HIV ALLOCATIVE EFFICIENCY IN LATIN AMERICA: THE USE OF OPTIMA

LAC HIV/AIDS TEAM
Some numbers of Latin America and the Caribbean region…

- New infections in 2014 (87,000) is 17% lower than in 2000 (100,000)
- AIDS-related deaths decreased by 31% (from 60,000 to 41,000)
- 47% of PLHIV received ART in 2014
- 79% from all 20,000 pregnant HIV positive were on ART (2014)
HOWEVER…. HUGE REGIONAL DISPARITIES

- Regional HIV prevalence 0.8% BUT range from 0.2% to 2.8%
- Brazil, Argentina, Mexico and Colombia concentrate around 55% of PLHIV in LAC
- ART coverage in LAC higher than global average (68% in LAC vs 54% globally- 2011)
- However, high disparities in access to treatment across countries
- 70% of total HIV spending in LAC region goes to ART (2009 to 2011)
HOW MUCH IS LAC SPENDING ON HIV?:

2.6 billion
Total Expenditure in HIV in LAC

94%
Financed with domestic sources (public + private)

1%
of total regional Health expenditure
RESPONSIBILITIES IN THE HIV RESPONSE

Share of public funding

- More than 75%
- Between 75% and 50%
- Between 50% and 25%
- Less than 25%
- Not available information

Source: GARPR indicator 6.1

Argentina 2012
Bolivia 2012
Brazil 2013
Chile 2012
Colombia 2013
Costa Rica 2012
Ecuador 2010
El Salvador 2013
Guatemala 2012
Honduras 2013
Mexico 2011
Nicaragua 2012
Panama 2012
Paraguay 2013
Peru 2013
Uruguay 2008
Venezuela, RB 2013

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WHY OPTIMA IN ARGENTINA, PERU, MEXICO & COLOMBIA

- Improving efficiency is at the top of national priorities (all 4 countries)
- Expenditures are high, and concentrated in treatment
- Share of domestic funding is 95%, and external funding 5%
- High ART coverages and high spending projection
- Budgets are decentralized (efficiency at sub-national level)
- Strategic investments to continue reducing BOD
OPTIMIZATION AND SCENARIO QUESTIONS

What would be the best way to allocate HIV/AIDS budget to continue reducing HIV/AIDS burden with no financial restrictions? (ideal)

How a more efficient allocation of resources could help towards the achievement of national targets?

Given the current inflexibilities and budget segmentation, what is the best allocation of resources to continue reducing the HIV burden under these constraints?
FOCUS ON TWO CASES:

1. ARGENTINA

2. PERU
WHY ALLOCATIVE EFFICIENCY ANALYSIS IN ARGENTINA?

Low Level of HIV BOD in Argentina

BUT

High Levels of spending

- Brazil (2012): 655,136,163 USD
- Mexico (2011): 285,946,488 USD
- Argentina (2012): 209,009,280 USD
- Haiti (2011): 137,009,702 USD
- Chile (2012): 98,820,696 USD
- Colombia (2012): 74,881,272 USD
- Peru (2013): 72,046,448 USD
- Cuba (2012): 66,618,452 USD
- Venezuela (2012): 55,220,432 USD
- Guatemala (2012): 34,448,076 USD
- Dominican Republic (2012): 29,974,062 USD
- Nicaragua (2012): 23,060,220 USD
- Panama (2012): 22,998,817 USD
- Paraguay (2012): 12,075,697 USD
- Bolivia (2012): 5,656,461 USD
- Suriname (2011): 4,592,708 USD
- Belize (2012): 2,718,722 USD
- Saint Vincent and the Grenadines (2012): 1,436,605 USD
- Antigua and Barbuda (2012): 987,161 USD
- Dominica (2012): 335,411 USD
- Grenada (2012): 120,141 USD
- Saint Kitts And Nevis (2012): 82,440 USD

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500,1,000,1,500,2,000
DALYs per 100,000
110,000 people live with HIV.
Concentrated epidemic:
34% Trans, 12-15% MSM
4-7% PWID, 2-5% SW
0.3% youth and adults.

Free ART is provided to about 50,000 PLHIV. 69% receive drugs from the public health system.
HIV/AIDS FUNDING

MEGAS by program (aggregate) 2012 (% of total)

- Prevention, 1%
- Incentives for Human Resources, 2%
- Strengthening systems and coordination of programs, 3%
- Social protection and social services (excluding OVC), 7%
- Research, 6%

- Orphans and vulnerable children (OVC), 1%
- Enabling environment, 0%

MEGAS by type of funding 2012 (% of total)

- Central/National, 42.6%
- Subnational, 36.5%
- Development Bank, 7.2%
- Social Security, 13.6%
- International (UN), 0.1%

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WORLD BANK GROUP
Argentina’s expenditures on HIV/AIDS per DALY were the third highest in the region, after Chile and Cuba.

Average expenditure per DALY in Argentina at US$3,178 vs average expenditure per DALY of in LAC US$1,052
Some challenges in the optimization

- 58% of the budget is concentrated in “Other care” including ambulatory and hospital health care.

- Only 20% of the budget is available for optimization, of which ART accounts for 97%.

- Unconstrained optimization (ethical constraint that no one is taken off PMTCT treatment)

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**Overall budget**

- Current
- Optimised
- Optimised 200%

**Budget available for optimization**

- Current
- Optimised
- Optimised 200%
MAIN CHALLENGES WITH THE USE OF OPTIMA IN ARGENTINA

Epidemiological data:
- Few studies on prevalence for populations at risk
- Population size
- Only one study for general population (trend)
- Lack data on population sexual behavior
- Change in government estimations (PLHIV)

Cost coverage curves
- Not a standardized NASA, spending by populations.
- Overlap between parameters
- HIV spending is supported by national and subnational sources of funding. National spending accounts for 45% of total spending on average. Difficulty to access to sub-national disaggregation
HIV/AIDS program expenditures 2005-2013 by source (US$ thousands 2013)

Significant external support from external sources until 2010.

Since 2011 MEF started to complement public funding for HIV to high-risk groups using budget for results methodology.
PPR showed good results!

Premature AIDS deaths by main regions 2000-2011

The introduction of budget for results for HIV/AIDS in 2011 and the financial decentralization increased the accountability of the health delivery model and equity in coverage. From 2000-2010, the country reduced its HIV/AIDS burden by 43%.

Patients on ART therapy by institution

Percentage of HIV screened pregnant women and infected pregnant women in ART
HOWEVER....

- HIV-AIDS budget management has a number of flaws, indicating insufficient planning and improvised management.
- Program could be significantly improved with monitoring at regional level and support for a strategic HR
  - Limited testing and lab capabilities in provinces
  - Less than half of the budget is allocated to high risk groups
  - Human resource financed by HIV program time allocated to actual HIV programs
Key policy questions for AE analysis in Peru

How much does it cost to achieve PEM’s objectives?

Determine the financial needs

- What are the financial requirements to achieve the health impact goals and its allocation across programs?
  - Percentage of HIV-positive pregnant women receiving antiretroviral drugs to reduce the risk of vertical transmission: Target 95%
  - HIV incidence in children: <2%
  - Care coverage prevention programs in key populations (MSM and FSW, trans): Target?
  - Percentage of eligible adults and children currently receiving antiretroviral therapy: Target 95%

- How much would it cost to achieve the 90-90-90 targets in 2020?
KEY CHALLENGES IN THE USE OF OPTIMA IN PERU

- Constructing cost-coverage curves based on solid evidence relevant to Peru proved to be difficult (insufficient data)

- Budgetary data for Peru is combined together for HIV/AIDS and TB programs (prevention, HR..)

- Limited testing and lab capabilities at subnational levels are under different budgets
LESSONS LEARNED OF THE USE OF OPTIMA IN LAC

- OPTIMA is an excellent HOUSEKEEPER (helps to better organize the overall picture of expenditures)
- OPTIMA is an extremely useful DATA COLLECTOR
- OPTIMA is a good DETECTIVE: it helps identify and analyze areas of expenditure never under investigation before
- OPTIMA is an excellent CREDIT ANALYST: identifies over-expenditures
- OPTIMA is a good PLANNER: identifies a critical path for HIV/AIDS sustainability
LESSONS LEARNED OF THE USE OF OPTIMA FOR THE WB

- OPTIMA provides a standardized analysis of programs in different countries

- OPTIMA contributes to evidence-based decisions

- OPTIMA results help improve dialogue with Ministry of Economy
LESSONS LEARNED OF THE USE OF OPTIMA IN LAC

- ALLOCATIVE EFFICIENCY should be analyzed together with TECHNICAL and PROGRAMMATIC EFFICIENCY

**ALLOCATIVE EFFICIENCY**

**TECHNICAL EFFICIENCY**

**PROGRAMMATIC EFFICIENCY**

**USE OF OPTIMA TOOL TO IMPROVE ALLOCATION OF RESOURCES**

**Use of Supply side surveys to analyze HIV/AIDS and STI Prevention, Diagnosis, and Treatment (ARGENTINA 2007 and 2010)**

**Cost-benefit analysis: Argentina saved over 4379 lives of premature death from 2001 to 2010 and saved US$748 Million.**
Thank you!

LAC HIV/AIDS Team

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