

*The National Academies of*  
SCIENCES • ENGINEERING • MEDICINE

HEALTH AND MEDICINE DIVISION  
AND

Consortium of  
**Universities**  
for Global Health



Present:

***Global Health and the Future Role of the United States***  
*Report Overview from The National Academies Committee Members*



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# Why Invest in Global Health?

- Saving lives of millions of children and adults over the next 20 years
  - Benefits to low-and middle-income countries can exceed costs up to 20 fold
- Securing protection against global health threats
- Promoting productivity and economic growth in other countries

# The Committee

- **JENDAYI FRAZER** (Co-Chair), Council on Foreign Relations
- **VALENTIN FUSTER** (Co-Chair), Mount Sinai Medical Center
- **GISELA ABBAM**, GE Healthcare
- **AMIE BATSON**, PATH
- **FREDERICK BURKLE, JR.**, Harvard University
- **LYNDA CHIN**, University of Texas, Houston
- **STEPHANIE FERGUSON**, Stanford University
- **LIA HASKIN FERNALD**, School of Public Health, University of California, Berkeley
- **PETER LAMPTEY**, FHI360
- **RAMANAN LAXMINARAYAN**, Centers for Disease, Dynamics, and Policy
- **MICHAEL MERSON**, Duke Global Health Institute, Duke University
- **VASANT NARASIMHAN**, Novartis
- **MICHAEL OSTERHOLM**, Center for Infectious Disease Research and Policy, University of Minnesota, Minneapolis
- **JUAN CARLOS PUYANA**, University of Pittsburgh

# Committee Process

- Hosted 4 deliberative committee meetings
  - September 29<sup>th</sup> and December 6<sup>th</sup> open for information gathering and public comment
  - September 30<sup>th</sup>, December 7<sup>th</sup>, January 5-6<sup>th</sup>, and February 2-3<sup>rd</sup> were closed to committee only
- Solicited information via Survey Gizmo from 40 CDC Country directors and 12 USAID Mission employees (see Chapter 1 for details)
- Prepared a 10 chapter report
  - Underwent expert review by 17 experts, mirroring report content

# Study Sponsors

## Federal Sponsors

- U.S. Agency for International Aid
- U.S. Centers for Disease Control and Prevention
- U.S. Food and Drug Administration
- U.S. National Institutes of Health
- U.S. President's Emergency Plan for AIDS Relief

## Private & Philanthropic Sponsors

- BD
- Medtronic Foundation
- Merck
- Rockefeller Foundation

# The Charge, in brief

## The Committee was asked to:

Assess the current global health landscape and offer recommendations on future priorities

Review the U.S. global health enterprise and offer recommendations to improve responsiveness, coordination, and efficiency

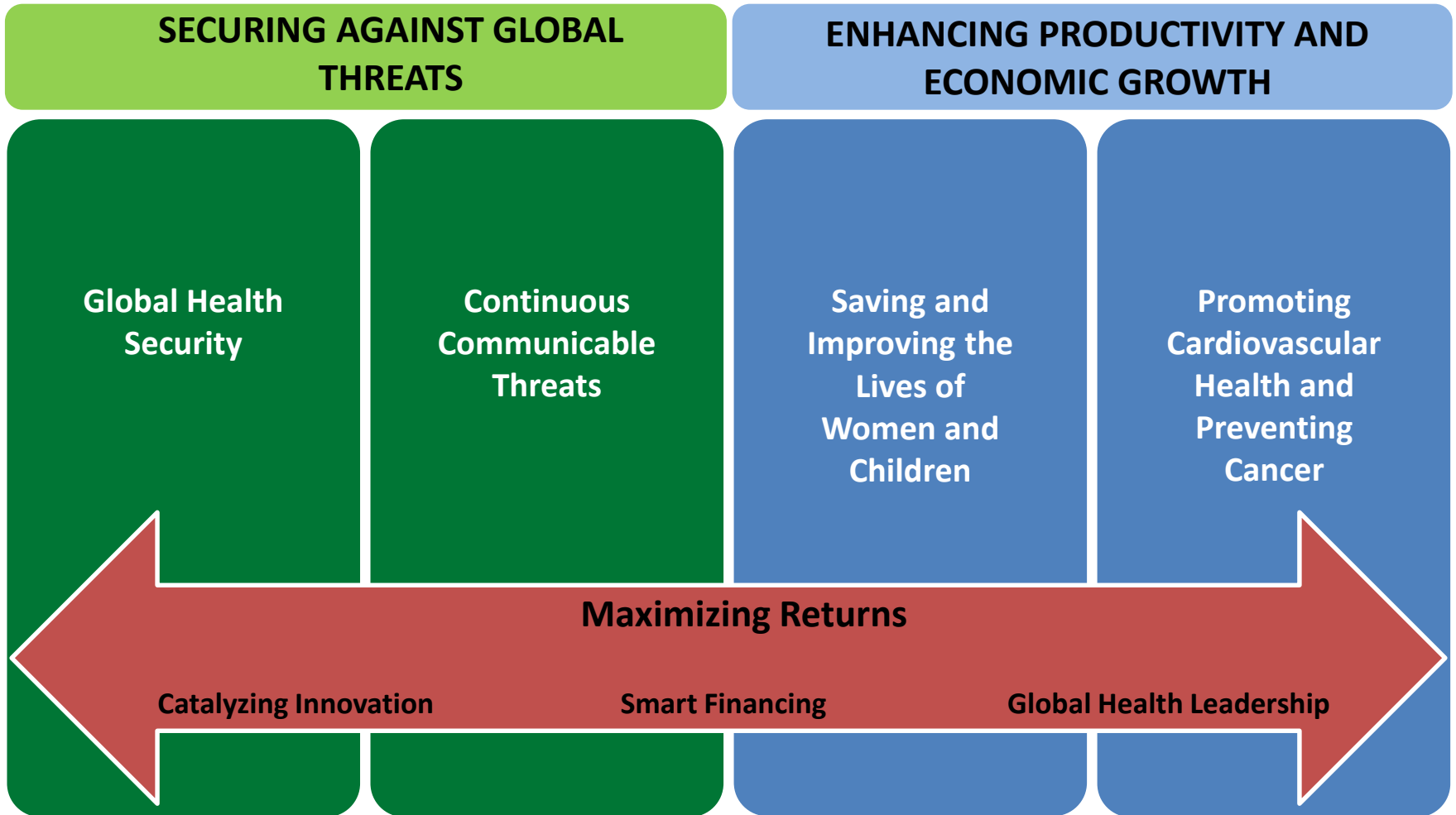
Relevant global changes considered were:

- Globalization
- Growing frequency of infectious disease epidemics & AMR
- Culmination of the MDGs
- Increasing privatization of health care
- Increasing importance of NCDs

# Key Messages

- Priority areas for Action:
  - Achieve global health security
  - Maintain a sustained response to continuous threats (HIV, TB, malaria)
  - Save and improve the lives of women and children
  - Promote cardiovascular health and prevent cancer
- Change the way we do business in global health to better enable innovation through:
  - Accelerating development of medical products
  - Enabling harmonized digital health infrastructure
  - Optimizing financing strategies
  - Maintaining U.S. leadership in global health architecture
- Embrace system focused concepts of integration, capacity building, and partnership

# Report Conceptual Model





# Report Details

# Global Health Security

## Current State & Challenges

### Key Threats:

- Zoonotic Spillover
- Pandemic influenza
- Antimicrobial resistance

### Challenges

- Urbanization
- Complacency
- Cross-Country Partnerships
- Leadership and Division of Responsibilities

### Key Vulnerabilities:

- Poor Public Health Infrastructure & Preparedness
- Vulnerable Supply Chains & Slow MCM Development
- Fragile states



# Global Health Security

## Needed Actions

Domestic: U.S. needs a new proactive approach for public health emergencies, embracing prevention and preparedness, which includes

- Creation of a single **coordinating body** to guide international public health emergency responses
- **Dedicated funding** for domestic preparedness, response, and medical product development
- Improved **coordination** with multilateral organizations



# Global Health Security

## Needed Actions

International: It is necessary to build core preparedness capacities and public health infrastructure internationally as well as domestically:

- Build **public health capacity** in LMICs including disaster risk reduction and disaster response.
- Align with effective multilateral organizations
- Coordinated, dedicated effort to **combat AMR**



# Continuous Threats: HIV, TB, Malaria

## Progress since 2000

### HIV/AIDS



Incidence: 35%  
Mortality: 42%

### Tuberculosis



Incidence: 23%  
Mortality: 34%

### Malaria



Incidence: 41%  
Mortality: 62%

## Challenges

- Only 60% know HIV Status
- 50% cases ARV treatment
- TB leading infectious disease killer
- Increased resistance and HIV co-infection
- Drug and Insecticide resistance



# Continuous Threats: HIV, TB, Malaria

## Needed Actions

- PEPFAR should be funded at current levels with more flexible funding targets. It should continue **transitioning to national governments**, adapt its platform to **focus on chronic care**, place stronger emphasis on prevention, including interventions targeting **gender-based violence**. **The Global Fund should be supported.**
- CDC, NIAID, and USAID should conduct a thorough **global threat assessment of TB** and execute a plan for developing and investing in new diagnostics, drugs, vaccines, and delivery systems.
- The U.S. government should continue its commitment to fighting malaria through the **President's Malaria Initiative**.



# Women and Children's Health

## Current State & Challenges

### Children

- Mortality rates cut by more than half since 1990 - but 6 million still die each year.
- 250 million children don't reach development potential

### Women

- Mortality rates cut by nearly half since 1990 but 300,000 mothers die each year
- Lack of access to family planning, birth spacing, and emergency obstetric care

**System:** Health care and social services, as well as women's and infant health are often delivered separately



# Women and Children's Health

## Needed Actions

- Investments in ending preventable maternal and child deaths should be accelerated and include **evidence-based interventions** (immunizations, IMCI, nutrition, prenatal care and safe delivery, family planning).
- USAID, PEPFAR and implementing partners should **incorporate child development interventions** that foster a “thrive” agenda into current programs
- This can be achieved if health systems are more **patient-centered** and package services for women and children.





# Cardiovascular Health and Cancer

## Current State & Challenges

### Cardiovascular Disease

- 18M Deaths in 2015
- Costs projected to rise to more than \$1 trillion by 2030
- Many symptoms go undiagnosed

### Cancer

- 8.8M Deaths in 2015
- Costs projected to rise to more than \$8 trillion by 2030
- 2/3 of deaths are due to late detection

Both suffer from a lack of “branding” and an ability to mobilize political will



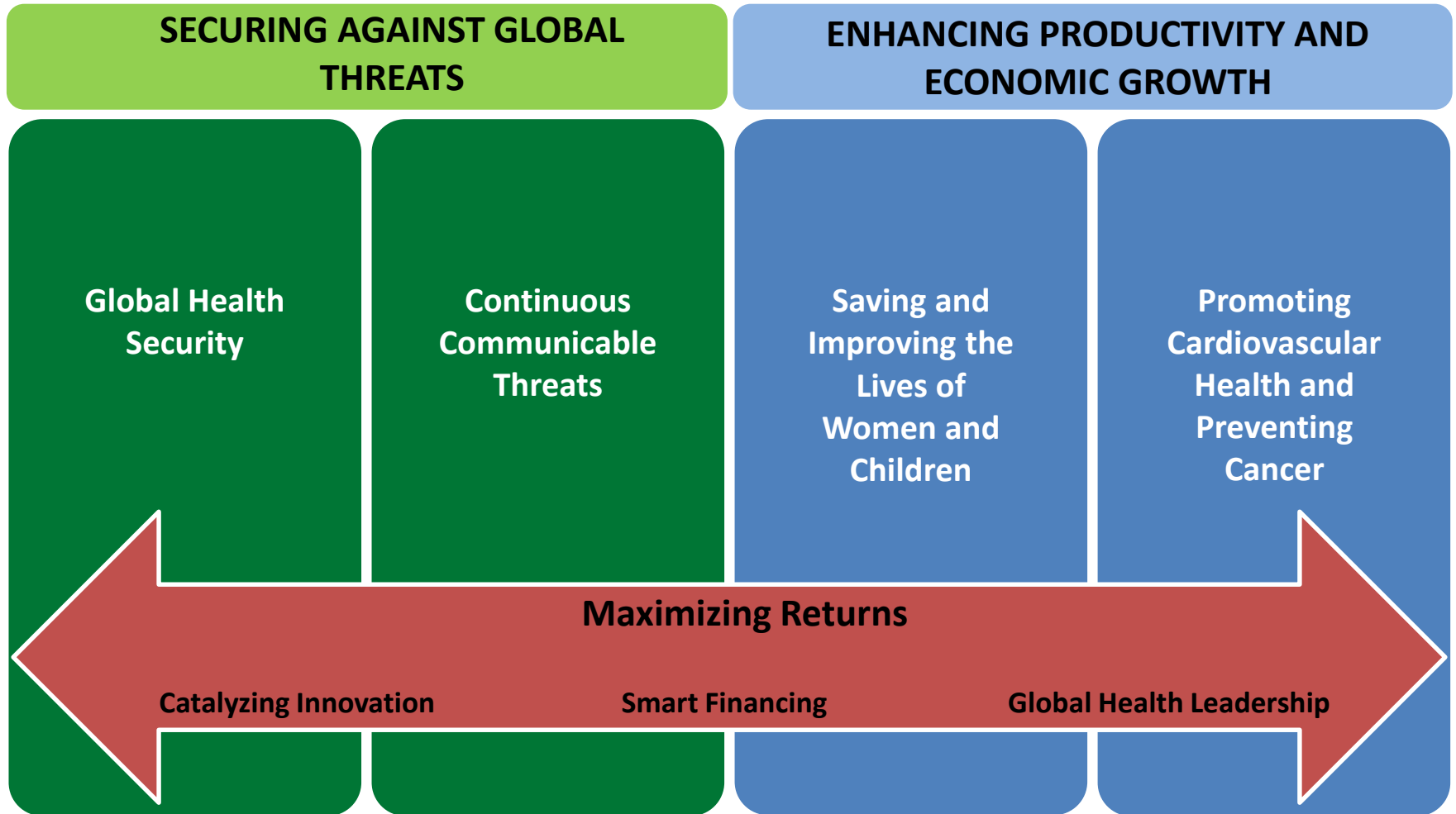
# Cardiovascular Health and Cancer

## Needed Actions

- USAID, State Department, and CDC should provide seed funding to **mobilize the private sector** to address CVD and cancer in countries
- Efforts should be coordinated with governments and **integrated** with existing platforms and community services.
- They should focus on behavioral **risk factors (smoking, alcohol use, obesity)**, hypertension, treatment of early cervical cancer, and immunization for HPV and Hep B



# Report Conceptual Model



# Catalyzing Innovation

## Current State and Challenges

- Weak markets and costly R&D results in underinvestment in medical products for neglected diseases.
- Capacity for medical product R&D in countries where diseases are endemic is often weak.
- Potential for information technology advances undermined by fragmented and duplicative apps and tools.



# Catalyzing Innovation

## Needed Actions

- U.S. agencies should develop and scale mechanisms that **reduce costs and both R&D and market risks** of developing, licensing, and introducing medical products needed for global health priorities.
- CDC, NIH (e.g. Fogarty), and DoD should **increase the number of trained people and institutions** in partner countries able to conduct clinical trials.
- U.S. agencies should work with international stakeholders to convene and create a **common digital health framework**
- U.S. agencies should expand on “build once” principle in Digital GAP Act and **align U.S. funding in digital health** to reduce duplication and fragmentation.



# Smart Financing

## Current State and Challenges

- Many LMICs have growing economies and are beginning to transition out of traditional foreign aid.
- Short term expenditures and vertical programs are more attractive to governments - but long term, cross-cutting investments can have significant returns.
- Rigorous economic analysis of the social, economic and financial return is important to ensure best use of funds and to engage private sector and new donors.
- Innovative financing mechanisms can increase the value of investment.



# Smart Financing

## Needed Actions

- Transition investments toward global public goods
  - USAID, State, and HHS should jointly assess their approach to global health funding and gear it toward **long-term, catalytic investments.**
- Optimize resources through smart financing strategies
  - USAID and PEPFAR should structure financing to **promote country ownership and domestic financing.**
  - USAID should expand use/flexibility of financing mechanisms such as **Development Credit Authority.**
  - U.S. Treasury, State, and USAID should motivate the World Bank, IMF, Global Fund, and Gavi to **promote transitions to domestic financing and attract alternative financing sources.**



# Global Health Leadership

## Current State & Challenges

- Global governance for health requires involvement of organizations that directly and indirectly impact health
- WHO performs essential functions, yet is in need of reform and remains underfunded
- The current U.S. system for health diplomacy is not well suited to global health emergencies.





# Global Health Leadership

## Needed Actions

- State Department and HHS should use their influence to **improve the performance** of key UN agencies, especially WHO.
  - U.S. contributions to WHO should come with a requirement that reforms are adopted.
- State and HHS should **remain committed to global partnerships** such as Gavi, The Global Fund, the GHSA, and the Global Financing Facility.
- Congress should **amend the Foreign Service Act** to enable global health experts within HHS, and the State department should **create a global health career track**.



# Summary



- Health and well-being of other countries affect the health, safety, and economic security of Americans.
- Taking a more proactive and systematic approach will make the U.S. government's global health enterprise more efficient and cost-effective.
- U.S. global health strategy should include forward-looking policies, a long-term vision, country and international partnerships, and continued investment.
- U.S. can maximize investments by catalyzing innovation, leveraging and shaping financing, and working with governments, industry and global partnerships

# Questions?

PDF of report available for download:  
[nationalacademies.org/USglobalhealth](https://nationalacademies.org/USglobalhealth)

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