RETURN ON INNOVATION

Why global health R&D is a smart investment for the United States

July 20, 2017

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Overview: Report key findings

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@GHTCoalition
Downward trend of US government investments in global health R&D

US government funding for global health R&D, 2007-2015

![Graph showing a downward trend of US government investments in global health R&D from 2007 to 2015. The graph indicates a decrease in funding, with a notable increase in emergency investments in Ebola and select VHFs in 2014 and 2015.]

- Neglected diseases
- Emergency investments in Ebola and select VHFs
US government investments in global health R&D are limited, but indispensable

US government investment, 2015

- $1.05 trillion
- $609 billion
- $102 billion
- $1.7 billion

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US government investments in global health R&D are limited, but indispensable.
US government investments respond to market failure

- Endemic and emerging global health challenges disproportionally affect people in the world’s poorest places
- US government jumpstarts research, de-risks investment
- The private sector alone will not fill this gap
Whole-of-government support for global health R&D

- **WHITE HOUSE**
  - **STATE**
  - **DoD**
  - **HHS**
    - **USAID**
    - **BARDA**
    - **FDA**
    - **NIH**
    - **CDC**

- **CONGRESS**
  - Appropriates funding
  - Authorizes programs
  - Approves appointments
### Impact: New technologies developed

**US government support for new global health technologies registered since 2000**

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neglected diseases</td>
<td>31</td>
</tr>
<tr>
<td>Diagnostics</td>
<td>11</td>
</tr>
<tr>
<td>Drugs</td>
<td>14</td>
</tr>
<tr>
<td>Vaccines</td>
<td>6</td>
</tr>
<tr>
<td>Reproductive health</td>
<td>7</td>
</tr>
<tr>
<td>Ebola and select VHF</td>
<td>4</td>
</tr>
<tr>
<td>Contraceptives</td>
<td>7</td>
</tr>
<tr>
<td>Diagnostics</td>
<td>4</td>
</tr>
</tbody>
</table>
Impact: Promising tools in pipeline

US government support for late-stage global health pipeline candidates

- Neglected diseases: 103
- Vaccines: 63
- Drugs: 28
- Diagnostics: 8
- Microbicides: 4
- Reproductive health: 14
- Ebola and select VHFs: 11
- Contraceptives: 7
- Multipurpose prevention technologies: 7
- Vaccines: 7
- Drugs: 4

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### US-supported tools are saving lives, lowering healthcare and treatment costs

<table>
<thead>
<tr>
<th>50-cent meningitis A vaccine</th>
<th>Two pediatric malaria treatments supported</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>USAID, CDC, NIH, FDA</strong></td>
<td><strong>NIH, USAID</strong></td>
</tr>
<tr>
<td>673,000 cases of meningitis A prevented</td>
<td>300 million treatments distributed</td>
</tr>
<tr>
<td>378,000 deaths averted</td>
<td>750,000 estimated children saved</td>
</tr>
<tr>
<td>63,000 children saved from disability</td>
<td></td>
</tr>
<tr>
<td>$9 billion dollars saved v. treating meningitis A</td>
<td></td>
</tr>
</tbody>
</table>
US investments in global health R&D create jobs and economic growth

- 89¢ of every dollar invested benefits US-based research
- Global health R&D injected $12 billion into the American economy

200,000 new US jobs
$33 billion in economic output

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Each dollar the NIH invests in basic research leverages an additional industry investment of $8.38.

US investments in global health R&D leverage private sector funding.
US investments in global health R&D promote cost-savings

- A $26 million investment in polio vaccine R&D in the 1950s has saved $180 billion in treatment costs in the United States alone.
- It cost $50 million to develop MenAfriVac – a low-cost meningitis A vaccine. By 2020, it is predicted to have saved $9 billion in meningitis A treatment costs.
- Large-scale disease pandemics could cost the global economy more than $60 billion a year. An R&D investment of $1 billion per year could deliver the tools needed to protect against these outbreaks.
US investments in global health R&D protect American health
US investments in global health R&D protect American health

Chagas’ disease: annual cost to the US economy vs. current US government R&D investment

- Annual cost of Chagas’ disease to the US economy: $900 million
- Annual US government investment in Chagas’ disease R&D: $7 million
Returns not reflected in global health R&D prioritization or funding

US government funding for global health R&D, 2007-2015

- Neglected diseases
- Emergency investments in Ebola and select VHFs
Global health R&D is a best buy for America

- Pandemic preparedness
- Improves health
- ECONOMIC GROWTH
- Global health security
- Small investment, big impact
- Leverages funding
- Spurs private sector
- New tools
- Jobs
- American leadership
- Builds goodwill
- Unlocks opportunity
- Lives saved
- Costs savings
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