

**Geneva Forum:  
Towards Global Access to Health**

**From basic research to delivery:  
When are PPPs needed?**

**Presentation by Louis J. Currat  
in the Parallel Session I-3  
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# Outline of the presentation

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2. **What is the main cause?**
3. **How to reconnect the public-private pipeline?**
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  - (b) **push/pull interventions by public sector**
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# **1. Problems regarding health products for the poor**

# **Problem 1: very few new products for the diseases of the poor in LDCs**

- Many infectious diseases affecting the developing world are potentially **treatable/preventable in the longer term.**
- **Economic disincentives** have resulted in underinvestment in medical research for new vaccines and medicines targeted at these diseases.
- Thus, of the more than 1200 drugs that reached the global market between 1975 and 2005, only an estimated **2-3% were for tropical infectious diseases** that primarily affect the poor.

# **Problem 2: existing products only reach some of the poor in LDCs**

## **Deaths from vaccine-preventable diseases (2002):**

- Measles	610'000
- Hepatitis B	600'000
- Haemophilus influenzae type b	386'000
- Pertussis	294'000
- Tetanus	213'000
- Yellow fever	30'000

## **Deaths from diseases for which vaccines are being developed (2002)**

- Pneumococcal disease	1'612'000
- Rotavirus	449'000
- Meningitis AC	26'000

## 2. What is the main cause?

### In the private sector:

- **High costs** of developing new products (several hundred million \$/product)
- Pricing perspectives **not** very favourable
- As a result, **withdrawal** of the private sector from investments in new products and marketing of existing products for poor populations in developing countries

### In the public sector:

- Concentration on **basic** health research
- **Lack of expertise**, mechanisms and resources to discover, develop and market new and existing products
- → **As a result, there is a disconnect (or several) between the public and private sectors for developing new and marketing existing products for the poor in developing countries**

# In other words...

## i.e. in terms of externalities

### In the private sector:

- Discovering/developing new products and marketing existing products for the poor populations of developing countries is, **normally**, an externality.
- This is **understandable** as the private sector cannot be held responsible for the global public good.

### In the public sector:

- In high-income countries, discovering/developing new products and marketing existing products for the poor of developing countries is still, **in part**, an externality.
- This is **more difficult to understand** (at least in the long-run) as the public sector is responsible for the global public good.
- **As a result, there is a severe lack of resources at the global level as compared to the size of the global problems to be solved (WHO budget = U of Geneva).**

## In summary:

### **a structural disconnect in the pipeline!**

For the delivery of Global Public Goods, in general, and the delivery of health services to the poor populations in developing countries, in particular, **there is a structural disconnect between:**

- (a) What the **private sector can do** (discover, develop and deliver based on market forces)  
and
- (b) What the **public sector can do** (basic health research, verifying quality and rational choice).

### **3. How to reconnect the public-private pipeline?**

#### **(a) Increase resources of UN agencies**

**A first possibility is to increase substantially the resources of the international public sector (UN agencies), ultimately responsible for fighting global public bads, so as to ensure adequate discovery/development of new products and marketing of existing products for the poor populations of developing countries.**

# How to reconnect the public-private pipeline?

## **(b) Push/pull interventions by Governments**

Another possibility is for Governments in high-income countries to take the following measures to help correct the structural problem of under-investment in the diseases of developing countries:

- **“Push”** interventions to reduce the costs of R&D
- **“Pull”** interventions to guarantee markets for products
- **“Ensure”** adequate supply, product quality, rational selection and appropriate use of products

# **“Push” interventions by the public sector** **(reducing the costs and risks of R&D)**

- **Increased funding for R&D on neglected disease**
- **Tax credits on R&D**
- **Social venture capital funds**
- **Harmonization of licensing processes**
- **Accelerated approval of drug and vaccine products**

# **“Pull” interventions by the public sector** **(providing support to guarantee markets for products)**

- **Purchase funds (providing a credible market for products)**
- **Tax credit on sales (increasing company revenue from the sale of products destined to low-income countries)**
- **Wider delivery of currently available vaccines**

# How to reconnect the public-private pipeline?

## (c) Public/private partnerships

- A third possibility is for the public and private sectors to develop **joint undertakings**, i.e. public-private partnerships, each sector doing what it can do best.
- **The initiative** is taken by the international or national public sector, or by civil society organizations (pursuing a global health objective with private resources) or the private commercial sector (as illustrated by donation programmes).

# How to reconnect the public-private pipeline?

## (d) A combination of the three

A combination of the three above-mentioned tools is likely to be the best strategy to increase the chance of success:

- **Increase the resources** of the international public sector (UN agencies)
- **Push/pull** interventions by national governments and ensuring adequate supply, quality, rational selection and appropriate use of products
- Develop **public-private** partnerships

# 4. PPPs during the period 1985-2005

1985-1994: launching of an estimated **17** PPPs

1995-2005: launching of an estimated **73** PPPs

## WHY THIS EXPLOSION?

- Greater **awareness** of the severity of health problems in the South (measurement of DALYs) and the dramatic impact of poor health on development and growth in developing countries
- Limited health **budgets** of national governments and UN agencies (causing some loss of confidence in their ability)
- Tendency for **pharmas** to withdraw individually from neglected diseases (leading however to their greater involvement in partnerships)
- **Determination** of UN agencies, national governments, CSOs and private commercial companies to deal **jointly** more effectively with health problems of the poor in developing countries following the adoption of the MDGs in 2000

## 5. Categories of PPPs (by objectives)

- **Product development PPPs:** IAVI, MMV, Global Alliance for TB Drug Development
- **Access to health products PPPs:** Mectizan (oncho→Merck), Albendazole (lymphatic filariasis→GSK)
- Global coordination mechanisms against specific **diseases:** Stop TB, RBM, Polio, DNDi
- Global coordination mechanisms to develop new **products/technologies:** FIND, IPM, CONRAD
- Global **funding** mechanisms: GAVI Fund, Global Fund to fight ATM

## **6. Examples of PPPs**

# International AIDS Vaccine Initiative (IAVI, 1996)

## Activities

- Mobilizing public/private funding for R&D (\$340mio)
- Providing financial and technical support to partnerships (industry, academia, government) for R&D of vaccines for developing countries
- Advocating vaccine research and access to vaccine
- Increasing the understanding of clinical trials

## Partnership (UN, govt, academia, CSOs, industry)

- WHO, ADB, World Bank, UNAIDS, Global Fund, GAVI, European Parliament, India, Japan, Uganda, universities, Profamilia/IPPF, ICRW, Evans Communication Co, Aventis Pasteur, Aberdare Ventures, Crucell NV, Parteurop

# Medicines for Malaria Venture (MMV, 1999)

## Activities

- Mobilizing public/private funding (\$113mio pledges)
- Providing financial and technical support, worldwide and on a competitive basis, to partnerships (industry, academia, government) for the discovery, development and delivery of safe, effective and affordable treatments for malaria to developing countries (current portfolio of about 20 projects widely viewed as the largest antimalarial drug research portfolio ever)

## Partnership (UN, govt, academia, CSOs, industry)

- Africa Matters, WHO, India CSIR, Brazil FIOCRUZ, Mozambique, Gates Foundation, Princeton U, TNT, Association of British Pharma Industry

# Mectizan Donation Partnership (Oncho, 1987)

## Main activities

- Distribution of Mectizan to 45 million people in Africa, Latin America and Middle East (Yemen) each year
- Delivery system also serves as avenue for other health and social services (Vitamin A, cataract identification, immunization campaigns, training programmes, census-taking)
- Since 1998, expansion of the programme to the treatment of lymphatic filariasis, together with the Global Alliance to Eliminate LF (today reaching 25 million people in Africa)

## Partnership (UN, Government, CSOs, industry)

- Merck Mectizan Donation Programme, World Bank, WHO, Unicef, Ministries of Health, NGOs, local communities

Source: Mectizan Partnership against Onchocerciasis

# Stop TB Partnership (1998)

## Activities: Reduce Burden of TB by 50% by 2015 by:

- Accelerating DOTS implementation
- Increasing the availability, affordability, access and quality of TB drugs
- Promoting R&D for new TB drugs, diagnostics and vaccines

## Partnership (UN, Government, CSOs, industry)

- 34 member-Board: high-burden countries, WHO, WB, Global Fund, regional representatives, Working Group chairpersons, donors, foundations, NGOs, local communities, corporate business sector

# Global Polio Eradication Initiative (1988)

## Activities

- Interrupting poliovirus transmission
- Achieving certification of global polio eradication
- Developing products for the cessation phase
- Mainstreaming the eradication

## Partnership (UN, Government, CSOs, industry)

**WHO (management, coordination), UNICEF (procurement, distribution, immunization), US CDC (experts), Rotary International (NGO volunteers: +\$620mio), donor governments, Gates Foundation, Intl Red Cross and Red Crescent movement, corporate business sector (Aventis Pasteur, De Beers, Wyeth: supplying products at very low cost)**

# FIND (2003)

## Foundation for Innovative New Diagnostics

### Activities

- Developing affordable and novel diagnostic tests for diseases in high-burden countries (malaria, TB, sleeping sickness)
- Bridge linking academic research and the diagnostic industry to the needs of developing countries

### Partnership (UN, Government, academia, CSOs, industry)

- Public health experts, business leaders, influential scientists, patient representatives
- Working with specialized agencies, academia, public+private research institutes, civil society and industry

# GAVI (1999)

## Activities

- Funding support to countries for vaccines+supplies (1999-2005: \$ 1.8 billion)
- Coordination and consensus-building: building consensus on policies, strategies and priorities
- Advocacy on the value of vaccination for reducing poverty

## Partners (UN, Government, academia, CSOs, industry)

UNICEF, WHO, World Bank, Gates Foundation, governments, research institutes, NGOs, vaccine manufacturers

# The Global Fund to Fight ATM (2002)

## Activities

- Mobilizing substantial resources to fight Aids, TB and malaria and direct these resources to areas of greatest need.
- As a partnership between governments, civil society, private sector and affected communities, the Global Fund represents an innovative, competitive approach to international financing.
- Commitments 2002-06: \$ 5.5 billion.
- Disbursements 2002-06: \$ 2.4 billion.

## Partners (UN, Government, academia, CSOs, industry)

Donor governments, recipient governments, developed country NGO, developing country NGO, Gates foundation, McKinsey Company, UNAIDS, WHO, WB

# The key question is...

- **Have these PPPs delivered more health services to developing countries' poor populations** than would have been the case if the same resources had been used by the United Nations agencies, Governments, (directly → delivery of health goods and services, or indirectly → push and pull interventions) and the private sector separately ?
- To answer this question, we must **evaluate the benefits and costs of each PPP** and come to a conclusion whether each PPP delivers the best results for the funds invested.

# **7. Benefits and costs of PPPs**

# Benefits of PPPs

## POTENTIAL FOR :

1. **Bringing together partners** with very different skills and resources to achieve a goal that is not attainable by individual action.
2. **Extra-funding:** mobilizing private funds/resources, that would not become available otherwise.
3. **Greater efficiency:** continuous forum for coordination and consensus-building on problem definition, policies, strategies, priorities, solutions.
4. **More interdisciplinarity:** the partnership increases the interdisciplinary approach to problem solving.
5. **More advocacy:** greater advocacy capacity for the problem to be solved than each institution would have separately.
6. **Good accountability** for the funds provided.

# Costs of PPPs

- **Multiplicity of structures** and decision-making bodies, considerably increasing the number of international meetings and travel.
- **High administrative costs for small PPPs** as a proportion of total budget.
- **Vertical structures sometimes** with the risk of bypassing the national health systems or diverting resources away from it (this is a risk however for all disease-specific measures, whether PPP or not; each case to be looked at individually to avoid pre-conceptions)

## 8. When are PPPs needed?

### CUMULATIVELY:

- When the **disconnect** in the product discovery / delivery pipeline between the public sector and the private commercial sector is **large (market failure)**.
- When **other ways** of re-connecting the public / private pipeline, such as increasing public funding of UN agencies or national governments OR push-pull interventions by the public sector are **insufficient**.
- When **benefit/cost analysis** shows consistent high benefits for reasonable costs.

# Conclusions

1. PPPs are **not a panacea**.
2. They are **part of the instrumentarium to reconnect the public-private pipeline** for the discovery, development and delivery of health products to the poor populations of developing countries.
3. The rapid increase in the number of PPPs in the past decade is the result of a greater awareness of the **urgency** to find solutions to the health problems of the poor.
4. **The greater the disconnect** in the public-private pipeline, **the bigger the rationale to use PPPs**, alone or in conjunction with other instruments such as a substantial increase in UN funding or push-pull interventions by the public sector.
5. **Benefit-cost analysis indicates where and when to use PPPs** to help deliver health services to the poor in developing countries.
6. **Many PPPs** in the past two decades have shown **high returns** for the investments made in them.
7. **Keep evaluating! Base decisions on evidence!**
8. **Only sustainable results count!**