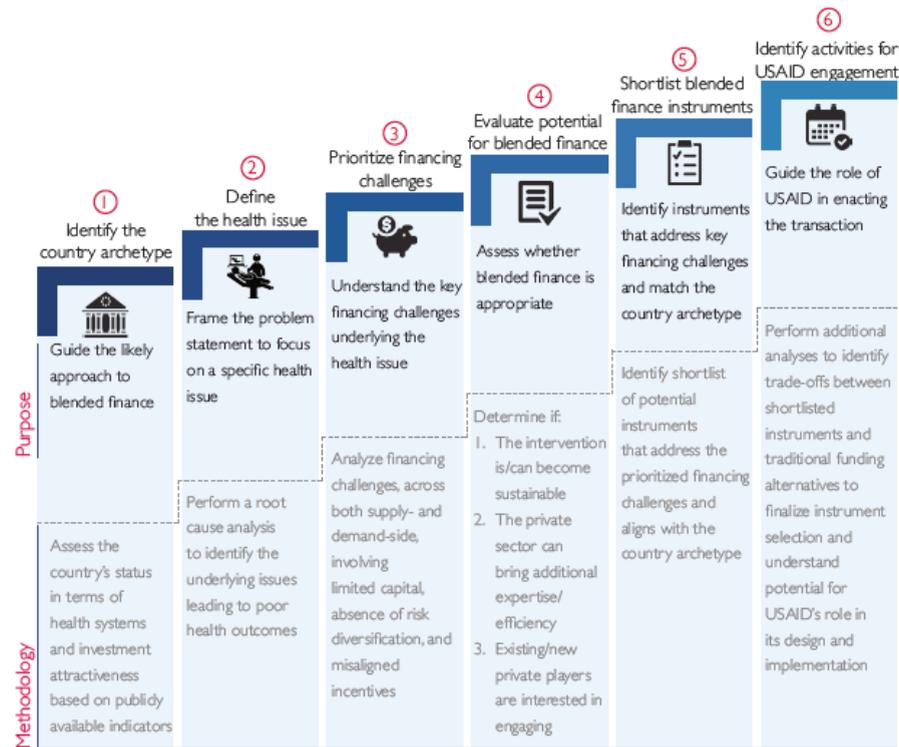
Cholera Impact Bond Design: Cholera was introduced to Haiti in 2010 in the wake of a devastating earthquake, resulting in more than 800,000 suspected cholera cases and 9,000 associated mortalities. In 2012, the Government of Haiti launched a National Plan for the Elimination of Cholera, in concert with international and national partners. Continued investment in this intervention strategy is critical, as Haiti remains vulnerable to a cholera resurgence. Specifically, there is a 'last mile' funding gap of ~\$37M for critical interventions from 2019-2022. A feasibility study, led by the UN Special Envoy (UNSEO) for Haiti and USAID, identified a development impact bond (DIB) as a high potential innovative financing mechanism to contribute to the elimination of cholera transmission. Of the \$37M gap, roughly \$26M has been identified to be funded via a DIB. USAID is working with UNSEO to design the DIB, as well as source investors and outcome funders.



INNOVATIVE FINANCING

EXAMPLE:

Blended Finance Roadmap for Global Health: Developed as a practical resource for USAID, the Blended Finance Roadmap for Global Health demystifies blended finance and provides a framework to help identify opportunities more systematically and strategically. The Roadmap outlines the role that blended finance can play in helping to solve health challenges and identify the most appropriate set of blended finance instruments.



SPOTLIGHT:

PRIVATE CAPITAL FOR GLOBAL HEALTH

We know we will need significantly more innovation – and funding to support that innovation– if we are to successfully achieve our global health aspirations. To that end, CII has been working to better understand the barriers and opportunities to increased private sector investment in global health innovation. We consulted with over 60 innovators, investors, development partners, academics, and other ecosystem stakeholders in order to better understand the needs and opportunities in this space. Through a design-led process, two promising initiatives are being pursued in partnership with others:

- **Catalytic Early Stage Innovator Support Facility** to increase the number of promising innovators successfully reaching a point where they can attract more traditional sources of private capital.



- **Investor Blended Finance & Healthcare Knowledge-Sharing Facility** to provide low-cost risk capital in order to offset lower risk-adjusted returns in global health and 'crowd-in' a wider array of private investors.





STRENGTHEN & APPLY CROSS-CUTTING ENABLERS

At CII, we are constantly evaluating what works and applying these forward-looking practices to USAID's health investments. To do so, we strengthen and apply cross-cutting practices to our work and share these best practices with the broader global health community. We amplify our expertise by engaging diverse perspectives and luminaries in the public, private, and academic sectors across four main areas:

Digital health

Public goods

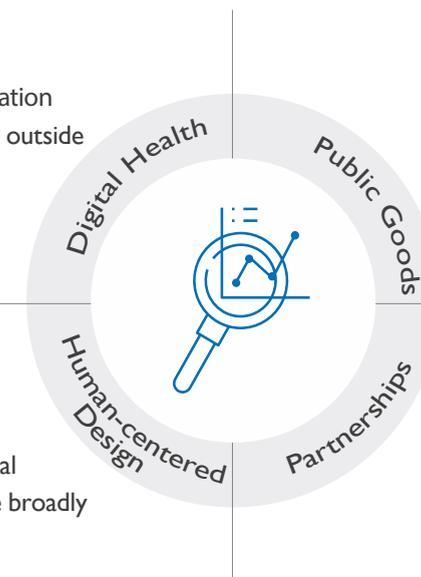
Partnerships

Human-centered design

THROUGHOUT OUR WORK, WE BRING CROSS-CUTTING, INNOVATIVE ENABLERS TO OUR PARTNERS IN GLOBAL HEALTH

Advocating for digital collaboration and interoperability inside and outside of USAID

Creating cutting-edge public goods to inform practitioners on the ground and to educate the next generation of leaders



Bringing human-centered design to the Bureau for Global Health, and global health more broadly

Leveraging >\$300M in external private & philanthropic funds, and a key conduit to partnerships with the private sector



DIGITAL HEALTH

How can we improve the quality and availability of health data, and its use in decision-making to improve individual and country-level health outcomes? As the wave of digitization grows around the world, increasingly strategic investments in digital technologies and their supporting environments are part of the answer.

CII works with the Bureau for Global Health and other USAID colleagues, as well as with a number of external partners, to set strategy and respond to country calls for increased coordination and alignment of investments in digital health.



EXAMPLE:

**DIGITAL
INVESTMENT
PRINCIPLES**



Principles of Donor Alignment: CII worked with partners to develop, and now endorse, the Principles of Donor Alignment. With these principles, and working through existing global and regional efforts, donors will:

1. Collaborate to align investments
2. Prioritize investments in national plans that incorporate “digital global goods” and avoid bespoke systems
3. Engage early to determine and quantify long-term costs of operating, maintaining, and supporting digital health systems for sustainable country ownership
4. Track investments, progress, learnings and successes in digital health systems in a transparent manner
5. Strengthen donor technical skills and core capacities, including awareness of the Principles for Digital Development

At the same time, donors will invest in:

6. The creation and evolution of a country’s national digital health strategy, policies, and regulatory framework
7. Systems at a level appropriate to the country’s progress along the digital health maturity continuum
8. Sustainable country capacity for digital health leadership, governance, implementation, oversight, global good adoption, and donor coordination
9. Scalable, sustainable, accessible, interoperable, and evidence-based digital health global goods that meet country priorities
10. Diverse stakeholder information-sharing and peer-learning networks at country and regional levels to foster coordination and alignment of implementation activities

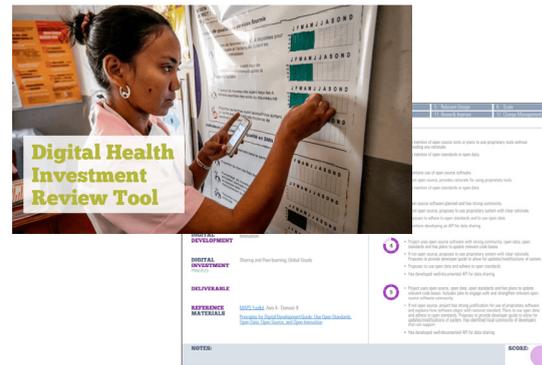


DIGITAL HEALTH

SOME EXAMPLES:

Digital Health Vision: To support USAID's operationalization of the Principles of Donor Alignment, working with USAID's Bureau for Global Health colleagues, CII is co-authoring the Agency's inaugural Digital Health Vision. The Vision will guide future USAID planning, procurement, and programming in digital health-supported country health activities. It highlights four strategic priorities for USAID to assess, align to, and help progress: country digital health capacity, national digital strategies and their costed roadmaps, and national digital health architecture, including through the adoption of reusable 'global goods'.

Digital Health Investment Review Tool: Too often digital health investments are made without the time or resources to develop a deep technical knowledge of the technologies behind them, or the ecosystem in which these technologies are used. The Digital Health Investment Review Tool (DHIRT), developed through a close collaboration with the Bureau for Global Health's Maternal and Child Health and Nutrition team, is a global good that can be used to support strategic investments in the use of digital technologies to support public and global health. Developed by a consortium of funders and implementers, the DHIRT is based on widely-accepted best practices in global digital health such as the Principles for Digital Development and the Principles of Donor Alignment.



SPOTLIGHT:



DIGITAL SQUARE

One solution to overcoming siloed investments in competing and fragmented digital health technologies is co-investment. Digital Square is an innovative financing mechanism created by USAID and managed by CII. Digital Square attracted co-investment in strategic and scalable digital health solutions by the Bureau for Global Health colleagues (including from the Office of Policy, Programs & Planning and the Office of HIV/AIDS) as well as USAID's Africa Bureau, Global Development Lab, East African Regional Office, and several country buy-ins. An initial \$22M invested by USAID has been matched by a further \$14M in co-investments from major global health funders including the U.S. Office of the Global AIDS Coordinator (OGAC), the Bill & Melinda Gates Foundation, and the German development agency, GIZ, to name a few.

Digital Square:

- Coordinates investments in proven digital technologies to maximize the impact of investments
- Scales global goods technologies that can be adapted to meet different countries' contextual needs
- Creates digital market readiness by building capacity with governments, local technology developers, and health workers



PUBLIC GOODS

CII has created a series of practical guides for the broader global health community on how to address barriers to the development, introduction, and scale-up of innovative technologies aiming to reach the most vulnerable populations.

IDEA TO IMPACT SERIES

Global health innovations have long been challenged by late introduction and slow scale-up. Consolidating best practices from the public and private sectors, CII's IDEA to IMPACT series shares guidance to help practitioners scale innovations and accelerate impact through better business model and partnership design, as well as earlier country-level launch planning.



Idea to Impact identifies priority activities and provides project management guidance across four stages of product development to help practitioners plan and execute delivery-related activities.



Pathways to Scale provides organizational guidance for innovators to select the most relevant business model and partnership options to be best positioned to scale.



Ready, Set, Launch supports practitioners in selecting initial launch locations and creating a comprehensive strategy and operational launch plan to achieve scale.

INVESTING FOR IMPACT SERIES

In 2016, the funding gap to achieve the health SDGs in low- and middle-income countries (LMICs) was estimated to be approximately \$134 billion, and this gap is expected to increase threefold by 2030. CII's INVESTING for IMPACT series provides practical tools and guidance for global health practitioners to assess and apply new, innovative financing tools that can help us better leverage private capital and other non-traditional sources of funding.



Investing for Impact outlines development finance trends and how USAID is applying non-traditional approaches to finance global health goals.



Blended Finance Roadmap for Global Health lays out how to catalyze blended finance transactions and partner with the private sector.



Market Shaping Primer describes a framework for diagnosing and addressing market barriers to efficiently deliver health products.



Unleashing Private Capital for Global Health Innovation defines the need for catalyzing private capital for global health innovations and designing innovator and investor support facilities.



PUBLIC GOODS

INNOVATING FOR IMPACT SERIES

Staying on the cutting-edge of new approaches and the application of new technologies isn't easy in any sector, especially the resourced constrained world of global health. CII's INNOVATING for IMPACT series provides guidance and market shaping strategies to unlock innovation and accelerate the adoption of the most promising new approaches and technologies.



UAVs in Global Health: Defining a Collective Path Forward provides a coordinated investment roadmap to accelerate the cost-effective use of UAVs in global health.



Artificial Intelligence in Global Health: Defining a Collective Path Forward explores the highest potential use cases for AI in global health and opportunities as part of a coordinated approach to invest in this space.

Launching the AI report
at the Aspen Institute,
April 2019



CII E-LEARNING SERIES

CII is developing a series of trainings to help USAID Washington and Mission colleagues better understand and apply the concepts we leverage in our work. These trainings provide an introduction to CII publications and review the business-minded approaches that are critical for future success in global health. This series will include:

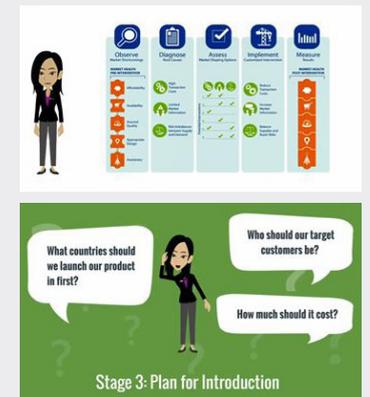
1. Market Shaping
2. Introduction Planning for Global Health
3. Innovative Finance for Global Health
4. Innovation Realized
5. Digital Health
6. Human-centered Design

SPOTLIGHT:

MARKET SHAPING AND INTRODUCTION PLANNING FOR GLOBAL HEALTH

CII's first training focuses on the principles of market shaping and strategic planning for the launch and scale-up of new global health products or services.

The **market shaping** section helps learners diagnose the root causes of market-based obstacles for a global health product in a certain location and implement customized market shaping interventions, if appropriate. The **introduction planning** section helps global health practitioners develop a strategic approach to launching and scaling a new product to ensure maximum uptake.



PARTNERSHIPS

Partnerships are central to the efficacy and sustainability of many global health solutions. CII, in partnership with the Bureau for Global Health, leveraged our expertise in the development of USAID's Private Sector Engagement Policy. This work highlights the following health goals that can be achieved by greater collaboration with the private sector:

- We can reach greater scale and higher efficiency by drawing on private sector resources and expertise or by accessing private sector channels.
- Increasing value for money through procurement savings is an important aspect of how more competitive markets can attract more investment from commercial actors, thereby facilitating access to health products.
- Finally, we can enhance USAID program sustainability with handover strategies that are less reliant on traditional donor assistance, such as revenue-generating business models and partnerships with local private sector actors.



GREATER SCALE



HIGHER EFFICIENCY



MORE VALUE FOR MONEY



ENHANCED SUSTAINABILITY



GRAND CHALLENGE PARTNERSHIPS

CII has been at the forefront of putting private sector partnerships to use in practice; and we've had great results. For example, CII's Grand Challenge model provides critical support for health innovations in their early stages so that they are effective and sustainable opportunities that attract partnership with the private sector to accelerate their time to market. Some examples:



Johnson & Johnson and Monash University



Every year, over 100,000 women die of postpartum hemorrhage (PPH), a condition of excessive blood loss after childbirth. Although PPH can be effectively prevented or treated with an injection of oxytocin, access to this drug is limited due to the requirements for refrigeration, storage and trained medical personnel for administration. With funding from Saving Lives at Birth, Monash University has developed a novel aerosol delivery system for oxytocin that can be inhaled by patients from a simple, disposable device immediately after childbirth. This year, Janssen Pharmaceutica N.V. of Johnson & Johnson announced that it has entered into a sponsored research agreement with Monash to advance the development of inhaled oxytocin. This new research agreement builds on an existing collaboration between Monash and GlaxoSmithKline, which was established in 2014.



Johns Hopkins University Center for Bioengineering Innovation and Design (JHU CBID), Jhpiego, DuPont



The 2014 Ebola epidemic demonstrated a critical need for improved personal protective equipment (PPE) for health care workers. Using the principles of human centered design, JHU and Jhpiego worked together to design a PPE ensemble that would improve health care workers' visibility and comfort as well as reduce their risk of being exposed to Ebola by increasing the efficiency of the doffing process. DuPont, one of the largest PPE manufacturers, saw the potential in the new PPE designs and signed a licensing agreement with JHU in September 2015. The partnership with DuPont has ensured that the new hoods and coveralls are designed to meet basic cost and manufacturability requirements.



FLAGSHIP PARTNERSHIPS

CII has developed several flagship partnerships with the private sector to bring relevant expertise to our global health work.

“It’s about having a vision and the energy to execute on it – it’s about dreaming in color, not in black and white. AMP Health and our MP have seen where we were, where we are and where we are going. They are dreaming in color with us”

– Doreen Ali, Deputy Director, Preventive Health Services, Malawi



The Aspen Management Partnership for Health (AMP HEALTH)

The Aspen Management Partnership for Health (AMP Health) partners with Ministries of Health to help scale community health and immunization programs by providing leadership and management training, mentoring and coaching, a network of like-minded partners, and placement of experienced private sector professionals.

AMP Health empowers Ministries of Health through a belief that strong leadership and management are key to driving sustainable change.



To learn more, visit amphealth.org.



Our Partners:



AMP Health currently supports work in Sierra Leone, Malawi, Ghana, and Zambia, and is looking to expand into other parts of sub-Saharan Africa and Southeast Asia.



Photo: Gina Rogari



FLAGSHIP PARTNERSHIPS



ATscale: Global Partnership for Assistive Technology

Launched at the July 2018 Global Disability Summit, ATscale, the Global Partnership for Assistive Technology, put forward the goal of reaching 500 million more people with life-changing assistive technology (AT) by 2030, to enable a lifetime of potential. USAID's Empowerment and Inclusion Division within the Bureau for Democracy, Conflict and Humanitarian Assistance and CII have helped initiate this partnership, along with partners including CHAI, DFID, NORAD, Office of the UN Secretary-General's Special Envoy for Financing the Health Millennium Development Goals, UNICEF, and WHO. In early 2019, ATscale published its strategy overview, which centers around two major objectives: 1) developing an enabling environment for quality, affordable AT and accompanying service delivery, and 2) identifying product specific interventions to shape markets and overcome demand and supply-side barriers.



To learn more, visit atscale2030.org.

Our Partners:



“[W]e are today announcing plans to take part in a new global partnership for assistive technology. Working with the private sector and other governments, it will help half a billion people globally by 2030, making a very real difference to a great many lives.”

– Theresa May, Prime Minister of the United Kingdom, announcing the launch of ATscale at the 2018 Global Disability Summit in London



FLAGSHIP PARTNERSHIPS



Project Last Mile

Project last Mile

Project Last Mile is a pioneering public-private partnership with The Coca-Cola Company and Foundation, the Bill & Melinda Gates Foundation, The Global Fund, and USAID to help improve uptake of life-saving health services and to enable medicines to go to the “last mile” and benefit communities in Africa.

Project Last Mile leverages the Coca-Cola system and expertise to support governments across Africa through solutions such as supply chain design and management, cold chain equipment maintenance, strategic marketing, differentiated service delivery, and route-to-market models.



To learn more, visit projectlastmile.com.

Our Partners:

BILL & MELINDA
GATES foundation

The Coca-Cola Company



The Global Fund
To Fight AIDS, Tuberculosis and Malaria

“One of the things [the Medical Stores Department (MSD)] learned was that the challenges that we [Coca-Cola] face are the same challenges that they face... clearing containers from the port, transferring product around the country. So, it was actually an eye-opener – that MSD are not unique in these challenges... I think the big learning was how we proactively plan to mitigate these challenges.”

– Staff member from Coca-Cola Bottlers Africa, Tanzania



In pursuit of a goal to reach 10 countries by 2020, Project Last Mile has provided support in 8 countries: Ghana, Liberia, Mozambique, Nigeria, Sierra Leone, South Africa, Swaziland, and Tanzania.



HUMAN-CENTERED DESIGN

Human-centered design is a proven approach to building global health products, services, and programs that meet the needs of users and other critical stakeholders to achieve greater health impact. By placing people at the center of product, service, and program development, design ensures that people's needs, desires, and abilities inform all key decisions – leading to a higher likelihood of adoption and sustainable impact. Design can drive impact and serve as a complement to our existing programs and partners through accelerating human-centered innovation.

CII, in partnership with the Bureau for Global Health, is more deliberately applying design to our work by actively engaging end users, providers, and other key constituencies to ensure that their needs and expectations inform decisions.



Our Partners:



SOME EXAMPLES:

Design support for global health innovation: Through the Combating Zika and Future Threats Grand Challenge, the Institute for Global Environmental Strategies applied design to gain feedback from students and teachers in Peru on the GO Mosquito Habitat Mapper App, which engages students through their science curriculum in school to identify and mitigate mosquito breeding sites. Based on their findings from the CII-supported HCD research, design modifications were proposed to the app to make it more engaging for students.



Design for Health: USAID and the Bill & Melinda Gates Foundation have been at the forefront of applying human-centered design in global health. Our teams have partnered to lead the development of public goods to advance the more intentional and appropriate use of design in global health.

Aimed at democratizing design, these public goods include a primer on design, a glossary of design terms, common principles between design and global health. At its core is a vision of design and global health and an actionable roadmap towards achieving this vision.



To learn more, visit designforhealth.org.



Design for Health was named a finalist in Fast Company's World Changing Ideas 2019, Health & Wellness.



HUMAN-CENTERED DESIGN

SPOTLIGHT:

VA VA VOOM! VIVACIOUS!

CII partnered with USAID's Office of HIV/AIDS (OHA) to launch "V", an innovative approach to branding and product packaging aimed at creating demand for oral PrEP for HIV prevention among adolescent girls and young women (AGYW). "V" was developed through a human-centered design process to better understand the challenges in uptake and adherence for oral PrEP among AGYW. "V" reimagines HIV prevention programming and creates a brand-in-a-box with a pill case and carrying bag similar to makeup products, empowering messaging, and peer and health worker support. "V" also employs private sector partnerships to create excitement for oral PrEP.



"V" is in the beginning stages of implementation across multiple countries in southern Africa. Lessons learned will be shared with the global health community throughout the year. All "V" materials are available online and open source to be adapted to local contexts for broader implementation. CII and OHA welcome your questions and ideas on partnering around "V" — you can contact USAID at "launchingV@usaid.gov."

"PSI Zimbabwe is so excited to implement V on the ground. Through V, we hope to normalise PrEP use among AGYW by positioning it as a product that fits into their lifestyle rather than a medicine."

– Kumbirai Chatora, PSI/Zimbabwe



SPOTLIGHT:

NIO FAR DAKAR

As part of the Design for Health community of practice, CII and the Bill & Melinda Gates Foundation annually convene design leaders to co-create and track progress towards a common future vision for the role of human-centered design in global health. Through an intense workshop, attendees from the design, donor, and implementing partner communities come together to take stock of progress and prioritize collective action for the coming year.

This year's convening, Nio Far* (n'yo fer) Dakar, was held in one of Africa's evolving hubs for design and the arts. Our venue was the Museum of Black Civilisations (Musée des Civilisations Noires), a new institution that celebrates black cultures and histories from across the world. It was chosen to inspire, energize, and uplift as we, as a community, tackled the question: As global health evolves over the next 25 years, how can design be best positioned to be integrated within the field while accelerating human-centered innovation to improve the health of populations?

*Nio Far is a phrase from the Wolof that roughly translates to "we are on" or "we are together".



Photo: Benjamin Harrison



OUR GLOBAL IMPACT

Our work is global in nature and touches the lives of people in **over 40 countries**. We rely on local experts to inform and shape what we do to ensure our work is most relevant.

TOP COUNTRIES WE WORK IN AND NUMBER OF PROJECTS:

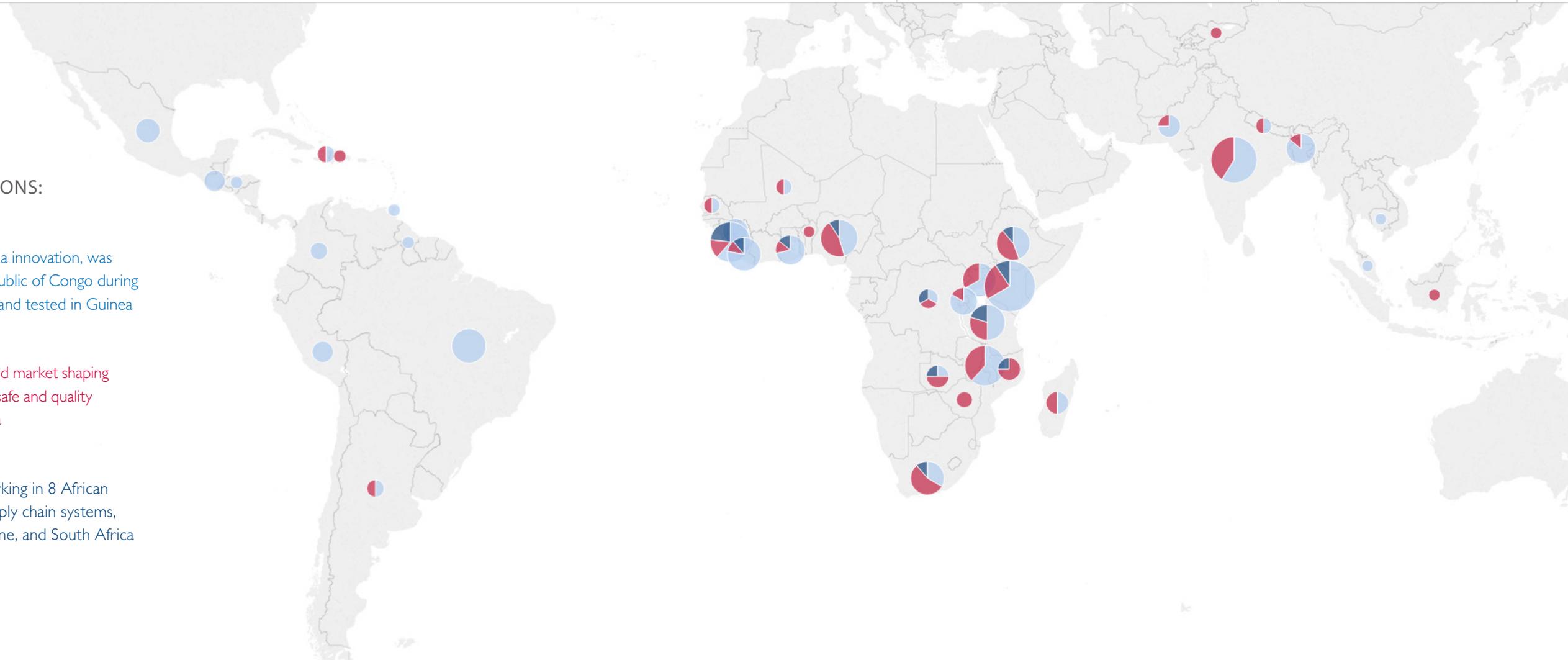
KENYA (18)
INDIA (15)
MALAWI (12)
SIERRA LEONE (11)

NUMBER OF COUNTRIES BY AREA OF WORK:

INNOVATION: 34
MARKET ACCESS: 29
PARTNERSHIPS: 11

WE PARTNER WITH MISSIONS:

- INNOVATION:**
e.g., Highlight, a Fighting Ebola innovation, was used in the Democratic Republic of Congo during the Ebola outbreak in 2018, and tested in Guinea
- MARKET ACCESS:**
e.g., CII and partners identified market shaping opportunities to strengthen safe and quality delivery of oxygen in Ethiopia
- PARTNERSHIPS:**
e.g., Project Last Mile is working in 8 African countries to strengthen supply chain systems, including Liberia, Sierra Leone, and South Africa



LOOKING AHEAD

IT IS A TIME OF OPPORTUNITY.
IT IS ALSO A TIME OF GRAND CHALLENGES.

Over the next decade, USAID and our partners have an incredible opportunity – and responsibility – to create dramatic health improvements across the globe. This won't be easy: demographics, urbanization, slower and unequal economic growth, and weather extremes and migration, to name a few, all pose huge challenges to our traditional approaches.

At the same time, we're seeing new opportunities to address these challenges in new ways. Since USAID's inception, for example, we have seen a historic five-fold increase in GDP per capita in the world, with half of low-income countries graduating to higher income status since the year 2000. Today, there is currently \$200T in global capital markets. Just 0.5% of that would be enough to fill our Health SDG funding gap.

Realizing our promise as a global health community will depend on how well our innovation can spur better, more cost-effective solutions to existing and new challenges.



CII BELIEVES THAT TODAY'S PROBLEMS
NEED TOMORROW'S SOLUTIONS.

We are energized and optimistic about what lies ahead. Below is a small sample of some of the things we'll be focused on over the coming year:

- **Blended finance** – How might we better leverage non-traditional sources of financing to fill the huge funding gap needed to reach our health goals?
- **The future of youth in Africa** – The median age in Africa is just 18. How might we help the youth in Africa achieve the future they want for themselves?
- **Innovation capacity building** – Taking cues from the private sector, how might we build best-in-class innovation skills across the Bureau for Global Health and in the countries in which we work?
- **Value-based care** – How might we move low- and middle-income countries to a health systems model that aligns patients, payers, and providers around the common goal of measuring and achieving the best health outcomes for the resources invested?
- **Digital health** – How might we accelerate the adoption of the new digital health principles in the countries in which we work? How might we accelerate the appropriate and effective use of artificial intelligence?
- **Human-centered design** – How might we expand design capacity through educational activities that improve design awareness, design fluency, and design practice in communities where the need is greatest?
- **Acceleration support for our innovators** – How might we help accelerate the impact of some of the most promising global health innovations?

As with these and other opportunities, our focus will remain on staying ahead of the curve, capturing and applying state-of-the-art practices, and turning *innovation into impact*.

WORK WITH US

WE BELIEVE IN THE POSSIBLE

With a bias towards action, we blend public health expertise with experience in med-tech and pharmaceutical strategy, finance, business management, and management consulting to work hand-in-hand with our technical colleagues across USAID's Bureau for Global Health.

As a small team we make sure that everything we do is a demand-driven priority for the Bureau for Global Health, catalytic, done in partnership, and tests the status quo.



And we're just getting started. We are eager to explore new partnerships, test our work and thinking, and learn from you!

At CII, we endorse the International Development Innovation Alliances (IDIA) Innovation Principles:

- Invest in locally-driven solutions
- Take intelligent risks
- Use evidence to drive decision-making
- Fail fast and iterate
- Facilitate co-creation across sectors
- Identify scalable solutions

PLEASE REACH OUT AT: CII@USAID.GOV

INNOVATION REALIZED

Florence is a neonatal nurse in Malawi training her peers on the importance of the Continuous Positive Airway Pressure (CPAP) machine. Known by her peers as the CPAP Champion, Florence is educating hospital staff on this device and how it helps save the lives of premature babies. She is a direct beneficiary of our work, harnessing the collective ingenuity of innovators around the world.

Florence, and others like her, remind us why we do this work and the importance of turning innovation into impact. To learn more about her story, go to USAID's YouTube page and watch: [American Innovation Breathes New Life into Newborns in Malawi](#).



Photo: USAID



USAID
FROM THE AMERICAN PEOPLE

U.S. AGENCY FOR
INTERNATIONAL DEVELOPMENT

1300 Pennsylvania Avenue NW

Washington, DC 20523

www.usaid.gov