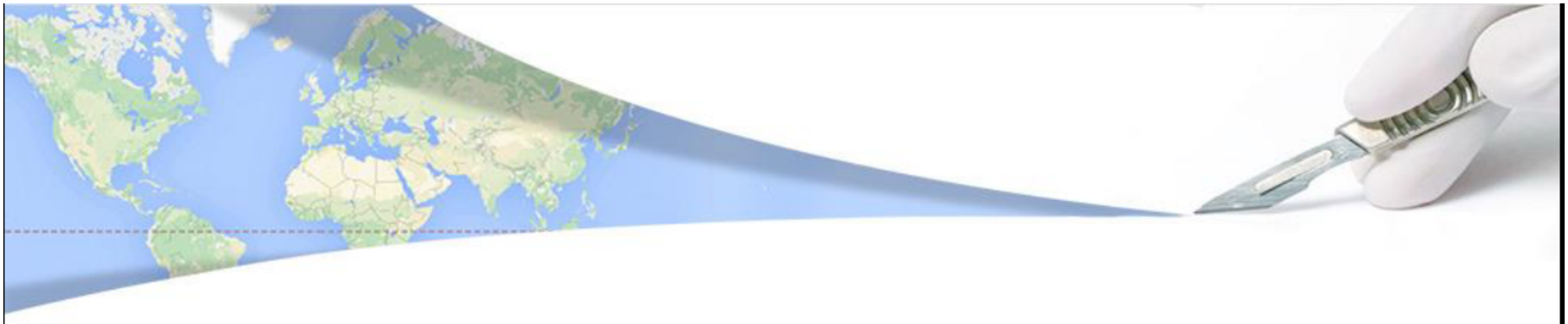

THE LANCET Commission on Global Surgery

Royal Society of Medicine, 27th April 2015

Financing Global Surgery

Gavin Yamey MD MPH, Lead, Evidence to Policy Initiative,
Global Health Group, University of California San Francisco
Chair, LCoGS Finance & Economics Working Group

“Failure to recognize and address the substantial human and economic toll of untreated surgical conditions in LMICs slows progress towards a diverse range of health and development goals”

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

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“Financing and financial mechanisms for surgical and anaesthesia care in LMICs are inadequate, do not meet current health needs, and will not in the near future”

The Present Situation

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

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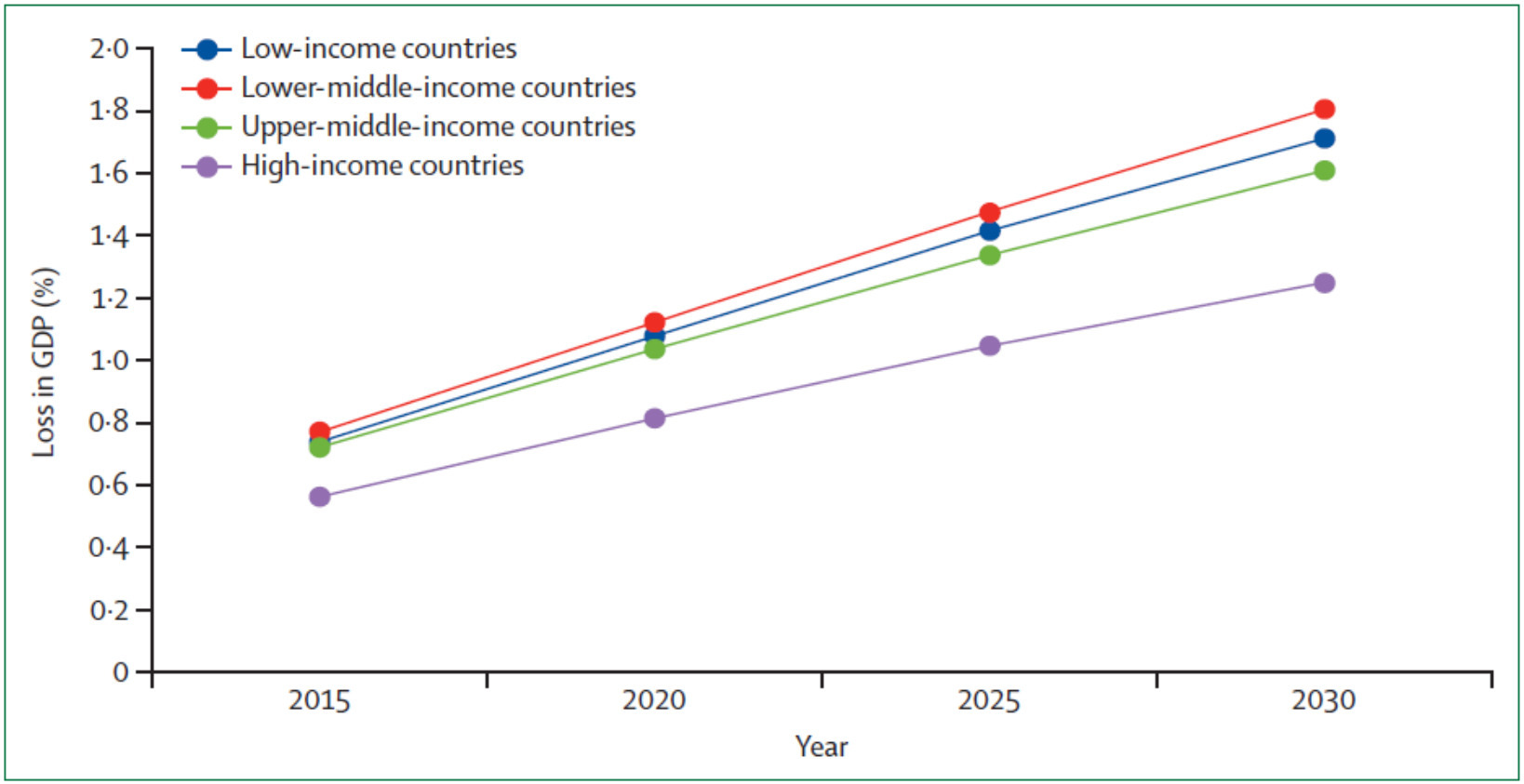
Surgical conditions cause lost economic productivity



Annual value of lost economic output due to surgical conditions

Alkire BC, et al. Global economic consequences of selected surgical diseases: a modelling study. *Lancet Glob Health* 2015; **3:** S21–27.

Surgical conditions cause large welfare losses

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

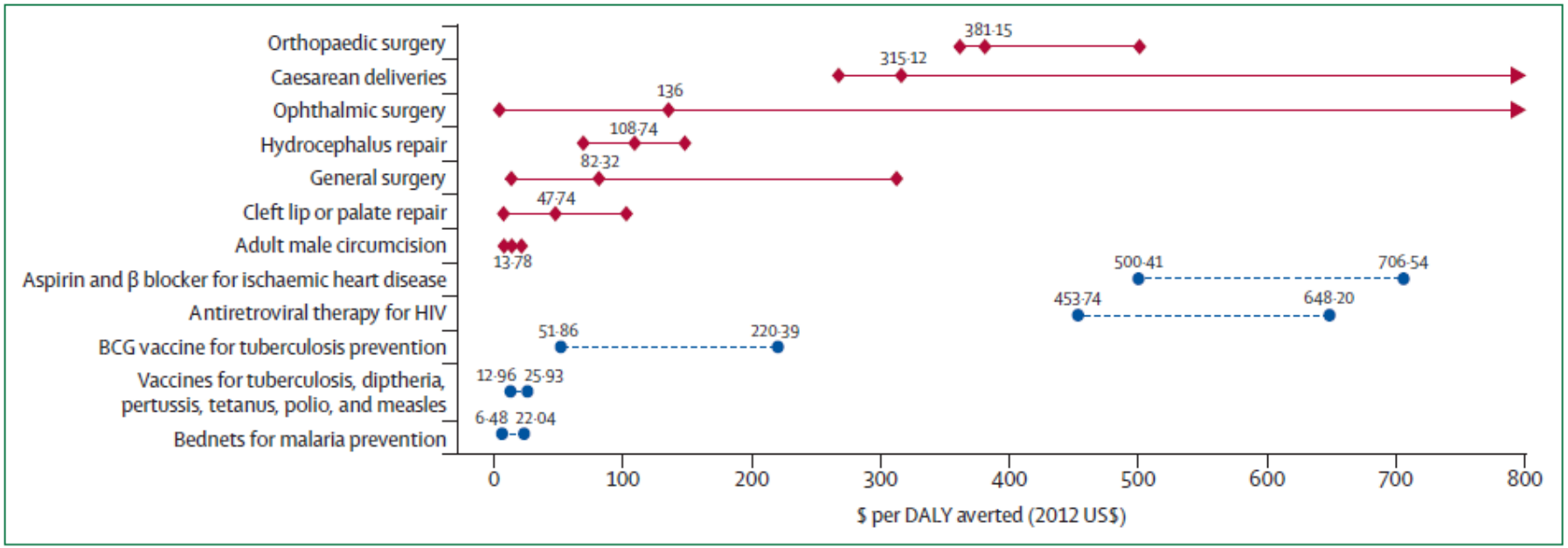


***Figure 13*: Cost-effectiveness of surgery in low-income and middle-income countries compared with other public health interventions**
Data points are medians, error bars show range. Surgical interventions are denoted by the diamonds and solid lines, public health interventions by the circles and dashed lines. Reproduced from Chao and colleagues,[53] 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

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 1st level hospital is very cost-effective ($33/DALY in SSA)

Costs are paid mainly out-of-pocket and are impoverishing

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

Emergency operations are especially impoverishing

Health care intervention	% of people pushed into poverty
Acute cholecystectomy	22.2
Appendectomy	12.5
Emergency hysterectomy	9.8
Health care services overall	3.4

Hamid SA, et al. Disease-specific impoverishment impact of out-of-pocket payments for health care: evidence from rural Bangladesh. *Appl Health Econ Health Policy* 2014;12: 421-33

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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

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

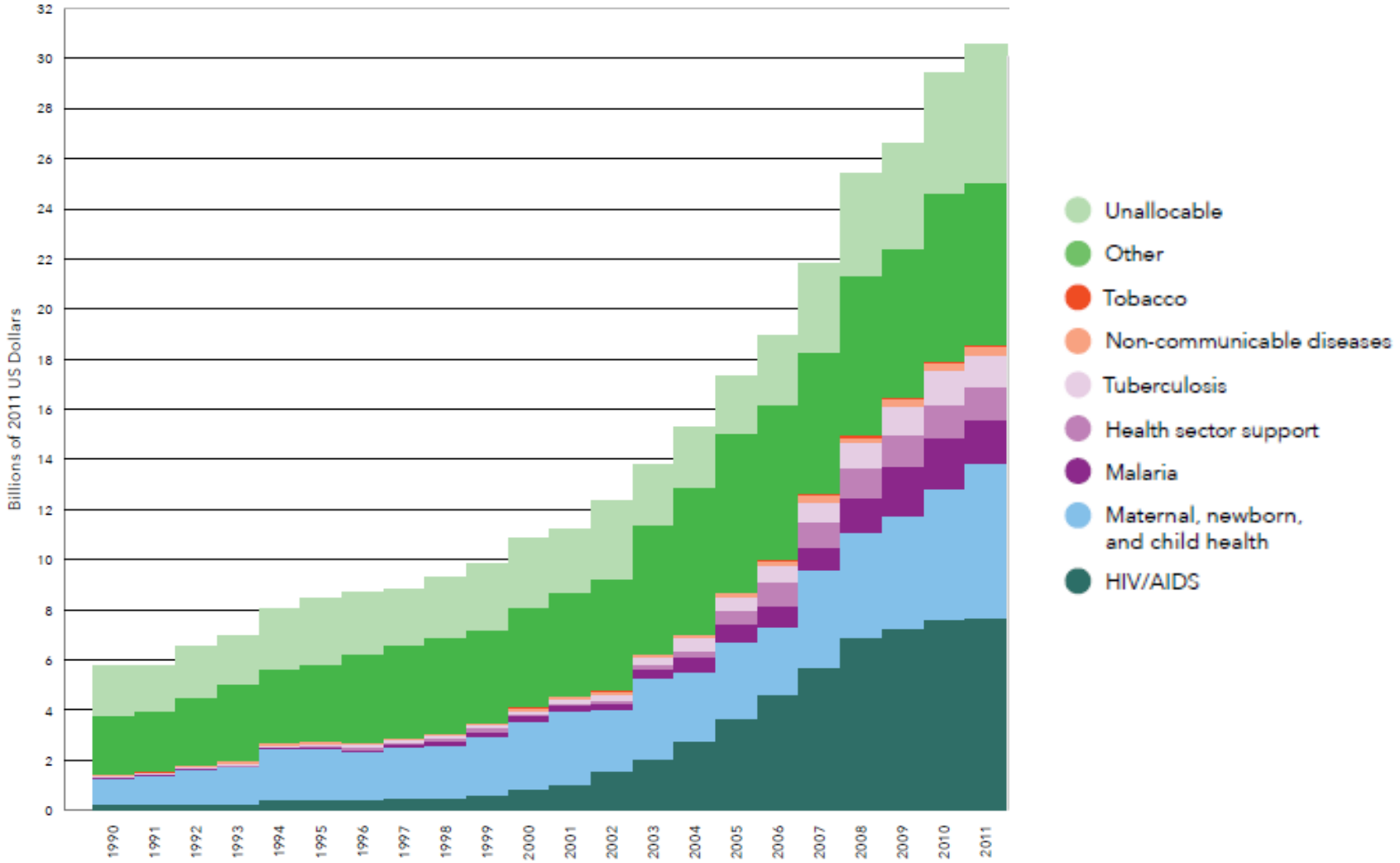
Countries do not collect specific data on their spending on surgery

→

We examined 958 National Health Accounts, 1996-2010

Only Georgia & Kyrgyzstan reported surgical spending

"Golden decade" of health aid: perhaps it neglected surgery?



Source: Institute for Health Metrics & Evaluation

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

- User fees dominate even when stated means of financing is general taxation
- OOPs are a barrier to accessing surgical care; removing them is associated with increased use of services (e.g. C-sections)
- They are regressive: higher burden on people with low income

Raykar NP, et al. A qualitative study exploring contextual challenges to surgical care provision in 21 LMICs. *Lancet* 2015;385:S15

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

- 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

- Target groups pay regular contribution either from general taxation or insurance models (premiums, copayments)
- Treatment expenses are then paid for when a member of the pool is sick
- Spreads out payments for services, minimizes costs for users, promotes equity and financial risk protection

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

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

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Scale up donor and domestic financing

Track aid to surgery and domestic spending

Policy Solutions

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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

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1. Governments

2. International collective action

1. UHC policies should cover surgery from early in expansion pathway
2. Avoid user fees, adopt prepaid financing; risk pooling with one pool and one payer promotes access, equity, FRP
3. Domestic resource mobilization for surgery will be essential for scale-up
4. National health accounts should track spending on surgery
5. Strategic purchasing should be strengthened as way to promote quality/ efficiency

1. Donor support for UHC should include surgery/anesthesia
2. Traditional aid and innovative global health financing are crucial to "kick-start" scale-up of services
3. Urgently need to track DAH for surgery
4. Donors could support new global effort to better track surgery in national health accounts
5. International collective action has a crucial role to play in financing R&D for new surgical technologies for use in LMICs

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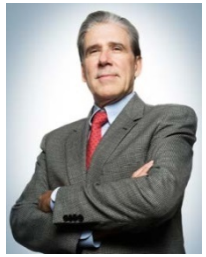

Research assistants


THANK
YOU