

Institute for Health Metrics and Evaluation

### **Financing Global Health 2012**

End of the Golden Age?

February 6<sup>th</sup>, 2013

UNIVERSITY of WASHINGTON

#### Outline

Global Health Context
 Three Phases of DAH
 Who Provides DAH?
 Where Does DAH Go?
 Government Spending
 Future Directions



#### **Global Burden of Disease 2010**

- 1. A *systematic scientific* effort to quantify the *comparative* magnitude of *health loss* for 187 countries from 1990 to 2010.
- Covering 291 diseases and injuries, 1,160 sequelae of these diseases and injuries, and 67 risk factors or clusters of risk factors.
- 3. Use GBD 2010 to provide context for understanding trends in global health financing.



# Four Key Drivers of Rapid Changes in Global Health Patterns

- Demographic transition increasing population size, substantial increase in the average age in most regions and falling death rates.
- 2) Cause of death transition fraction of deaths or years of life lost shifting from communicable, maternal, neonatal and nutritional to non-communicable diseases and injuries despite the HIV epidemic.
- 3) Disability transition steady shift to burden of disease from diseases that cause disability but not substantial mortality.
- Risk transition shift from risks related to poverty to behavioral risks.



#### Dramatic Demographic Shifts: Mean Age of Death Rising Rapidly

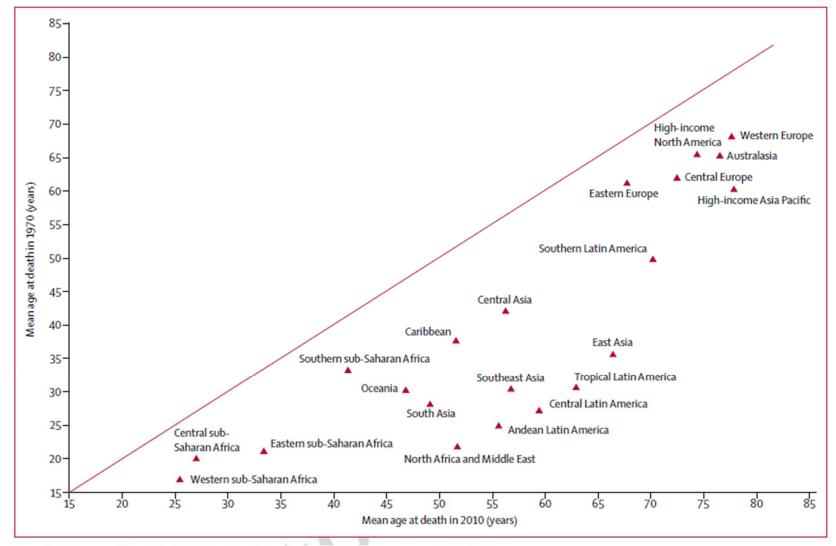
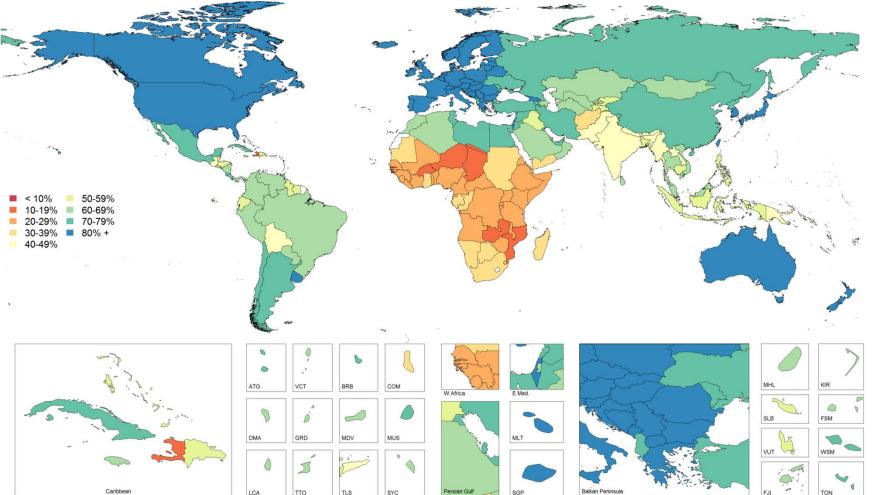


Figure 8: Mean age of death in Global Burden of Disease regions in 1970 compared with 2010

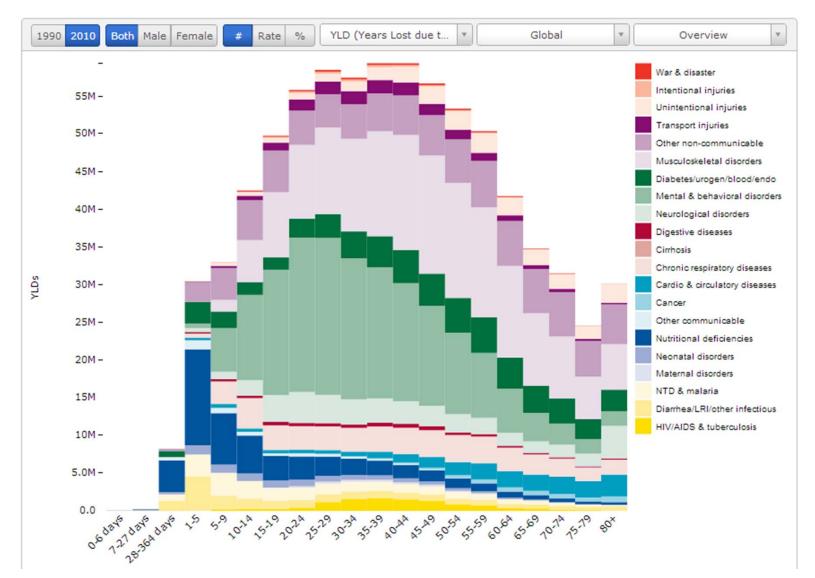


#### Percent of DALYs from Non-Communicable Diseases in 2010: Over 60% in Nearly All Countries Outside of Sub-Saharan Africa



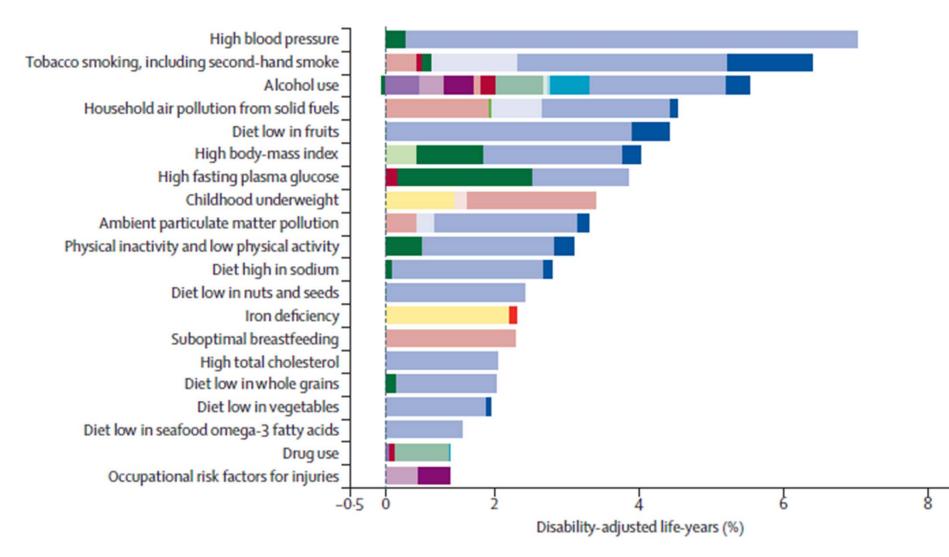


## What Ails You is Not Necessarily What Kills You: Years Lived with Disability by Cause and Age, 2010



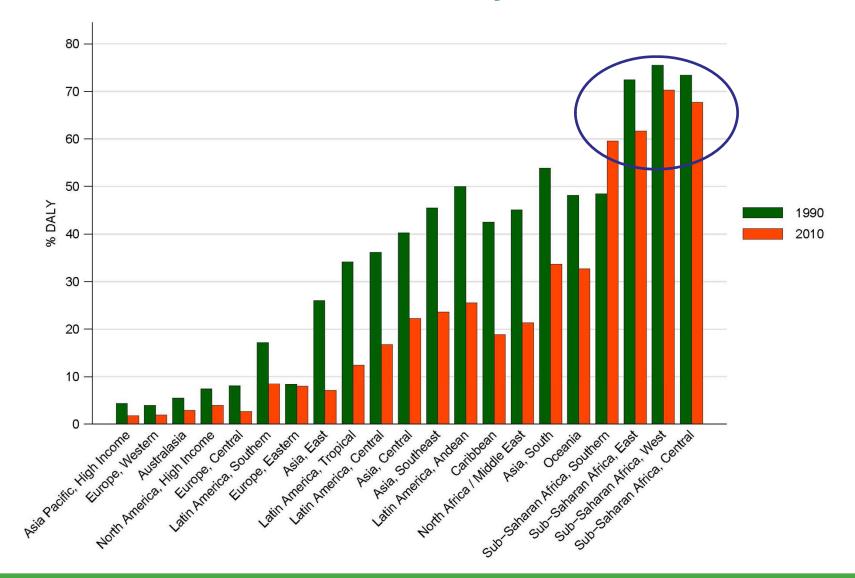


#### **Risk Factor Transition: Global DALYs Attributable to Leading Risk Factors 2010**





#### Despite Progress in Sub-Saharan Africa: Health Priorities Still Dominated by MDG 4, 5, and 6



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#### What is *Financing Global Health*?

- Accounting of development assistance for health
- DAH > health ODA
- 2012 is the 4<sup>th</sup> report in the series



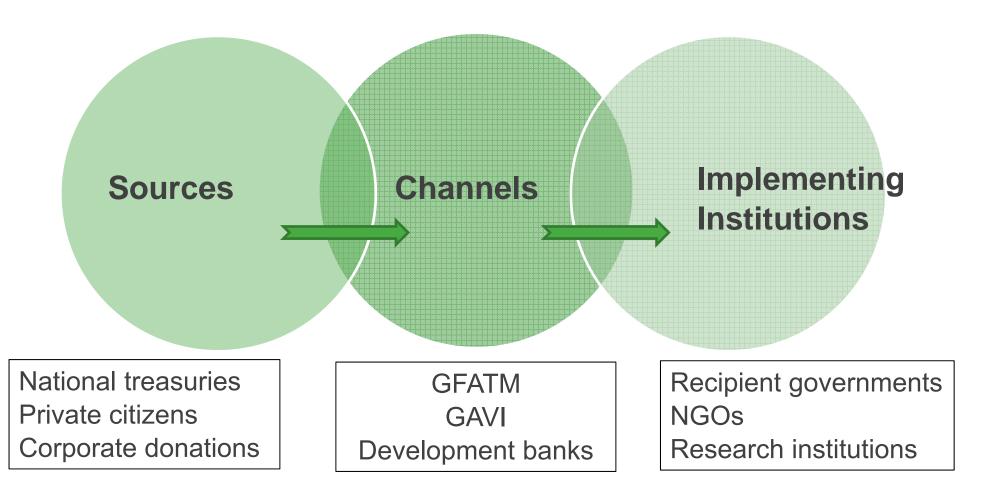






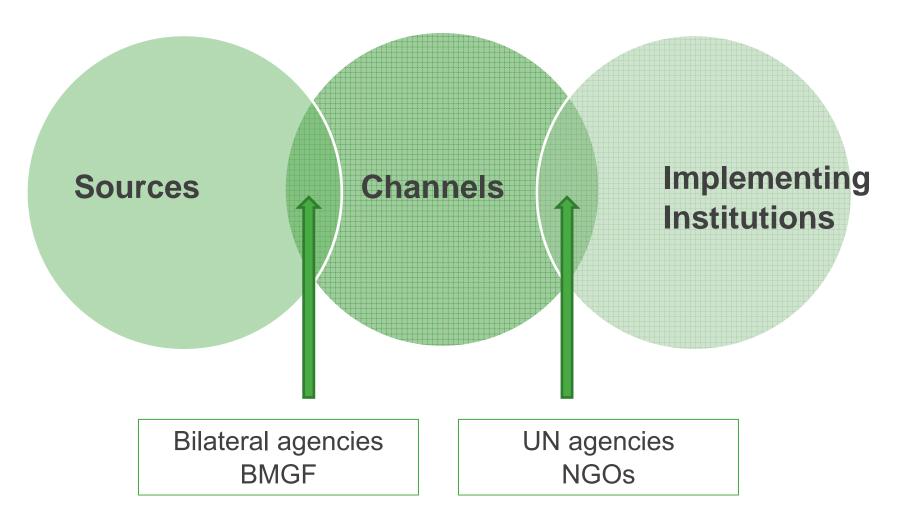


#### **Conceptual framework**



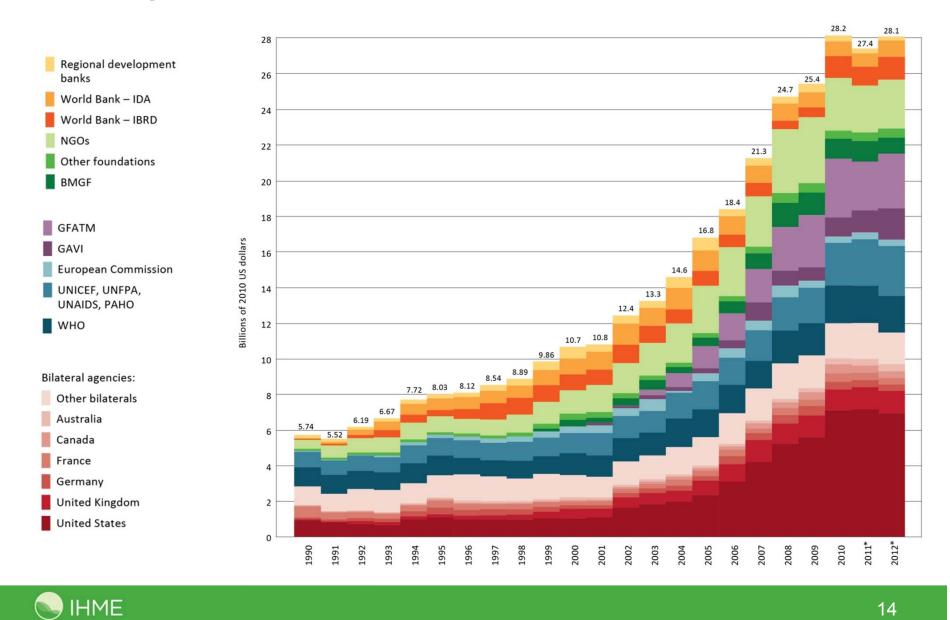


#### **Overlapping roles**



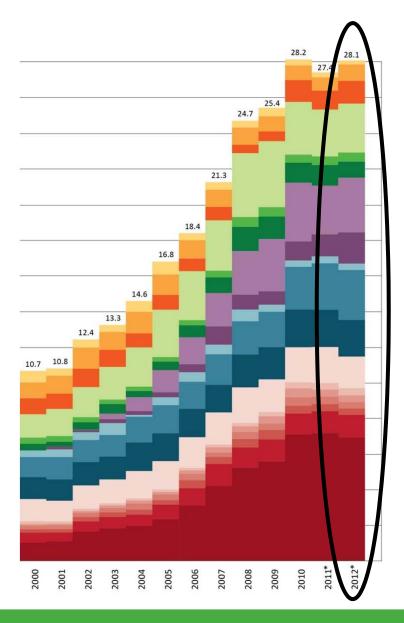


#### DAH by channel, 1990–2012



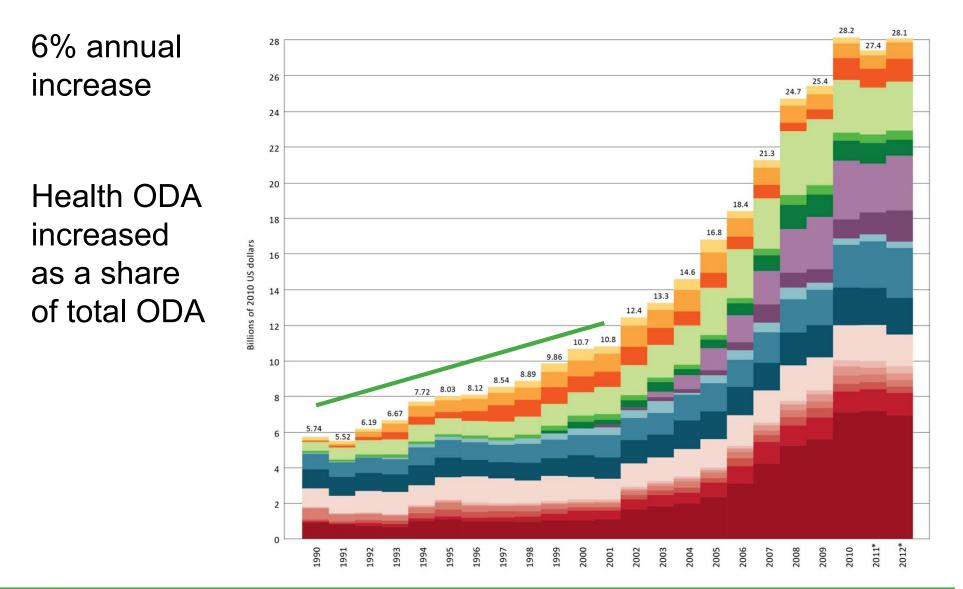
#### DAH by channel, 2012





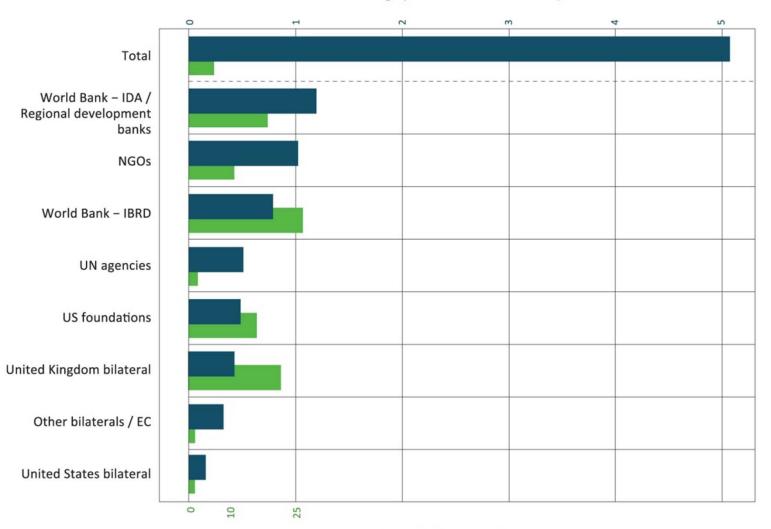


#### DAH 1990-2001: "Moderate growth"





#### Change in DAH by channel, 1990 – 2001



Change (billions of 2010 US dollars)

Annualized percent change



#### DAH 2001-2010: "Golden Age" 28.2 28.1 11% annual 28 27.4 26 increase 25.4 24.7 24 22 New players 21.3 20 emerge: 18.4 18 16.8 Billions of 2010 US dollars **BMGF** 16 14.6 PEPFAR 14 13.3 12.4 **GFATM** 12 10.7 10.8 9.86 GAVI 10 8.89 8.54 7.72 8.03 8.12 8 6.67 6.19 6 5.52 4 2 0 2011\* 2012\* 2010 1990 1991 2005 2006 2009 1992 1993 1994 1995 1996 1998 1999 2000 2002 2003 2004 2007 2008

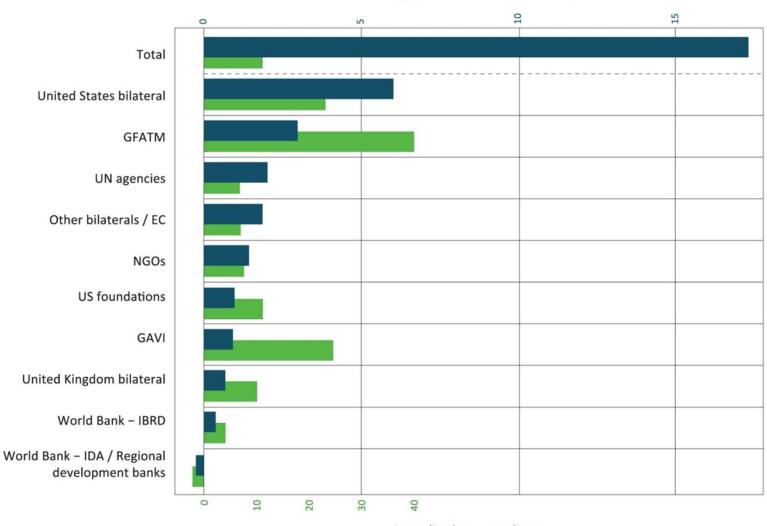
1997

2001

18



#### Change in DAH by channel, 2001 – 2010

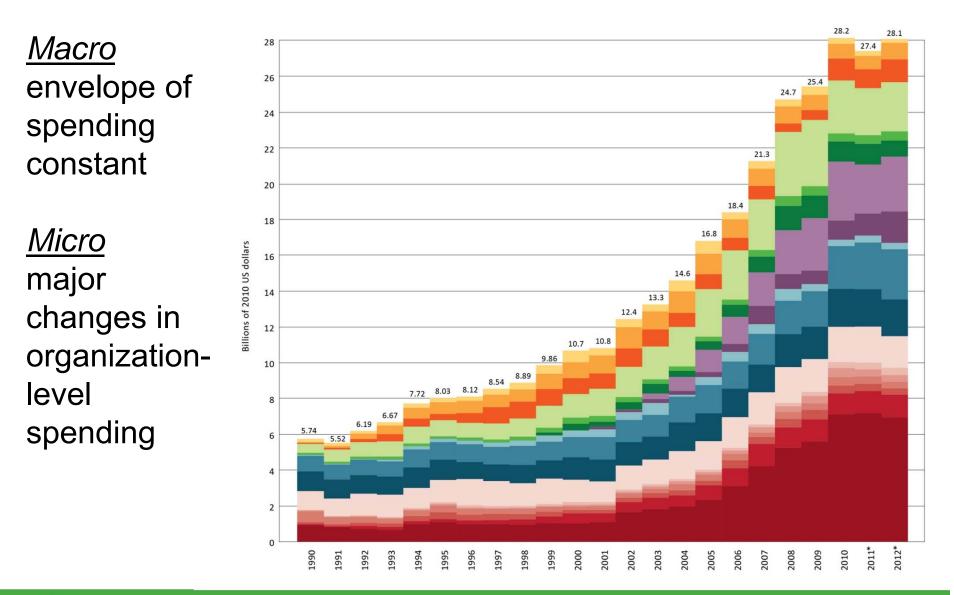


Change (billions of 2010 US dollars)

Annualized percent change

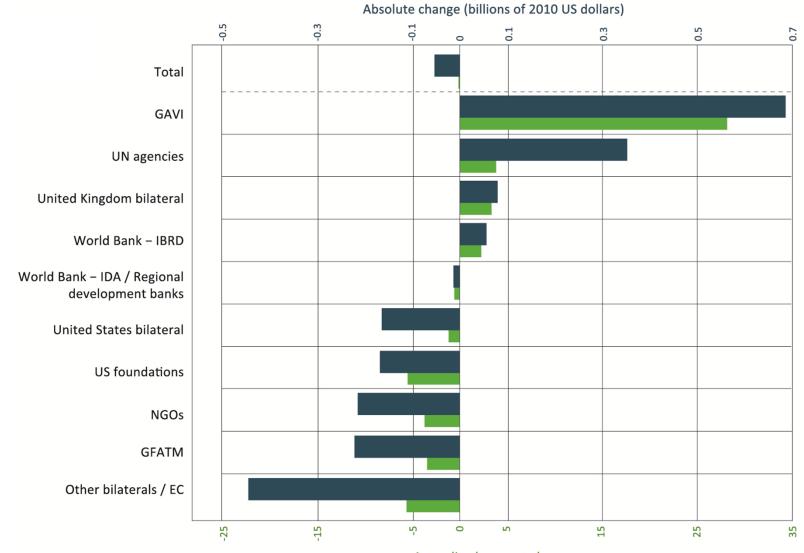


#### DAH 2010—2012: "No growth" stage?



NIHME

#### Change in DAH by channel, 2010 – 2012



Annualized percent change



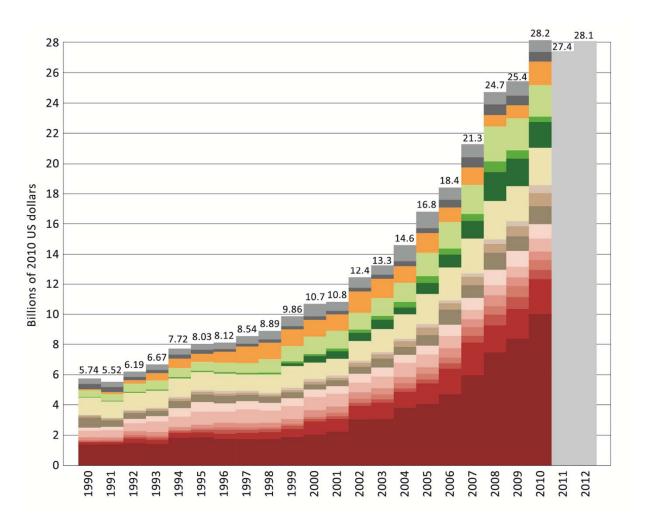
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#### DAH by source, 1990-2010





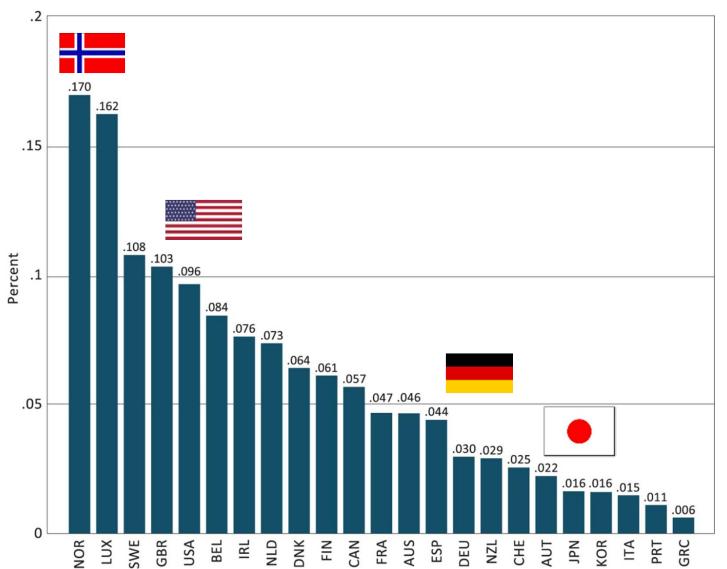


#### Who provides DAH?

Source	2010 Amount (billions USD)
US	\$10.0
UK	\$2.3
Private philanthropy (non-BMGF)	\$2.1
BMGF	\$1.7
IBRD	\$1.6
France	\$1.2
Germany	\$1.0



#### DAH as a percentage of GDP



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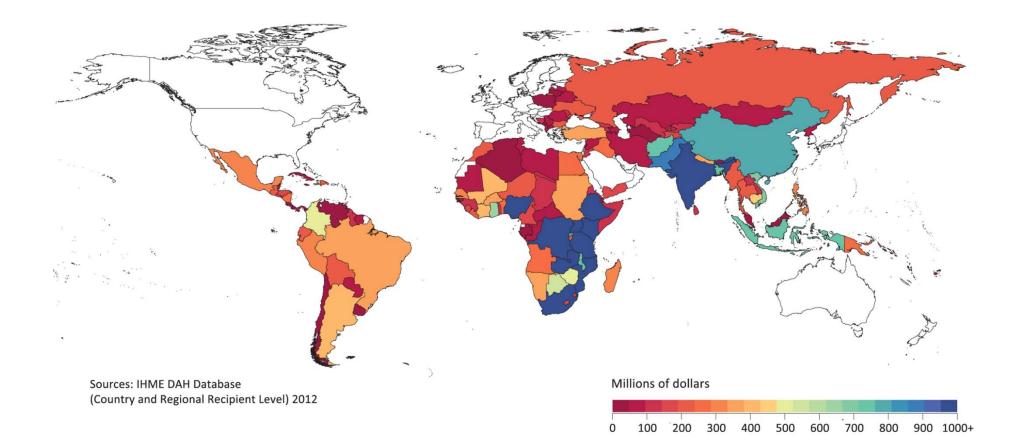
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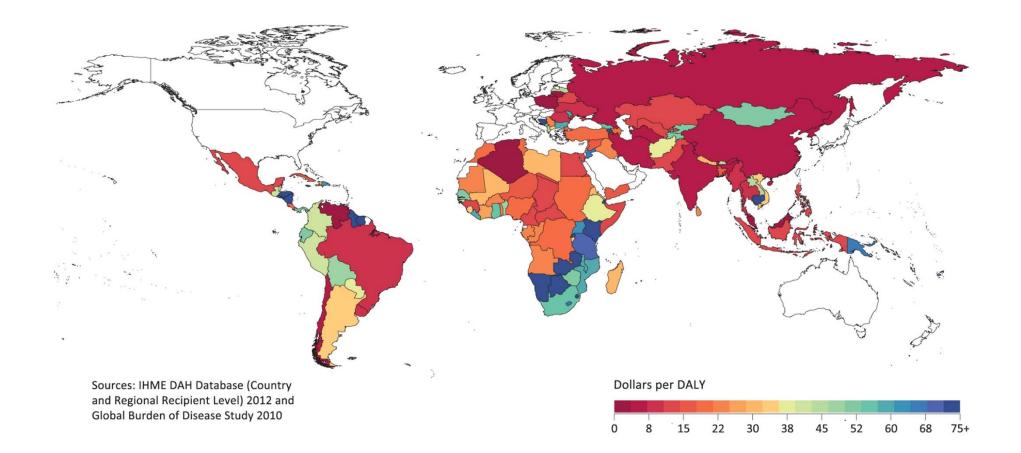


#### Country-level estimates, 2008-2010





#### DAH per all-cause DALY, 2008-2010



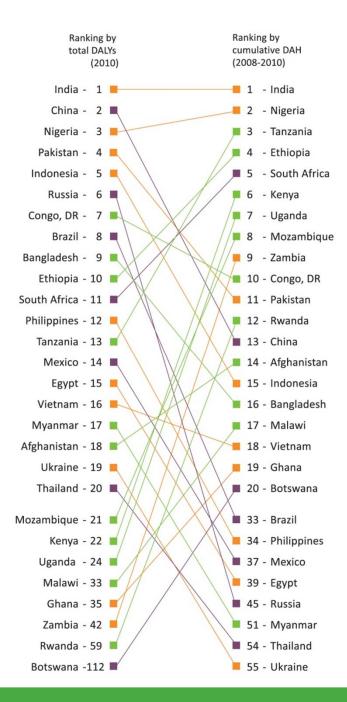


# Relationship between DALYs and DAH

Income explains many incongruities

Low-income countries Lower-middle-income countries Upper-middle-income countries

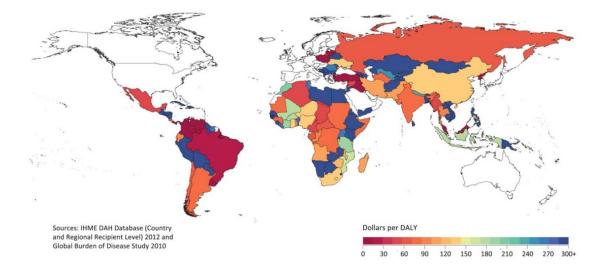
# Yet other factors matter, too

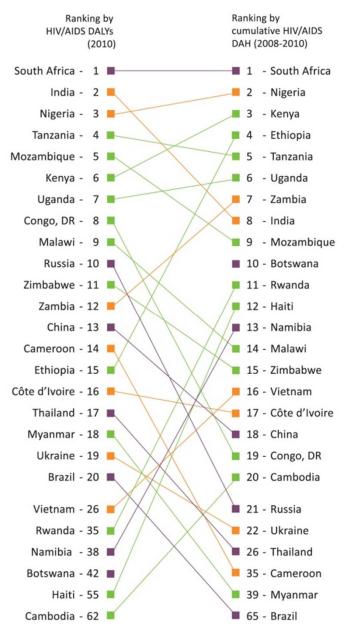




#### **HIV/AIDS**

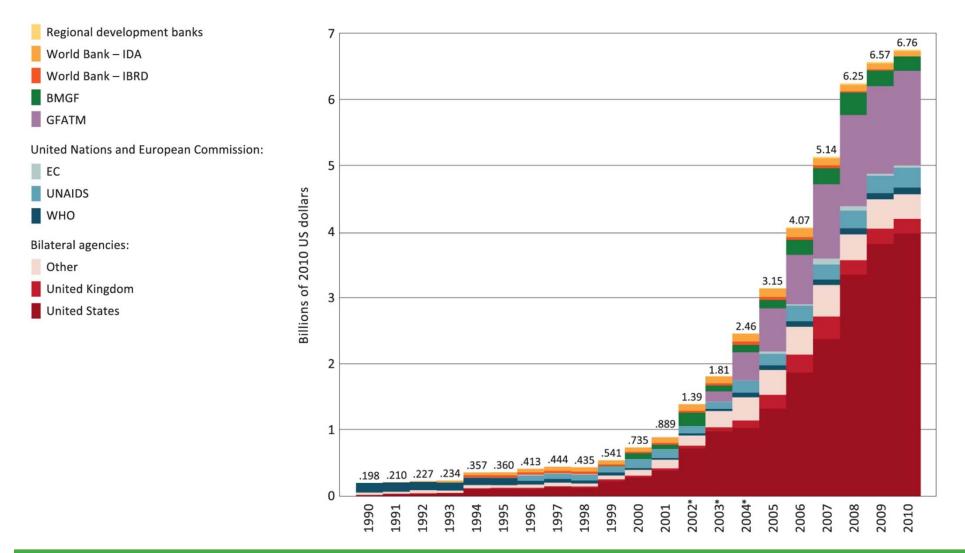
- \$0 \$300+ per DALY
- Disproportionately to SSA







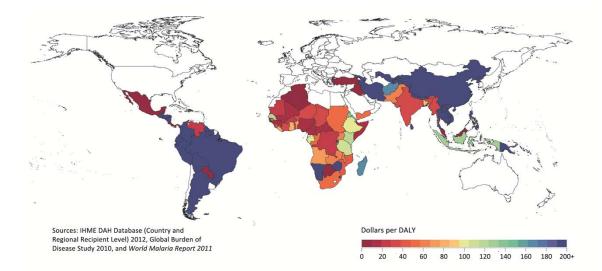
#### DAH to HIV/AIDS by channel, 1990-2010

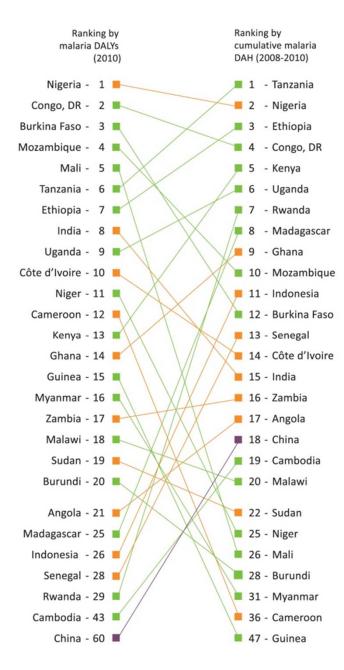




#### Malaria

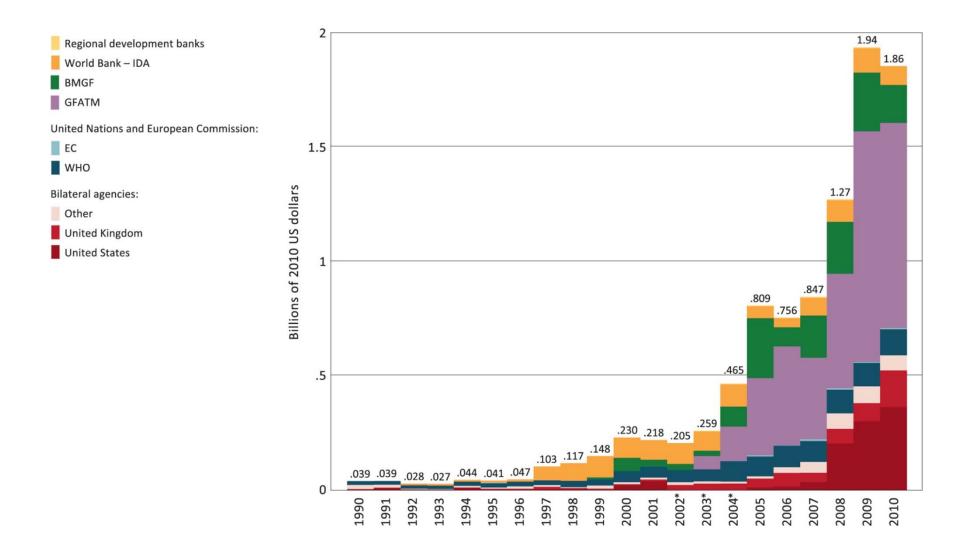
- \$0 \$200+ per DALY
- Highest burdens receive lowest DAH per DALY







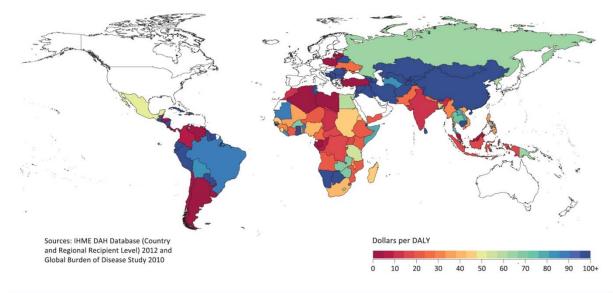
#### DAH to malaria by channel, 1990-2010

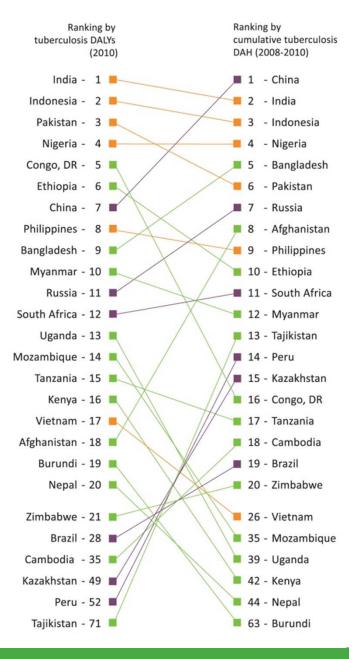




#### **Tuberculosis**

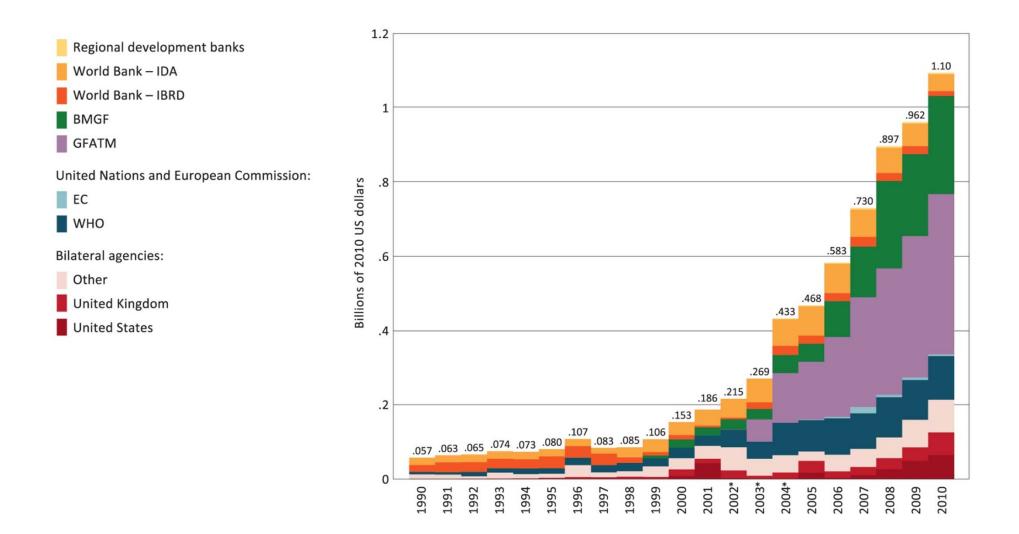
- \$0 \$100+ per DALY
- BRICS receive substantial TB DAH







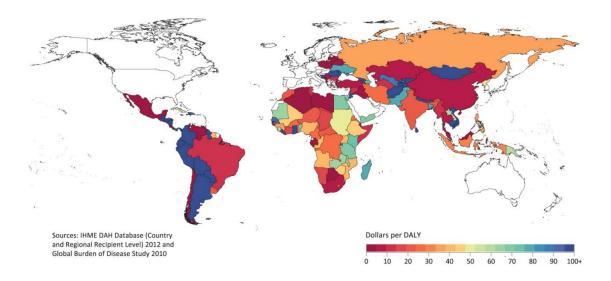
#### DAH to TB by channel, 1990-2010

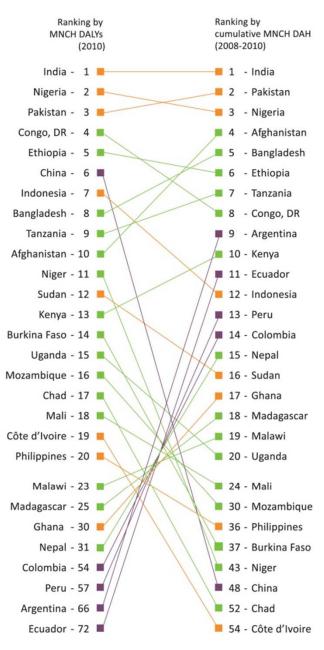




#### **MNCH**

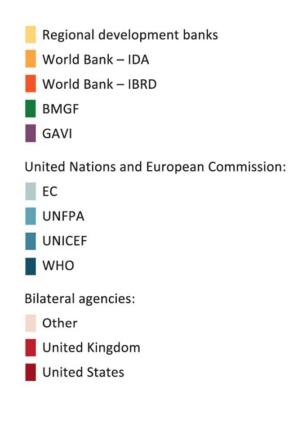
- \$0 \$100+ per DALY
- Wealthier countries receive MNCH DAH

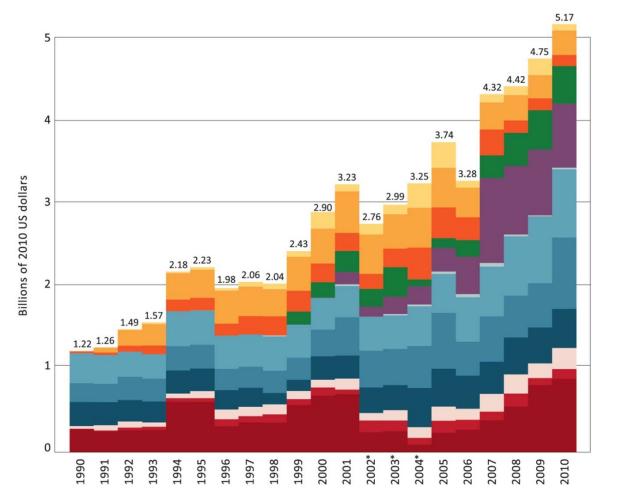






## DAH to MNCH by channel, 1990-2010

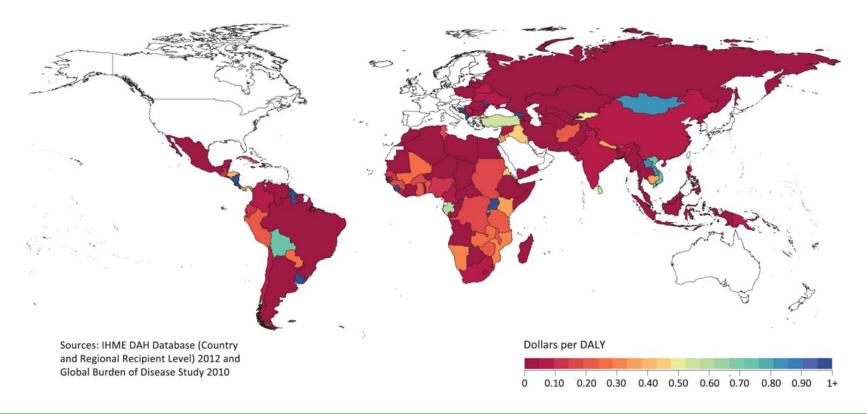






#### **NCDs**

- 2010 total is less than \$200m
- \$0 \$1+ per DALY





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## **DAH-G and DAH-NG**

• WHO reports "total government health expenditure"

 Conflates DAH and domestically-generated expenditure

• IHME separates DAH into DAH-G and DAH-NG to (partially) disentangle funding streams

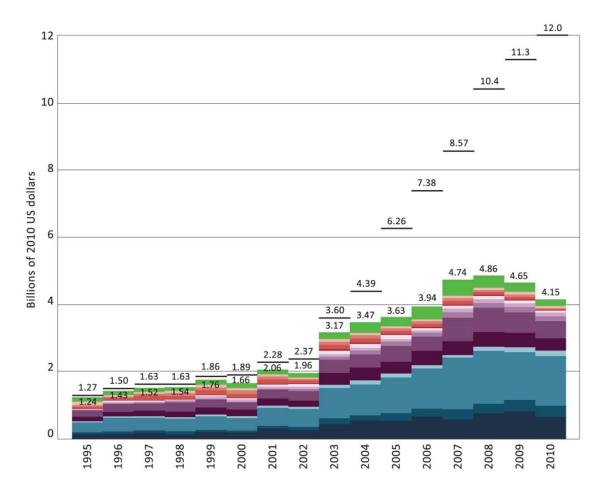


#### DAH-G, 1995-2010

The upper-most number in each column is the sum of DAH-G and DAH-NG for that year.

North Africa / Middle East
Caribbean
Latin America, Andean
Latin America, Central
Latin America, South
Latin America, Tropical
Oceania
Asia, Central
Asia, East
Asia, South
Asia, Southeast
Sub-Saharan Africa, Central
Sub-Saharan Africa, South
Sub-Saharan Africa, West

Source: IHME DAH Database (Country and Regional Recipient Level) 2012



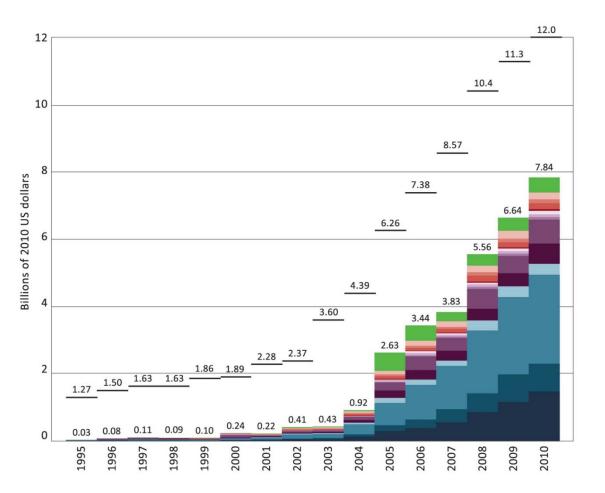


#### DAH-NG, 1995-2010

The upper-most number in each column is the sum of DAH-G and DAH-NG for that year.



Source: IHME DAH Database (Country and Regional Recipient Level) 2012

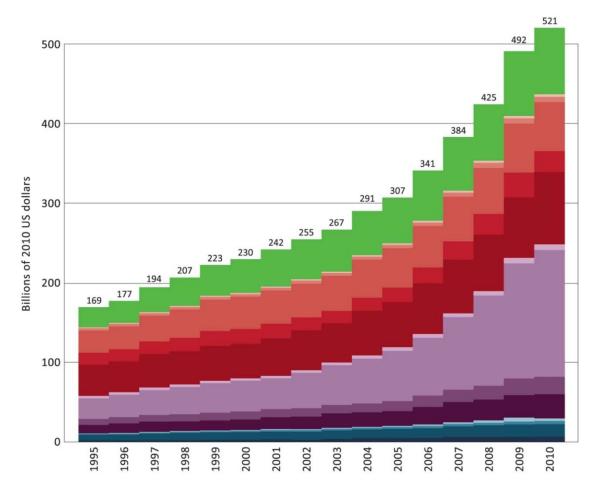




#### Government expenditure, 1995-2010

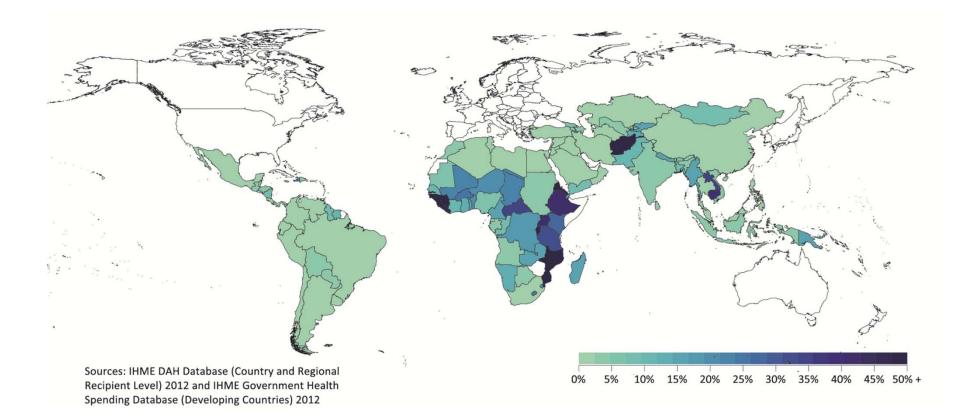
North Africa / Middle East
Caribbean
Latin America, Andean
Latin America, Central
Latin America, South
Latin America, Tropical
Oceania
Asia, Central
Asia, East
Asia, South
Asia, Southeast
Sub-Saharan Africa, Central
Sub-Saharan Africa, South
Sub-Saharan Africa, South
Sub-Saharan Africa, South
Sub-Saharan Africa, West

Source: IHME Government Health Spending Database (Developing Countries) 2012





#### **DAH-G** as a percentage of total GHE





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### Beyond FGH — private expenditure

How to measure out-of-pocket spending?

Analysts rely on HH surveys

 Results a function of survey instrument (number of questions, recall period)

 Forthcoming study quantifies these effects, normalizes results across surveys



### **Beyond FGH** — additionality

Government receives \$1 in DAH-G. How much does total government health expenditure increase?

Best evidence suggests less than \$1

Methodological challenges around causality

○ Forthcoming study identifies asymmetric effect:
 displacement ≠ replacement



### Beyond FGH — expenditure by condition

• How much health expenditure (irrespective of source) is devoted to each condition or disease

• We are currently conducting "proof of concept" analyses in multiple countries

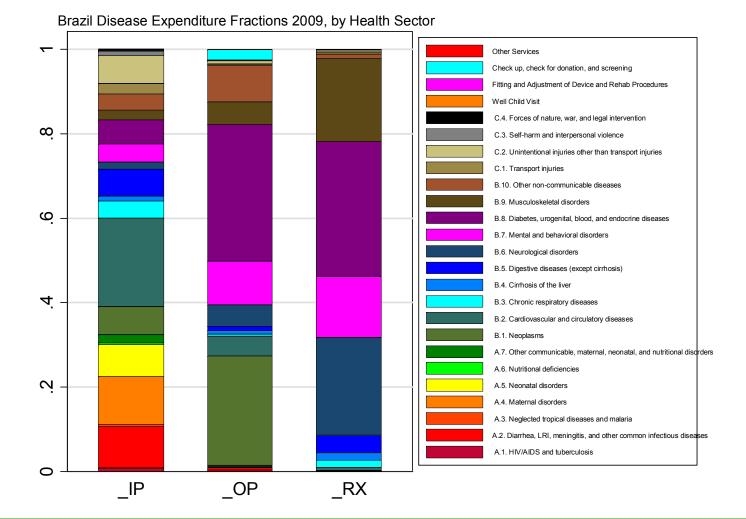
• Eventually extend to 187 countries







#### Expenditure by service type





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# Thank you



















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