



## Session XII

Panel: financing global surgery for improved health, welfare, & economic development

**THE LANCET** Commission on Global Surgery


Gavin Yamey, Vanessa Kerry, Robert Marten | May 6, 2015 | Boston, USA

# Moderator- Gavin Yamey

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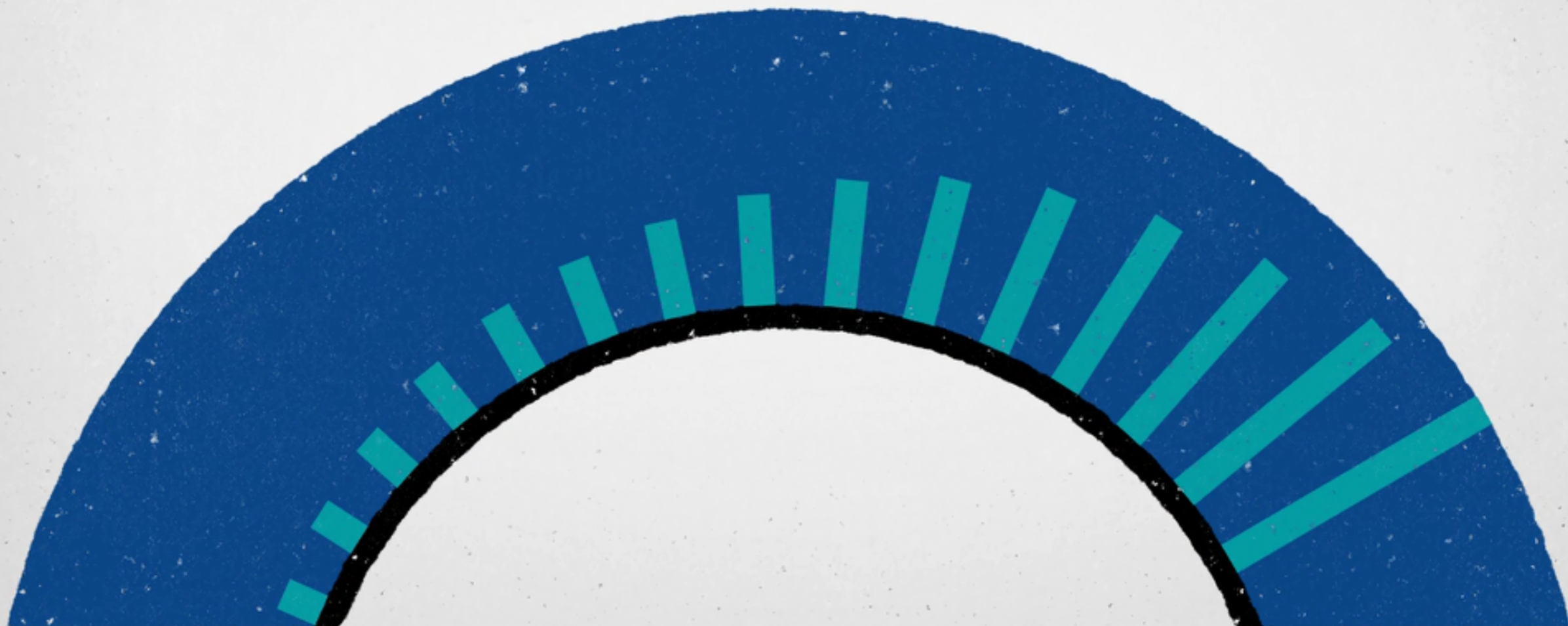
- Leads the Evidence-to-Policy Initiative ([E2Pi](#)) at the Global Health Group, University of California, San Francisco (UCSF)
- Teaches masters courses in global health policy at UCSF and the London School of Hygiene and Tropical Medicine (LSHTM).
- Commissioner, and lead writer, of The Lancet Commission on Investing in Health (CIH).
- Commissioner of The Lancet Commission on Global Surgery, with a primary interest in the finance and economics of global surgery



 @GYamey @globlhealth2035 @GHSatUCSF

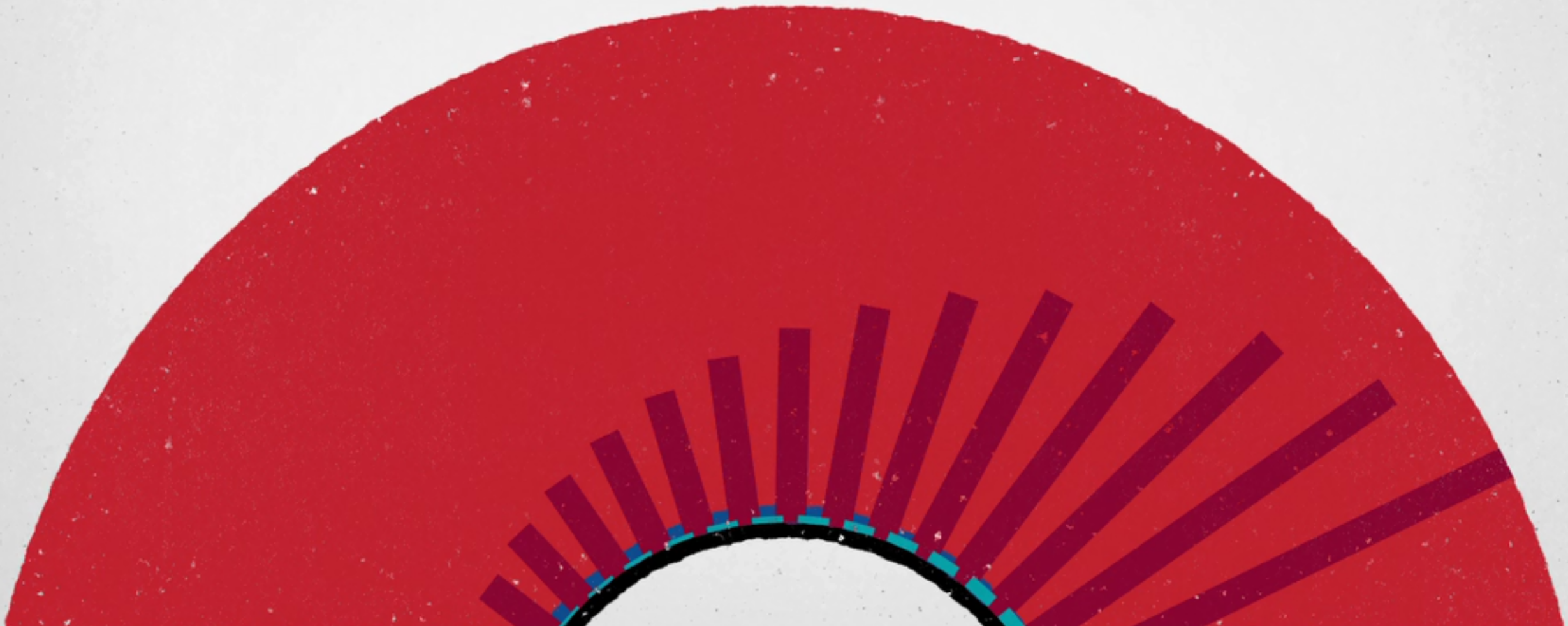
Cost of Surgical Expansion (2015-2030)

**\$350,000,000,000**



Total GDP Losses (2015-2030)

**\$12,300,000,000,000**



# Agenda



- » *The present situation*—what is the policy problem?
- » *The way forward*—our proposed policy solutions
- » *Recommendations*—for governments and international collective action

# The Present Situation

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## 1. There is a strong economic case for investing in surgery

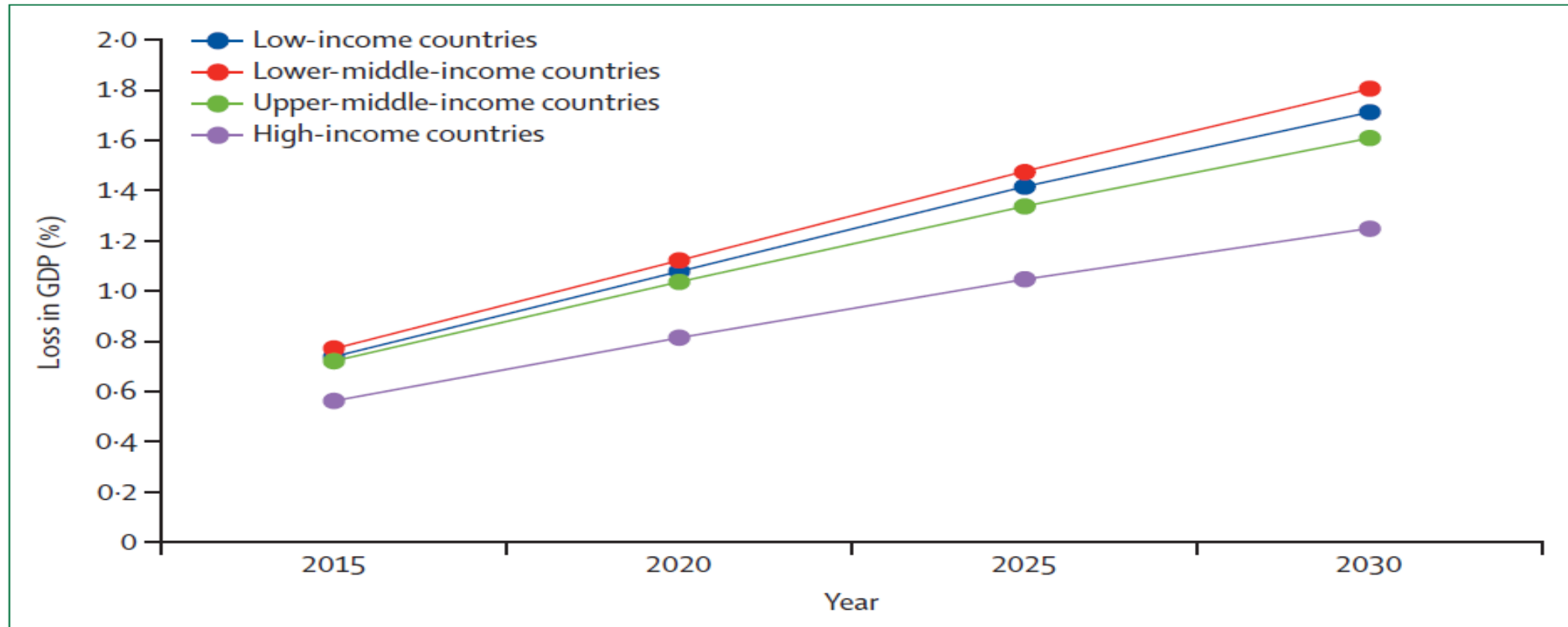
- Conditions have large macro-economic impact
- Treatments are highly cost-effective
- Costs are paid mostly out of pocket and can be impoverishing



## 2. The present financing arrangements are very weak

- Coordination and tracking of funds is very poor
- Financing systems create access barriers, inequity, poverty
- Paying providers for inputs, not outputs, impairs quality/efficiency

# Surgical conditions cause lost economic productivity



**Annual value of lost economic output due to surgical conditions**

## Surgical conditions cause large welfare losses

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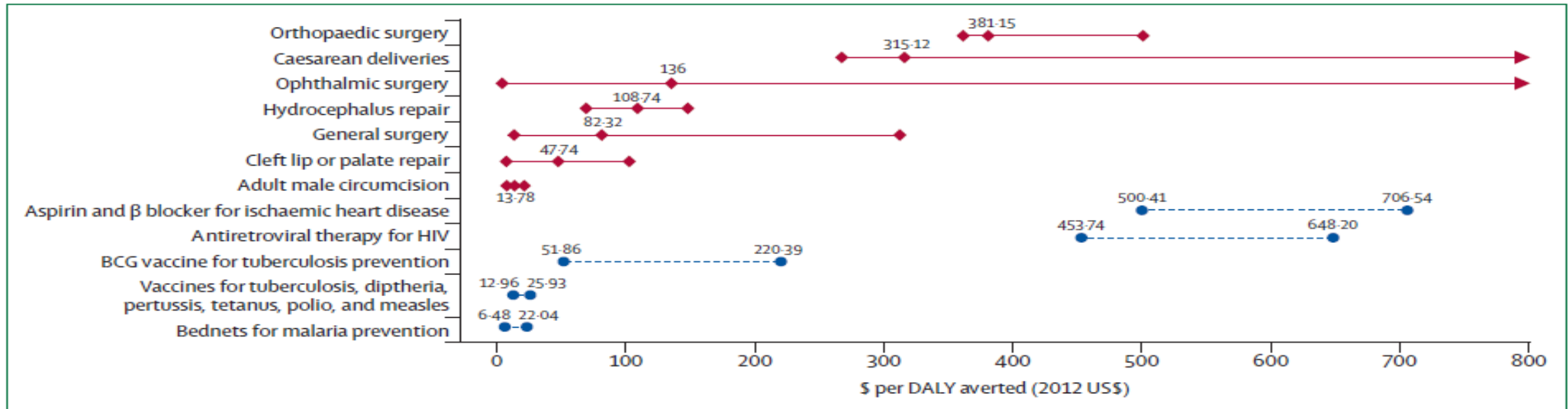
GDP alone fails to capture full value of better health

So we also used a broader measure: value of a statistical life (VSL)

VSL: intrinsic economic value that people place on living longer

In 2010 alone, \$14.5 trillion in welfare was lost due to surgical conditions; \$4 trillion in LMICs

# Surgical treatments are a “best buy” in global health



**Figure 13: Cost-effectiveness of surgery in low-income and middle-income countries compared with other public health interventions**

Data points are medians, error bars show range. Surgical interventions are denoted by the diamonds and solid lines, public health interventions by the circles and dashed lines. Reproduced from Chao and colleagues,<sup>53</sup> by permission of Elsevier. DALY=disability-adjusted life-year.

## Economies of scale make surgery even more attractive

Cost-effectiveness studies have mostly examined isolated procedures, ignoring “platform” effects

Once you have a platform in place (initial capital outlays, staff training), there are huge economies of scale and scope

Studies of single interventions aren’t as useful to policymakers—decisions are about surgical *platforms*

Debas et al, 2006: platform of surgical services delivered in 1<sup>st</sup> level hospital is very cost-effective (\$33/DALY in SSA)

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**33 million**

people/year suffer catastrophic  
expenditures from accessing  
surgery

**20%**

of all cases of catastrophic health  
expenditure

Additional **48 million**

people/year suffer catastrophic  
expenditures from non-medical costs  
of accessing surgery

Poor coordination and alignment of funds can lead to fragmented services

**Public sector**

- General revenues (taxation)
  - Social insurance (contributions from insured, insured's employer, or state into a public insurance scheme)

**Private sector**

- Out-of-pocket payments
  - Private insurance

**External**

- Grants from donor agencies
  - Concessional loans from development banks

## We have no idea how much the world is spending on surgery

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### **DONORS**

Databases that track aid for health do not collect specific data on surgery



We examined one donor: USA  
NGOs: elective eye surgery, cleft palate  
USAID/NIH: fistula, trauma research

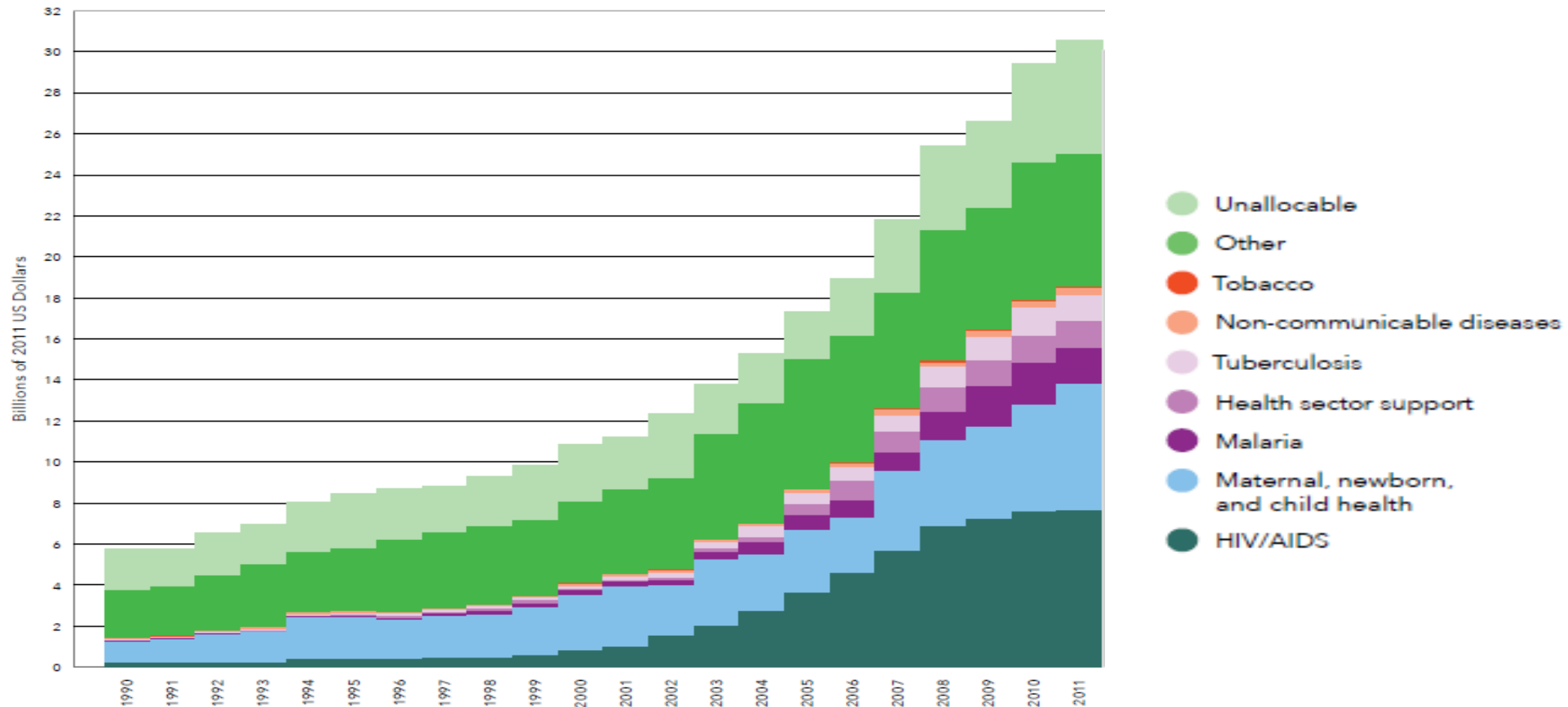
### **DOMESTIC**

Countries do not collect specific data on their spending on surgery



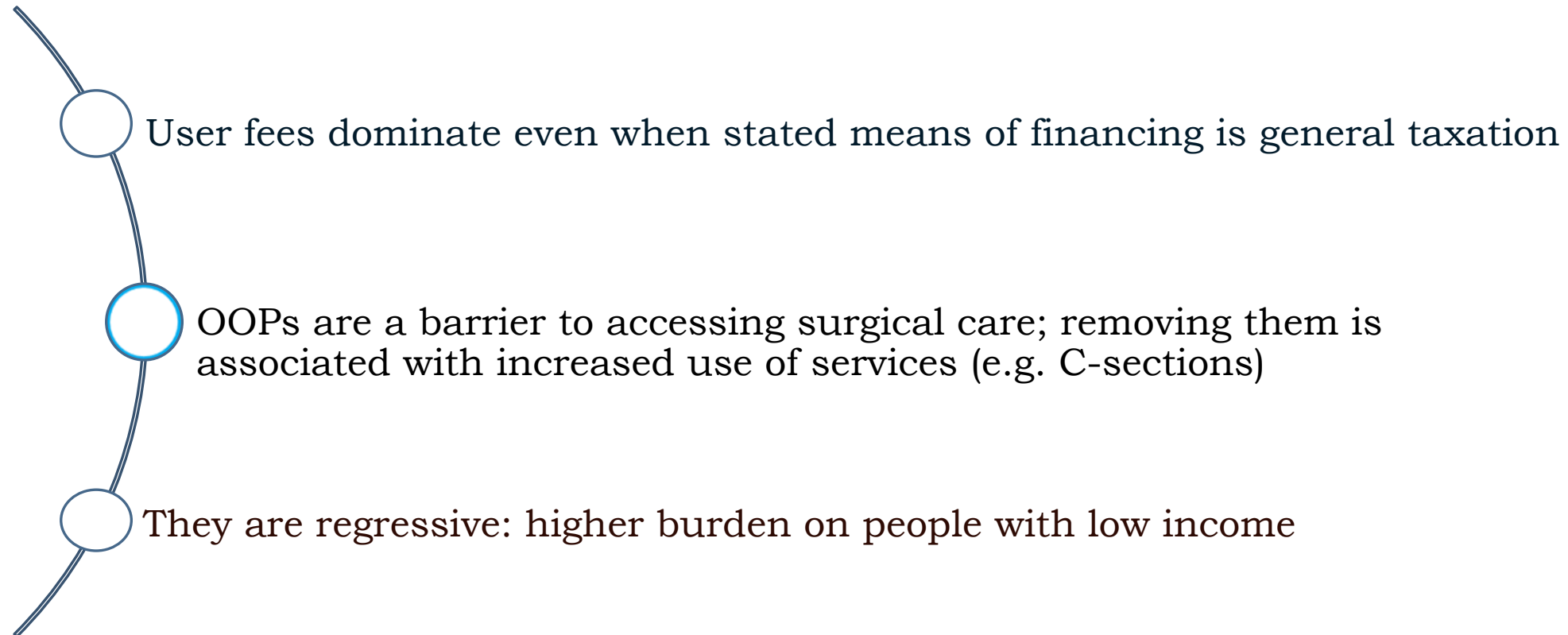
We examined 958 National Health Accounts, 1996-2010  
Only Georgia & Kyrgyzstan reported surgical spending

## “Golden decade” of health aid: perhaps it neglected surgery?



## The bulk of financing is direct payments from user fees (OOPs)

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On top of user fees, two other OOP expenses are a barrier

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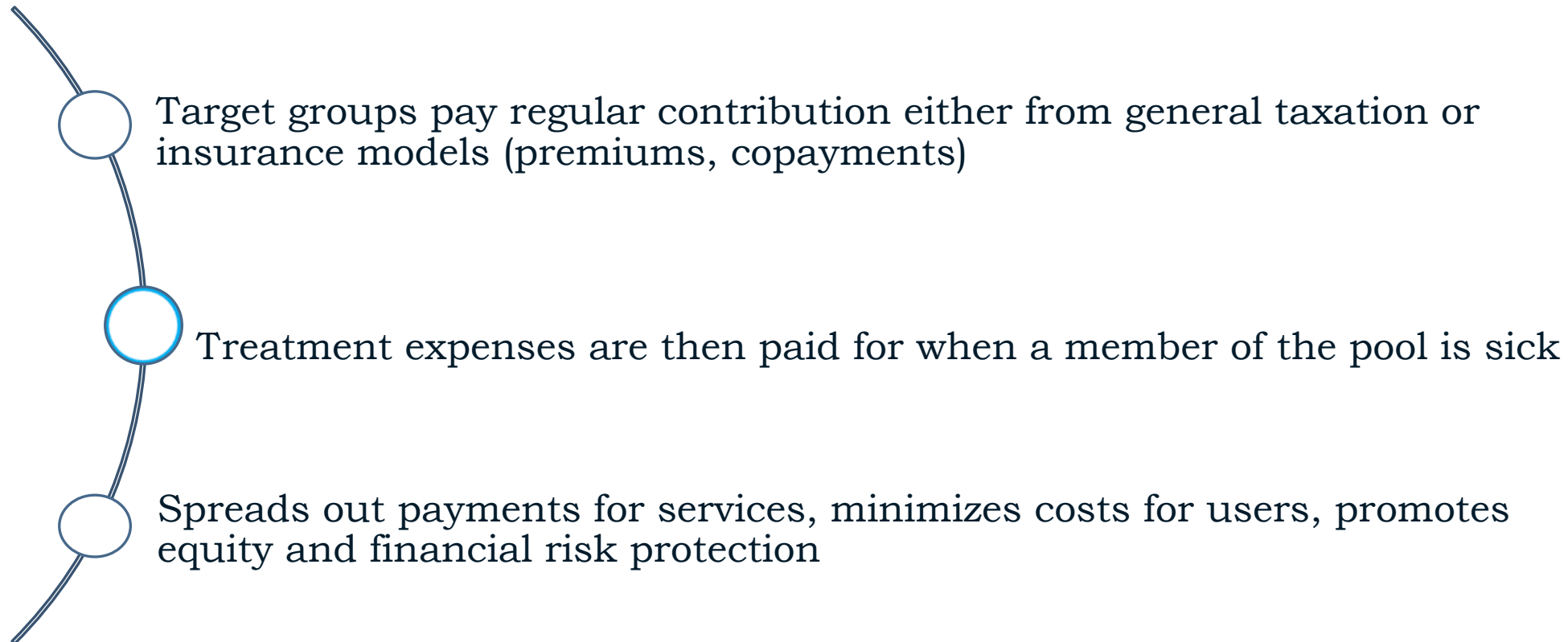
- Costs of surgical supplies (e.g. gloves, sutures, dressings, intravenous fluids, antibiotics)



- Costs of transport and food—these can be impoverishing *even when the care is free*

Indirect (prepaid) financing, in which risk is pooled, is a better mechanism but is under-used

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Key features of surgical care make prepayment preferable to user fees



Time-critical and life- or limb-threatening conditions



Unpredictable, cannot plan or save for financial consequences



User fees are often high and can be catastrophic

Paying for inputs rather than outputs is dominant, and can reduce quality and efficiency

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**INPUT-BASED  
PURCHASING**

Government payments



**Inputs:** personnel,  
supplies, equipment

*Little attention to quality, efficiency;  
little use of mechanisms to motivate  
providers*

**STRATEGIC  
PURCHASING**

Government payments



**Predefined outputs:**  
payment is linked to  
quality measures

**Scale up donor and domestic financing**

**Track aid to surgery and domestic spending**

# Policy Solutions

## 1. There is a strong economic case for investing in surgery

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## 2. The present financing arrangements are weak

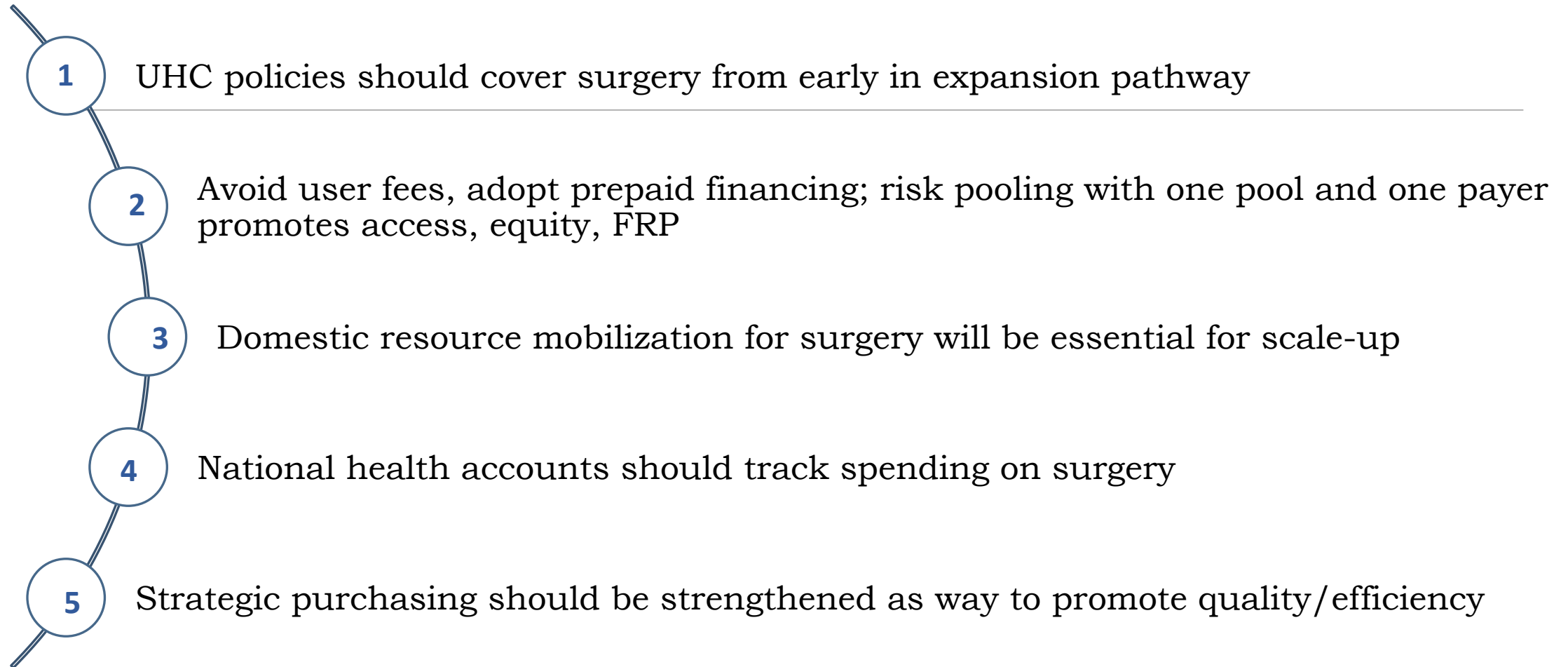
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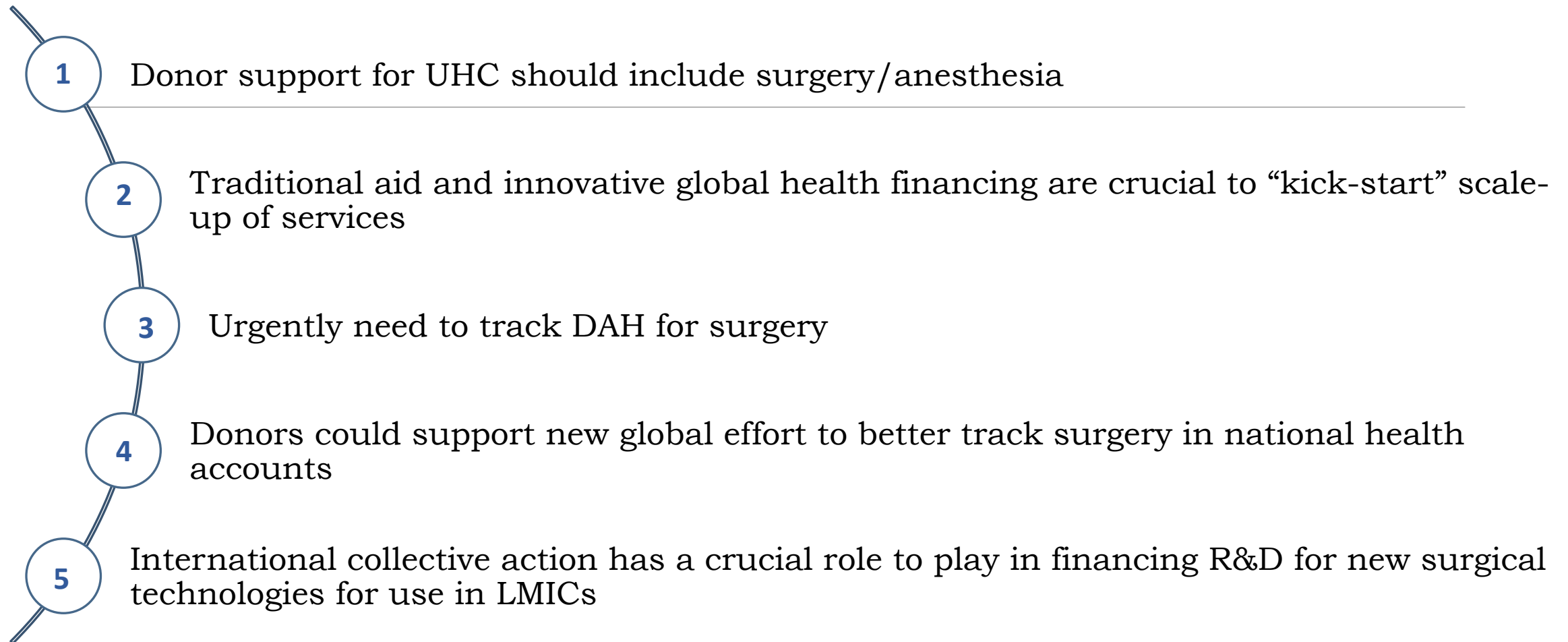
**Introduce at least an element of strategic purchasing**

**Adopt prepaid, pooled coverage that includes surgery; include surgery in UHC service package**

## 1. Governments

## 2. International collective action





*Panel Focus:*


How can we generate funding to improve surgical care globally?

# Panelist- Vanessa Kerry

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- Founder and CEO of Seed Global Health, an NGO promoting the sustainable development of human resources for health.
- Director of the program in Global Public Policy and Social Change in the Department of Global Health and Social Medicine at Harvard Medical School.
- Holds an MSc in health policy, planning, and financing from the London School of Economics and the London School of Hygiene and Tropical Medicine
- Critical care physician at Massachusetts General Hospital serving as the Associate Director of Partnerships and Global Initiatives at its Center for Global Health



 @vbkerry @seed\_global

# Panelist- Robert Marten

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- Joined the Rockefeller Foundation in 2010
- Manages relationships with current and prospective grantees
- Works on the Transforming Health Systems (THS) initiative and is coordinating the Foundation's Post-Ebola Resilience Building work
- Previously worked with The World Bank, the WHO, German Technical Cooperation, the Global Public Policy Institute, and the United Nations
- Holds a Master's of Public Policy from the Hertie School of Governance, an MPH from Johns Hopkins, and is pursuing a doctoral degree at the London School of Hygiene and Tropical medicine



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