

Creating Access for Health Technologies in Poor Countries



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UNC SPH, 23 April 2010



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**How do good health technologies get to
poor people in poor countries?**

Laura J. Frost & Michael R. Reich

**Based on book
published by
the Harvard
Center for
Population &
Development
Studies**

www.accessbook.org

*downloadable
for free*

The Gates Foundation



Bill Gates speaking at the World Health Assembly, 16 May 2005

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Overall Goal

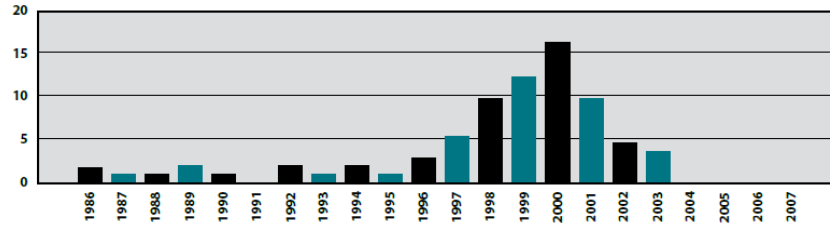
Assist the Gates Foundation in understanding and more effectively *planning for success* for its product development portfolio

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Growth in Product Development Partnerships

Number of public-private partnerships for product development created by year from 1986 to 2007²¹



Source: Meredith & Ziemba, Global Forum for Health Research, 2008.

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PDPs by Neglected Disease, 2007

Disease	Number of PDPs			
	Drugs	Microbicides	Vaccines	Diagnostics
HIV		2	2	
Tuberculosis (TB)	1		2	2*
Malaria	4		3	
Chagas	2		1	
Dengue fever			1	
Diarrhoeal diseases	1		2	
Human African trypanosomiasis (HAT)	2			
Hookworm			1	
Leishmaniasis	2		1	
Onchocerciasis	1			1*
Schistosomiasis	1			
Pneumonia			1	
Meningitis			1	

*The Infectious Disease Research Institute (IDRI) works on vaccines and diagnostics for TB and leishmaniasis, included in both categories.

Source: Meredith & Ziemba, Global Forum for Health Research, 2008.

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\$2.5 billion invested in ND R&D, 2007

DISEASE	AMOUNT (US\$)	%
HIV/AIDS	1,083,018,193	42.3
Malaria	468,449,438	18.3
Tuberculosis	410,428,698	16.0
Kinetoplastids	125,122,839	4.9
Diarrhoeal diseases	113,889,118	4.4
Dengue	82,013,895	3.2
Helminths (Worms & Flukes)	51,591,838	2.0
Bacterial Pneumonia & Meningitis	32,517,311	1.3
Typhoid and Paratyphoid Fever	9,117,212	0.4
Leprosy	5,619,475	0.2
Buruli Ulcer	2,412,950	0.1
Trachoma	1,679,711	0.1
Rheumatic Fever	1,670,089	0.1
Core funding of a multi-disease R&D organisation	110,921,673	4.3
Platform technologies	9,997,189	0.4
Unspecified disease	51,619,120	2.0
Grand Total	2,560,068,749	100.0

Source: Mary Moran, George Institute, Australia; presentation on G-Finder, Oct 2009

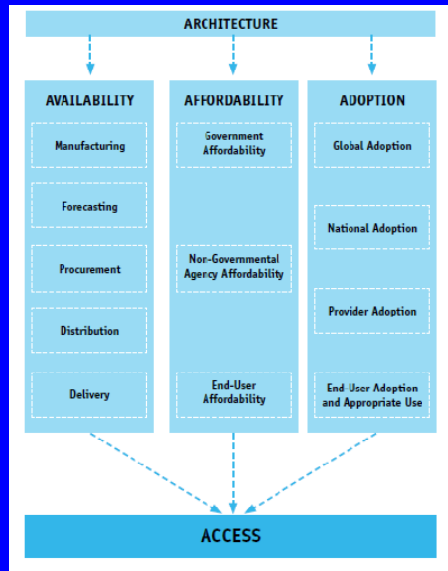
Funding Sources for ND R&D 2007

RANK	FUNDER	AMOUNT (USD)	% TOTAL FUNDING
1	US National Institutes of Health	1,064,859,791	41.59%
2	Bill & Melinda Gates Foundation	452,102,715	17.66%
3	European Commission	121,366,882	4.74%
4	US Department of Defense	86,914,578	3.40%
5	United States Agency for International Development	80,600,336	3.15%
6	Wellcome Trust	59,985,371	2.34%
7	UK Medical Research Council	51,716,968	2.02%
8	UK Department for International Development	47,565,987	1.86%
9	Netherlands Ministry of Foreign Affairs	33,951,646	1.33%
10	Pasteur Institute	31,617,540	1.24%
11	Irish Aid	24,271,557	0.95%
12	Swedish International Development Agency	21,529,014	0.84%
	Sub Total	2,076,482,385	81.11%
	TOTAL R&D FUNDING	2,560,068,749	100.00%

- 12 organisations provided >80%
- 2 organisations provided ~ 60%

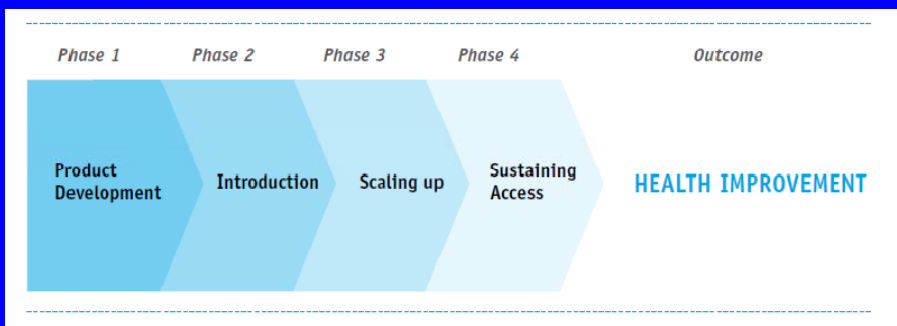
Source: Mary Moran, George Institute, Australia, presentation on G-Finder, Oct 2009

Our Access Framework



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These phases provided the structure for the case studies

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One Medicine: Praziquantel



Source: Schistosomiasis Control Initiative
<http://www.schisto.org/Zambia>



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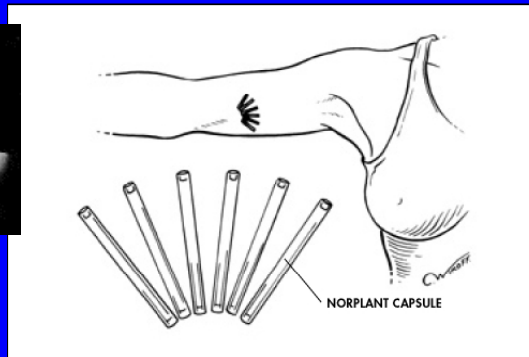
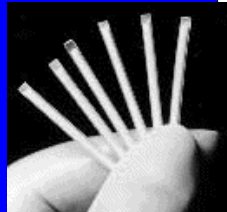
One Vaccine: Hepatitis B Vaccine



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One Contraceptive: Norplant



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One Device: Vaccine Vial Monitor



Labels on vaccine vials to indicate heat exposure.

“Used properly, this [vaccine vial monitors] can be a miracle tool to reduce wastage and prevent the use of heat damaged stock.”

Umit Kartoglu, WHO
Department of Vaccine and
Biologicals, *GAVI Immunization
Focus*, July 2003.



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One Dual-Protection Technology: Female Condom



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FC in USA Today – Today

 April 23, 2010

Female condom empowers women to save themselves

Updated 11h 31m ago

Commentary By Yolanda Young

In 1993, the Food and Drug Administration gave its stamp of approval to a then-novel item: the female condom. At the time, AIDS awareness was growing. NBA star Magic Johnson had announced he was HIV-positive less than two years earlier. But the virus was still greatly feared and misunderstood. Condom use was urged as a matter of dire public health, and so women finally could protect themselves if their partner chose not to.

Yet according to the Center for Health and Gender Equity, in 2007 about 11 billion male condoms were circulated worldwide compared with 26 million female ones. Cost used to be an issue, but it is no longer. The \$4 female condom has been replaced by the 62-cent one.

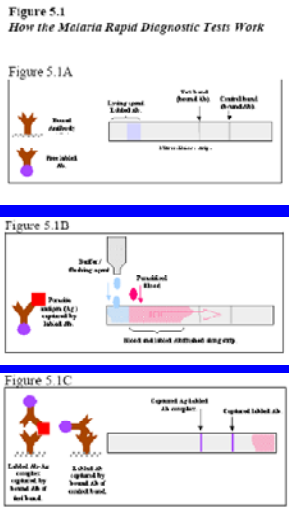
Although the title in the paper at the Carolina Inn was:
“Women need to take lead in safe sex”...

Comment on Website:
“I can understand why there are no comments, I've been sitting here for an hour trying to imagine how a female condom works and where do you put it.”

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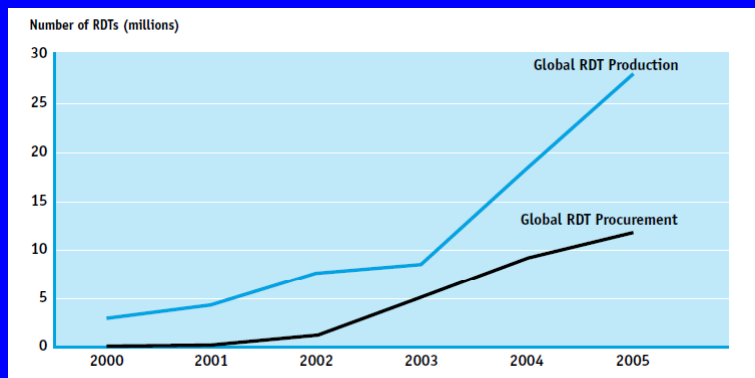
One Diagnostic: Malaria Rapid Diagnostic



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Rapid Growth in Malaria Rapid Diagnostic Tests



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Access Problems with Malaria Rapid Diagnostic Tests

- Limited adoption by health workers and patients (adoption)
- High product price, compared to microscopy (affordability)
- Varying performance of RDT products in the field (availability)
- Confusing range of products for purchasers (availability)

What Was Done for Malaria Rapid Diagnostic Tests

- Architecture: Create global focal point for malarial RDTs
- Adoption: WHO develop “job aids” for health workers
- Affordability: Global Fund support increased procurement
- Availability: WHO develop website on products and suppliers and work with FIND on quality assurance

Study Finding #1

Developing a safe and effective technology is necessary but not sufficient for ensuring technology access and health improvement.

Study Finding #2

End-user adoption of the technology is an essential but often overlooked component of the access process.

Study Finding #3

Creating access depends on effective product advocacy, including a coordinating architecture, product champion, and access plan.

Study Finding #4

The cost of health technologies and related services is a key barrier, requiring strategies to address affordability.

Study Finding #5

Strategies to assure the availability of a technology are needed to expand access.

Study Finding #6

Efforts to scale-up access to technologies need to invest in health systems to ensure sustained access.

Conclusions

- Creating access to good health technologies in poor countries is not easy – but it can be done and it does happen
- Creating access requires attention to processes of agenda-setting and implementation at the global level as well as national level actions
- Creating access requires strategies to manage imperfect markets and imperfect governments