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Development Economics • Data

# The Global Surgery Indicators and World Bank's World Development Indicators (WDI)

**World Bank  
Development Data Group (DECDG)**

**Emi Suzuki, M.A., Ph.D.**

# Outline of the presentation

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- What is World Bank's World Development Indicators (WDI)
- What are the global surgery indicators
- Progress made
- Promoting global surgery data
- Data quality
- Challenges/opportunities

What is WB's World Development Indicators (WDI)

# What is World Bank's World Development Indicators (WDI)

World Bank's main work:

1. Development Projects (funded over 12,000 projects since 1947)
2. Knowledge and Innovation (e.g. **WDI**, Open Data, Open Knowledge Repository)
3. Products and Services (offer support to developing countries through policy advice, research, and technical assistance)

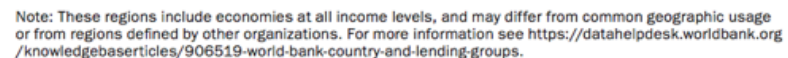




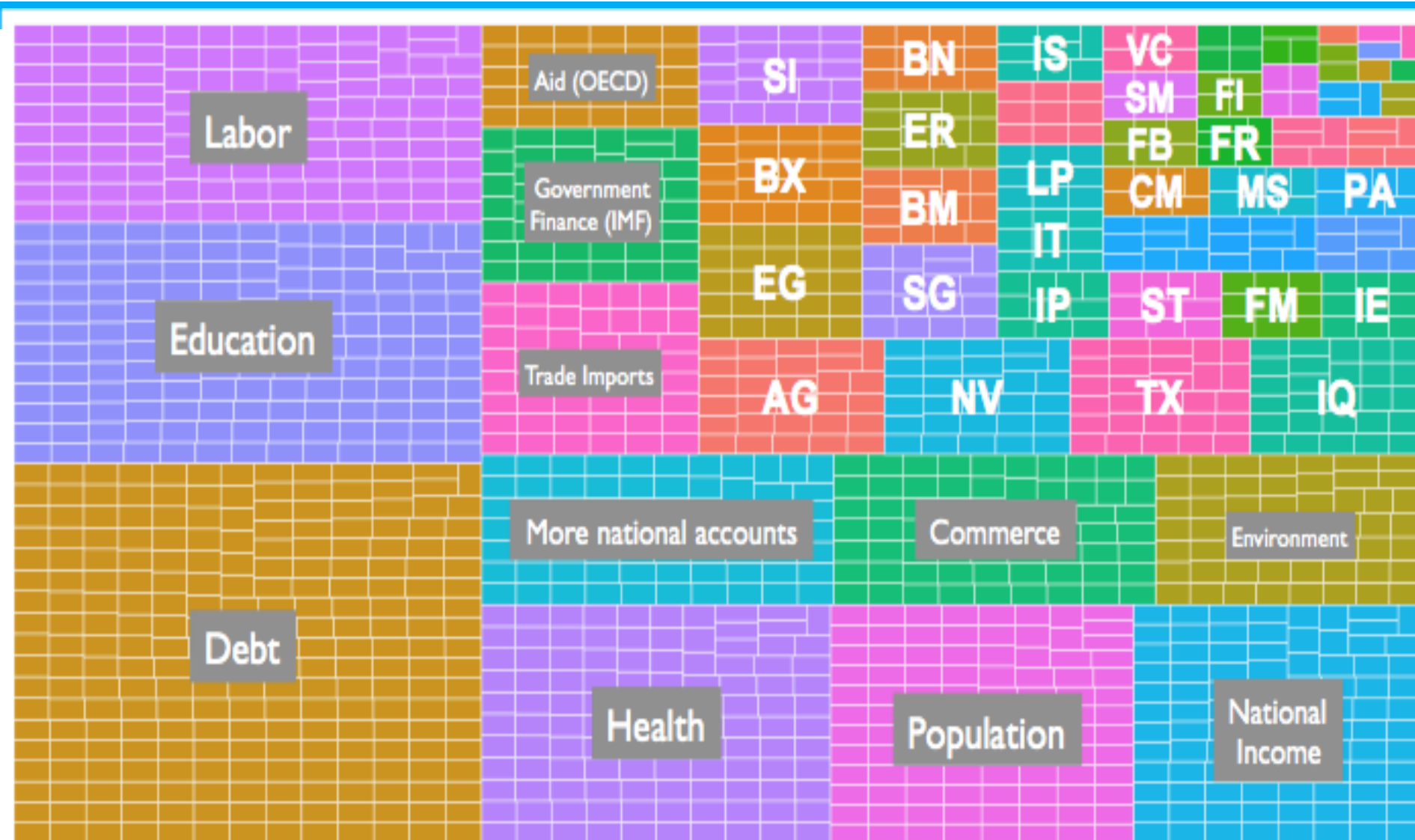
# What is World Bank's World Development Indicators (WDI)



World Development Indicators (WDI) is one of the main knowledge products of the World Bank.



# Data Coverage: 1500+ Indicators from year 1960



Each small box is an indicator, that are grouped by first two letters of the indicator code which is thematic.

# Criteria for Inclusion of indicators in WDI

**THE NEW**  
**World Development Indicators**

POVERTY AND INEQUALITY   PEOPLE   ENVIRONMENT   ECONOMY   STATES AND MARKETS   GLOBAL LINKS

OCT 15, 2018  
Do children who work attend school?

OCT 01, 2018  
In Sub-Saharan Africa, HIV is more common among young women than

OCT 01, 2018  
Globally, more than 1 in 10 people defecate in the open


















































Indicator	Code	Time coverage	Region coverage	Get data
Population, total	SP.POP.TOTL	■■■■■■■■	■■■■■■■■■	⊕
Population growth (annual %)	SP.POP.GROW	■■■■■■■■	■■■■■■■■■	API
Birth rate, crude (per 1,000 people)	SP.DYN.CBRT.IN	■■■■■■■■	■■■■■■■■■	XLS
Death rate, crude (per 1,000 people)	SP.DYN.CDRT.IN	■■■■■■■■	■■■■■■■■■	CSV

World Development Indicators [↗](#)

Oct 29, 2018

1. Development relevance
2. Good data coverage – across the world, and over time (trend data if possible)
3. Comparability across countries and across time (consistent definitions and methodology)
4. Good reliable source with regular updates





















































# Data Sources: 50+ International Organizations, 200+ NSOs

 <b>CDIAC</b>	Carbon Dioxide Information Analysis Center		Centre for Research on the Epidemiology of Disasters		United Nations Educational, Scientific & Cultural Organization, Institute for Statistics		United Nations Environment Programme
	Deutsche Gesellschaft für Internationale Zusammenarbeit		The DHS Program		United Nations Industrial Development Organization		United Nations International Strategy for Disaster Reduction
	Emission Database for Global Atmospheric Research		Eurostat		United Nations Office on Drugs and Crime		United Nations Office of the High Commissioner for Refugees
	Food and Agriculture Organization		Harvard Medical School Program in Global Surgery and Social Change		United Nations Population Fund		Uppsala Conflict Data Program
	Institute for Health Metrics and Evaluation		Internal Displacement Monitoring Centre		World Bank		World Health Organization
	International Civil Aviation Organization		International Diabetes Federation		World Intellectual Property Organization		World Tourism Organization
	International Labour Organization		International Telecommunication Union		World Trade Organization		Center for International Earth Science Information Network
	Lund University		National Science Foundation		International Institute for Strategic Studies		Lloyd's List
	The Office of U.S. Foreign Disaster Assistance		Organisation for Economic Co-operation and Development		Netcraft		PwC
	Stockholm International Peace Research Institute		Understanding Children's Work		Standard and Poor's		World Conservation Monitoring Centre
	United Nations		United Nations Centre for Human Settlements, Global Urban Observatory		World Economic Forum		World Federation of Exchanges
	United Nations Children's Fund		United Nations Conference on Trade and Development		World Resources Institute		
	United Nations Department of Economic and Social Affairs, Population Division		United Nations Department of Peacekeeping Operations				

- Producing WDI data involves:
  - 50+ international organizations
  - 200+ NSOs
  - WB country economists from 150 countries
- WDI indicators are updated quarterly (July, September, December and April) or more
- $\frac{2}{3}$  of the data come from external partners
- Sources include admin data, academia & household surveys



# Data Sources: 50+ International Organizations, 200+ NSOs

 Carbon Dioxide Information Analysis Center	 Centre for Research on the Epidemiology of Disasters	 United Nations Educational, Scientific & Cultural Organization, Institute for Statistics	 United Nations Environment Programme
 Deutsche Gesellschaft für Internationale Zusammenarbeit	 The DHS Program	 United Nations Industrial Development Organization	 United Nations International Strategy for Disaster Reduction
 Emission Database for Global Atmospheric Research	 Eurostat	 United Nations Office on Drugs and Crime	 United Nations Office of the High Commissioner for Refugees
 Food and Agriculture Organization	 Harvard Medical School Program in Global Surgery and Social Change	 United Nations Office on Drugs and Crime	 United Nations Office of the High Commissioner for Refugees
 Institute for Health Metrics and Evaluation	 Internal Displacement Monitoring Centre	 United Nations Population Fund	 Uppsala Conflict Data Program
 International Civil Aviation Organization	 International Diabetes Federation	 World Bank	 World Health Organization
 International Labour Organization	 International Telecommunication Union	 World Intellectual Property Organization	 World Tourism Organization
 Lund University	 National Science Foundation	 World Intellectual Property Organization	 Center for International Earth Science Information Network
 The Office of U.S. Foreign Disaster Assistance	 Organisation for Economic Co-operation and Development	 World Trade Organization	 Lloyd's List
 Stockholm International Peace Research Institute	 Understanding Children's Work	 International Institute for Strategic Studies	 PwC
 United Nations	 United Nations Centre for Human Settlements, Global Urban Observatory	 Netcraft	 World Conservation Monitoring Centre
 United Nations Children's Fund	 United Nations Conference on Trade and Development	 Standard and Poor's	 World Federation of Exchanges
 United Nations Department of Economic and Social Affairs, Population Division	 United Nations Department of Peacekeeping Operations	 World Economic Forum	
		 World Resources Institute	

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# WDI Usage Statistics (approx. annualized)

Channel	“Views” (‘000s)	Unique users (‘000s)
Book (incl. print & OKR pdf)		65
Bulk download	345	75
Tables online	1,500	500
Databank (WDI only, = 50% total)	9,300	1,500
data.worldbank.org	80,000	30,000 20-40,000
API data queries	80,000	
Google infobox	80,000 (17-170,000)	



[illegible]

- | Health expenditure     |            |               |                     |             |             |             |                     |                  |                  | Health workers |             | Specialized personnel | Concentration of health expenditure | Concentration of health expenditure |
|------------------------|------------|---------------|---------------------|-------------|-------------|-------------|---------------------|------------------|------------------|----------------|-------------|-----------------------|-------------------------------------|-------------------------------------|
| Total                  | Public     | Out of pocket | Capital expenditure | per capita  | per capita  | Physicians  | Nurses and midwives | per 1,000 people | per 1,000 people | %              | %           |                       |                                     |                                     |
| % of GDP               | % of total | % of total    | % of total          | 2010 PPP \$ | 2010 PPP \$ | 2010 PPP \$ | 2010 PPP \$         | 2010 PPP \$      | 2010 PPP \$      | 2010 PPP \$    | 2010 PPP \$ |                       |                                     |                                     |
| Algeria                | 8.1        | 48.8          | 12.4                | 0.0         | 197         | 107         | 1.9                 | 1.9              | 19.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Armenia                | 5.2        | 49.9          | 49.9                | 0.0         | 273         | 619         | 1.3                 | 1.9              | 11.6             | 10.0           | 83.0        |                       |                                     |                                     |
| Australia              | 7.2        | 100.0         | 0.0                 | 0.0         | 1,000       | 1,000       | 1.0                 | 1.0              | 121              | 10.0           | 10.0        |                       |                                     |                                     |
| Austria                | 6.1        | 100.0         | 0.0                 | 0.0         | 1,510       | 1,428       | 1.0                 | 1.0              | 100              | 10.0           | 10.0        |                       |                                     |                                     |
| Azerbaijan             | 0.3        | 10.9          | 14.0                | 2.0         | 106         | 236         | 0.1                 | 1.4              | 0.0              | 100.0          | 100.0       |                       |                                     |                                     |
| Bahamas                | 8.5        | 100.0         | 23.7                | 1.0         | 774         | 1,208       | 1.0                 | 1.0              | 14.3             | 10.0           | 76.0        |                       |                                     |                                     |
| Bangladesh             | 4.8        | 100.0         | 100.0               | 0.0         | 500         | 1,137       | 1.0                 | 1.0              | 10.0             | 10.0           | 100.0       |                       |                                     |                                     |
| Barbados               | 6.5        | 100.0         | 0.0                 | 0.0         | 900         | 900         | 1.0                 | 1.0              | 0.0              | 100.0          | 100.0       |                       |                                     |                                     |
| Belize                 | 0.4        | 100.0         | 10.0                | 0.0         | 6,000       | 4,000       | 0.4                 | 0.0              | 10.0             | 100.0          | 100.0       |                       |                                     |                                     |
| Berlin                 | 11.2       | 100.0         | 10.0                | 0.0         | 1,000       | 1,000       | 0.2                 | 0.0              | 10.0             | 100.0          | 100.0       |                       |                                     |                                     |
| Bhutan                 | 0.0        | 0.0           | 100.0               | 0.0         | 4,000       | 4,000       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Bolivia                | 7.7        | 49.9          | 10.0                | 0.0         | 1,700       | 1,919       | 2.7                 | 4.0              | 24.4             | 10.0           | 80.0        |                       |                                     |                                     |
| Bosnia and Herzegovina | 2.8        | 100.0         | 10.0                | 0.0         | 1,100       | 1,100       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Botswana               | 7.9        | 100.0         | 0.0                 | 0.0         | 1,200       | 1,200       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Brazil                 | 6.7        | 100.0         | 10.0                | 0.0         | 490         | 1,000       | 4.4                 | 10.9             | 124.0            | 100.0          | 100.0       |                       |                                     |                                     |
| Bulgaria               | 10.0       | 100.0         | 10.0                | 1.0         | 1,000       | 1,000       | 1.0                 | 1.0              | 10.0             | 100.0          | 100.0       |                       |                                     |                                     |
| Burkina Faso           | 6.2        | 100.0         | 23.0                | 11.4        | 279         | 400         | 0.8                 | 1.0              | 10.0             | 10.0           | 100.0       |                       |                                     |                                     |
| Burundi                | 4.4        | 100.0         | 100.0               | 0.0         | 100         | 100         | 0.1                 | 0.0              | 1.0              | 10.0           | 10.0        |                       |                                     |                                     |
| Cambodia               | 2.0        | 100.0         | 10.0                | 0.0         | 1,000       | 1,000       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Cameroon               | 3.0        | 100.0         | 10.0                | 0.0         | 200         | 200         | 0.0                 | 0.0              | 1.0              | 10.0           | 10.0        |                       |                                     |                                     |
| Canada                 | 6.1        | 100.0         | 0.0                 | 0.0         | 1,000       | 1,000       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Chad                   | 0.0        | 10.0          | 10.0                | 0.0         | 1,000       | 1,000       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Chile                  | 6.8        | 100.0         | 10.0                | 0.0         | 1,000       | 1,000       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| China                  | 5.5        | 100.0         | 10.0                | 0.0         | 1,000       | 1,000       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Colombia               | 2.8        | 100.0         | 10.0                | 0.0         | 1,000       | 1,000       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Costa Rica             | 6.0        | 100.0         | 10.0                | 0.0         | 1,000       | 1,000       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Croatia                | 6.0        | 100.0         | 10.0                | 0.0         | 1,000       | 1,000       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Cuba                   | 11.1       | 100.0         | 10.0                | 0.0         | 1,000       | 1,000       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Cyprus                 | 10.0       | 100.0         | 10.0                | 0.0         | 1,000       | 1,000       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Czechia                | 7.4        | 100.0         | 10.0                | 0.0         | 1,000       | 1,000       | 1.0                 | 1.0              | 10.0             | 10.0           | 10.0        |                       |                                     |                                     |
| Dominican Republic     | 7.0        | 100.0         | 10.0                | 0.0         | 1,000       | 1,000       | 1.                  |                  |                  |                |             |                       |                                     |                                     |

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World Development indicators was updated on September 18, 2017

World Development Indicators (WDI) is the primary World Bank collection of development indicators, compiled from officially recognized international sources. It presents the most current and accurate global [See more +](#)

Foreign direct investment,  
net inflows (BoP, current)

## A collage of various data visualization types including maps, scatter plots, bar charts, and network graphs. The visualizations are arranged in a grid-like fashion, showcasing different ways to represent information. Some show geographical data, while others are abstract or represent specific metrics over time or across categories.

					
<b>POVERTY AND INEQUALITY</b>	<b>PEOPLE</b>	<b>ENVIRONMENT</b>	<b>ECONOMY</b>	<b>STATES AND MARKETS</b>	<b>GLOBAL LINKS</b>
poverty, prosperity, inequality	population dynamics, migration, urbanisation	agriculture, climate change, biodiversity	growth, economic development, innovation	business, stock markets, globalisation	debt, trade, aid, security, peace

# Global Surgery Indicators

# Global Surgery 6 Indicators





# Global Surgery Indicators and WDI



- Early 2015: WDI team was contacted by the global surgery team
- June 2015: Global surgery team and WDI team met and agreed to work towards publishing the global surgery indicators
- November 2015: Global surgery data on 6 indicators were shared with the WDI team
- April 2016: World Development Indicators 2016 published the 4 surgery indicators (#2,3,5,6) (2 indicators (#1,4) were not published due to low data coverage)
- April 2017: SAO density & surgical volume data were updated in World Development Indicators 2017
- April 2018: More SAO density and surgical volume data were added from Pacific countries
- July 2018: Time-series financial risk protection data were added

# Progress - Data coverage of 6 global surgery indicators

	WDI 2016		WDI 2017		WDI 2018	
	#	(%)	#	(%)	#	(%)
1 Geographic accessibility *	14	(6%)	14	(6%)	14	(6%)
2 SAO density	173	(80%)	173	(80%)	174	(80%)
3 # of surgical procedures (non-modelled)	33	(15%)	58	(27%)	69	(32%)
4 Perioperative mortality rates *	19	(9%)	19	(9%)	19	(9%)
5 Risk of Impoverishing expenditure	186	(86%)	186	(86%)	149**	(69%)
6 Risk of catastrophic expenditure	186	(86%)	186	(86%)	149**	(69%)

\* Not published in WDI    \*\* Time series data

# Global Surgery Indicators in WDI: How many times users are viewing

between May 1 2017 – April 30 2018

All WDI Indicators: Views on <a href="https://data.worldbank.org">https://data.worldbank.org</a> *	21,485,890
All health indicators (SH.* domain)	1,375,847
SH.MED.SAOP.P5 (SAO density)	5,253
SH.SGR.PROC.P5 (Surgical volume)	12,577
SH.SGR.IRSK.ZS (Risk of impoverishing expenditure)	1,099
SH.SGR.CRSK.ZS (Risk of catastrophic expenditure)	835

\*This includes only the views from the Open Data home page. This excludes other sites like DataBank.

# Global Surgery Indicators in WDI: How many times users are viewing

between May 1 2017 – April 30 2018

Totally the 4 global surgery indicators were viewed by users **20,000 times** a year between 2017-18





# Promoting Global Surgery Indicators in WDI

# Good health and well-being

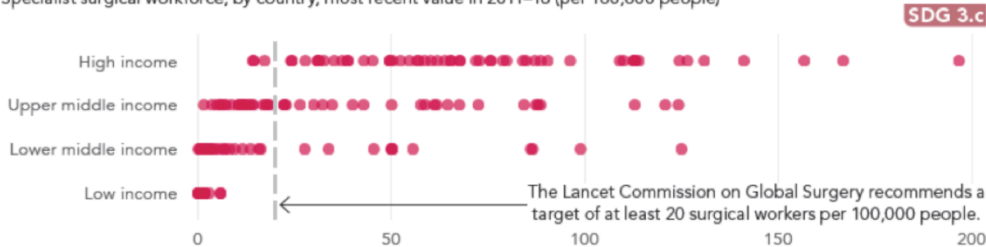
Ensure healthy lives and promote well-being for all at all ages

## Atlas of Sustainable Development Goals 2018 From World Development Indicators



Low-income countries have a severe shortage of specialist surgical workers. All low- and most lower-middle-income countries have fewer than the target number.

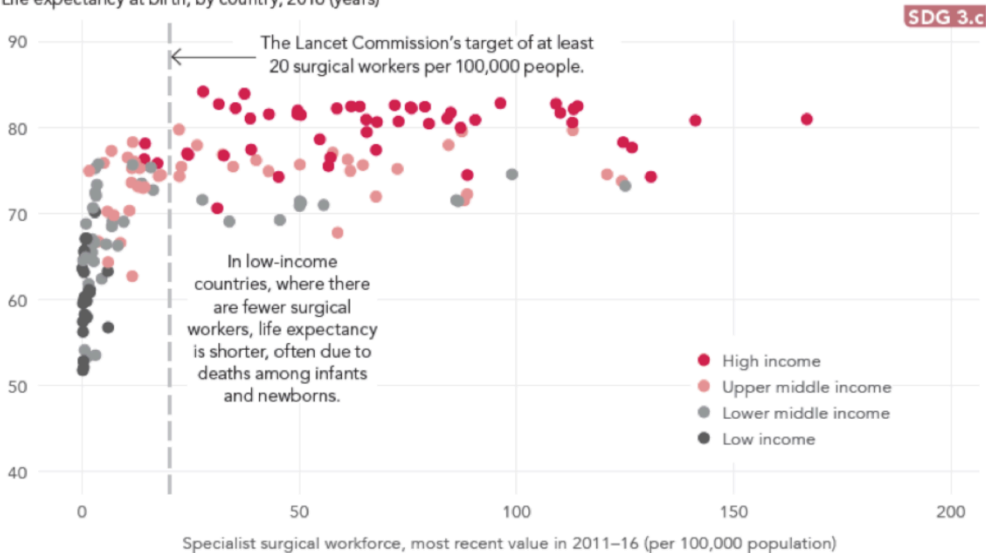
Specialist surgical workforce, by country, most recent value in 2011–16 (per 100,000 people)



Source: The Lancet Commission on Global Surgery. World Development Indicators (SH.MED.SAOP.P5).

Better staffed health systems can lead to improved health outcomes. For example, life expectancies are higher where there are more surgical workers per person.

Life expectancy at birth, by country, 2016 (years)



Source: The Lancet Commission on Global Surgery and UN Population Division. WDI (SH.MED.SAOP.P5; SP.DYN.LE00.IN).

## Measuring surgical systems: systems strengthening



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Also available in: **Español** | **中文** | **Français** | **العربية**



*This is a companion blog to the [series of blogs](#) from the [Lancet Commission on the future of health care](#). It is a guest contribution from colleagues involved in the [Lancet Commission on the future of health care](#).*

**The relative number of surgical speciali**

Number of specialist surgical, anaesthetic, and obstetric (SAO) p



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The**DATA**Blog

## Surgical care – an overlo



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**Five billion people—two thirds of world pop**  
**anesthesia and obstetric (SAO) care** while a t  
anesthesia decision-making or treatment. Trea  
**Despite such huge burden of disease, safe and**

Why? **It may be because surgery and anesthesia** that address the breadth of human disease — trauma-related disease and injuries, and internal vertical disease-based programs.

Prior to 2015, global data on surgery, anesthesia that “We can’t manage what we don’t measure” Surgical, Obstetric and Anesthesia (SAO) indicators analysis of these data show large gaps in SAO c

There are 70-times as many surgical workers compared with low-income countries

The**DATA**Blog

Choose Blog

## Measuring surgical systems worldwide: an update



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# WDI BLOGS: PROMOTING GLOBAL SURGERY INDICATORS

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### Why are people dying following surgery in Africa?



SUBMITTED BY [BRUCE BICCARD](#) ON FRI, 08/03/2018

CO-AUTHORS: [HYLA-LOUISE KLUYTS](#), [DOLLY MUNLEMVO](#), [FARAI DANIEL MADZIMBAMUTO](#)



Surgery is a core component of health. It is a cost-effective intervention<sup>1</sup> which is important for global health.<sup>2</sup> However, to fully realize the health benefits of surgery, it needs to be safe. In the African continent—with a population of 1.2 billion people—it is estimated that approximately 95% do not have access to safe and affordable surgery. The Lancet Commission on Global Surgery has established six indicators to indicate the success of providing access to safe and affordable surgery.<sup>3</sup> Four of them are included in the World Bank's World Development Indicators (WDI) database. The perioperative mortality rate (POMR)—the number of in-hospital deaths from any cause in patients who have undergone a procedure done in an operating theatre, divided by the total number of procedures—is one of the indicators the success in achieving safe surgery, yet it is not included in the WDI as the data is sparse, including the one from Africa. The recent publication of the African Surgical Outcomes Study (ASOS) has cast an important light on the POMR in Africa.<sup>4</sup>

ASOS has shown that for patients in Africa fortunate enough to access surgical care, the patient outcomes following surgery are relatively poor. ASOS demonstrated that African surgical patients were twice as likely to die following surgery when compared to the global average, despite a similar complication rate to the global average (Table 1). This is despite the fact that surgical patients in Africa are relatively healthy when compared with similar international surgical patient cohorts,<sup>5</sup> and one would thus expect them to do well postoperatively. Therefore, if the data from ASOS had been risk-adjusted for patient comorbidities, it is likely that the mortality following surgery in Africa is more than twice the global average. The results from ASOS are compelling as they provide comprehensive data on surgical outcomes in Africa, from 25 countries, 247 hospitals, and over 11,000 patients.

**Table 1. Mortality, complications and 'failure to rescue' following surgery**

Source: ISOS International Surgical Outcomes Study ASOS African Surgical Outcomes Study<sup>4</sup>

## TheDATABlog

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### Cured Into Destitution: the risk of financial catastrophe after surgery



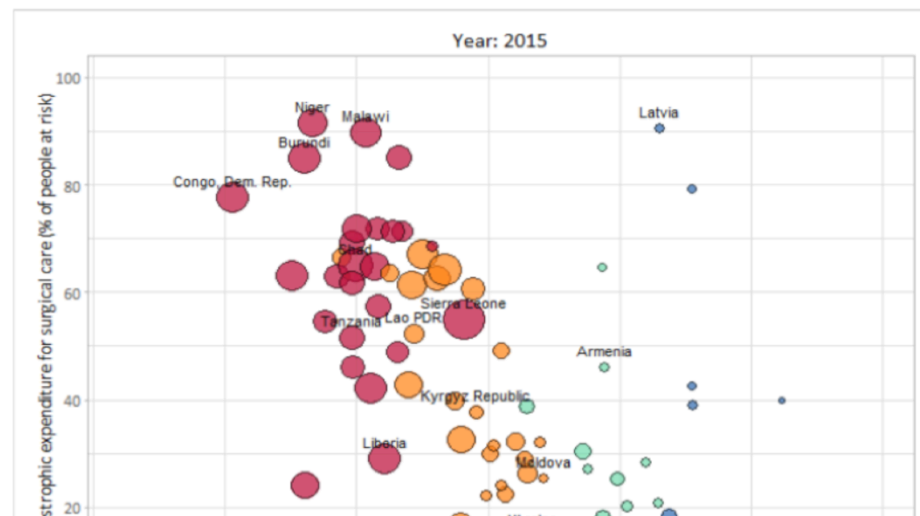
SUBMITTED BY [KATHRYN WALL](#) ON MON, 08/20/2018

CO-AUTHORS: [EMI SUZUKI](#), [JOHN G MEARA](#), [MARK G SHRIME](#)



Also available in: [العربية](#) | [Español](#)

**Low-income countries face the highest risk of financial catastrophe due to surgery and have made the slowest progress**

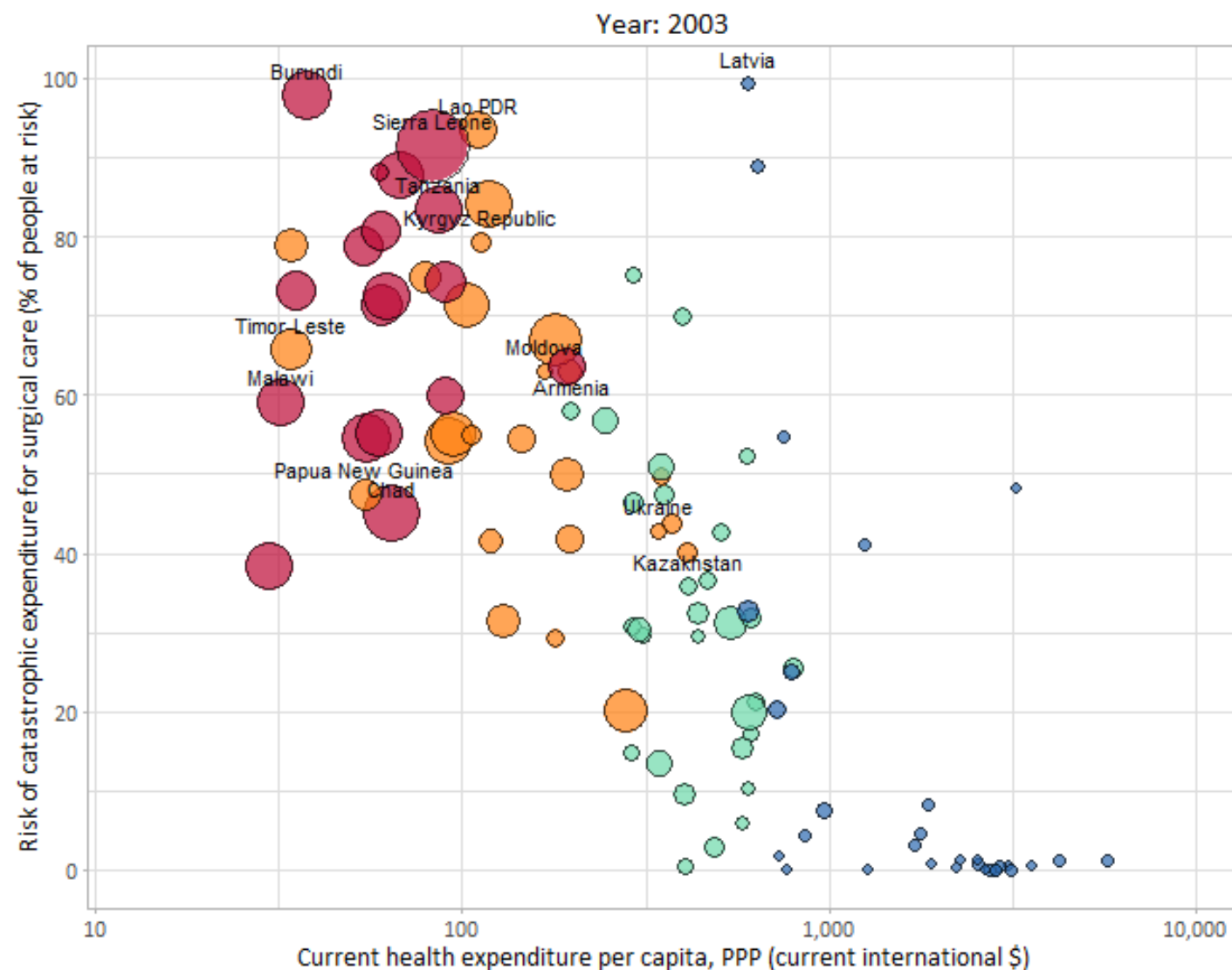




## Cured Into Destitution: the after surgery



SUBMITTED BY [KATHRYN WALL](#) ON MON, 08/20/2018  
CO-AUTHORS: [EMI SUZUKI](#), [JOHN G MEARA](#), [MARK G SHRIME](#)



Maternal Mortality Ratio (per 100,000 live births) ○ 500 ○ 1000 ○ 1500 ○ 2000

Income Group ● Low income ● Lower middle income ● Upper middle income ● High income

# TWITTER: PROMOTING GLOBAL SURGERY INDICATORS



**World Bank Data** @worldbankdata · 12h

The delivery of safe and quality SOA care is critical for the realization of many of the Sustainable Development Goals, including: Good health and well-being (#sdg3); No poverty (#sdg1), and Reducing inequality (#sdg10). [wrlld.bg/p0QV30ilZdr](http://wrlld.bg/p0QV30ilZdr)






**World Bank** @WorldBank · Feb 27

9 out of 10!  
That's the number of people in low-income countries at risk of becoming poor due to direct out-of-pocket payments for surgical and anaesthesia when surgical care is required: [wrlld.bg/EHmy30iCAZd](http://wrlld.bg/EHmy30iCAZd)

Most people in low- and lower middle-income countries lack access to safe and quality surgical care

Risk of catastrophic expenditure for surgical care in 2014 (% of people at risk)

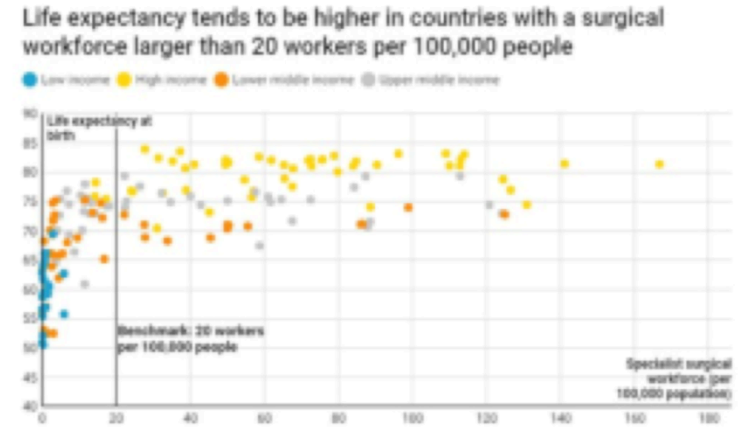




**World Bank** @WorldBank · Feb 18

Countries with more surgical workers tend to have a higher [#LifeExpectancy](#). And most low-income countries fall below the benchmark of 20 workers per 100k people: [wrlld.bg/5owM30ioTIL](http://wrlld.bg/5owM30ioTIL)

Life expectancy tends to be higher in countries with a surgical workforce larger than 20 workers per 100,000 people

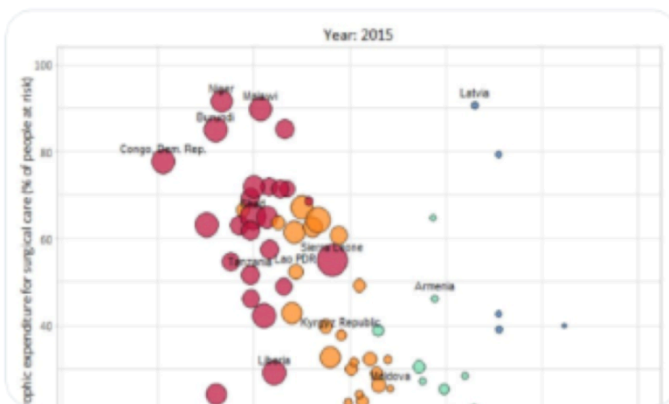


# TWITTER: PROMOTING GLOBAL SURGERY INDICATORS



World Bank @WorldBank · 4d

Over two billion people cannot afford surgery if they needed it today. Read why low-income countries face the highest risk of financial catastrophe: [wrlb.bg/z17730ltZMF](http://wrlb.bg/z17730ltZMF)



6

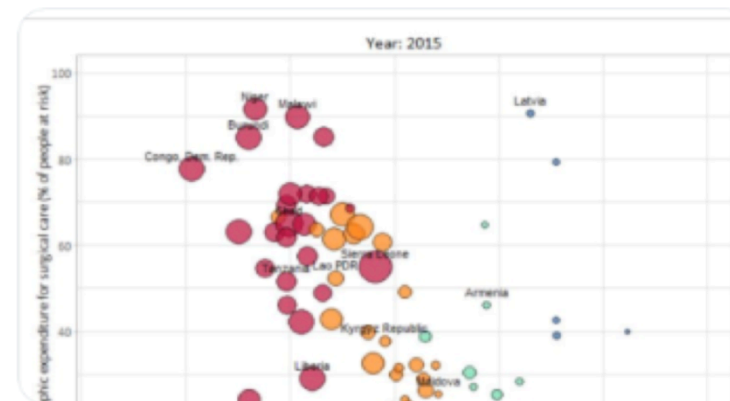
67

96



Jim Yong Kim @JimYongKim · 1d

New data shows that 181 million people are thrown into poverty each year because they needed [#surgery](#). Access to quality, affordable healthcare including surgical care is essential to good health—and is the very foundation of [#humancapital](#). [#healthforall](#)



World Bank Research

5

54

62



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Data quality

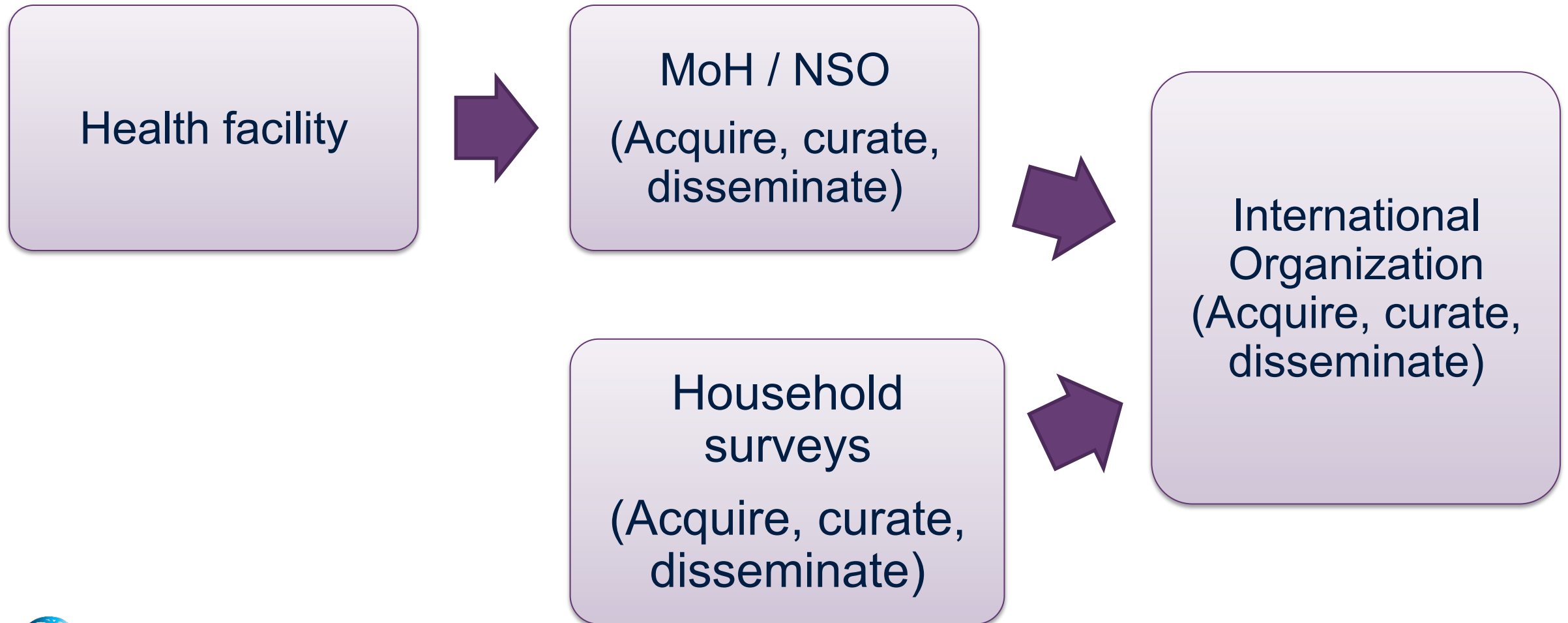
# Dimensions of data quality

Completeness	Data are available for all required data elements. Completeness of indicator data
Accuracy	Proximity of the data to the "truth" - effected by systematic biases e.g. omission and misclassification
Validity	The data measure what they intend to measure
Reliability	Data are measured and collected consistently
Timeliness	Is data available for use in a timely manner
Comprehensiveness	Data has all the detail needed for the creation of useful indicators
Utility	Data produced is useful and pertinent for policy and programmatic needs
Accessibility	Can these data be accessed by potential data users

# Challenges in data quality for 6 global surgery indicators

	Access	SAO	Volume	POMR	FRP (modelled)	FRP (non- modelled)
Completeness	X			X		X
Accuracy	X	X	X	X	X	X
Validity	X			X	X	X
Reliability	X	X	X	X		X
Timeliness	X		X	X		X
Comprehensiveness	X			X		X
Utility						
Accessibility	X			X		X

## IDEAL DATA FLOW OF GLOBAL SURGERY INDICATORS



# Challenges & opportunities for data collection

## Capacity issues

- Capacity building and training

## No incentives

- Request needed from international organizations.
- International organizations use these country data

## No resources

- Data collection should become higher priority

## Lack of communication/trust/understanding

- Better partnerships needed at all levels. Need solid data collection system.
- Centralized data management system (by MoH/NSOs & by International organizations)

## Unclear what & how to measure

- Need clear international standards (definition, methodology),
- Guide/manual for countries

## GOOD EXAMPLE OF PROMOTING COUNTRIES TO GENERATE DATA: UNAIDS' DEVELOPMENT OF CORE PARTNERSHIPS



**“Through the development of core partnerships with country teams, implementers, demographers, mathematicians, epidemiologists and international organizations, UNAIDS has developed the capacity of country teams to produce internationally comparable HIV estimates.” (Mary Mahy et al. 2017)**



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ORIGINAL ARTICLE

OPEN ACCESS Check for updates

### Producing HIV estimates: from global advocacy to country planning and impact measurement

Mary Mahy<sup>a</sup>, Tim Brown<sup>b</sup>, John Stover<sup>b,c</sup>, Neff Walker<sup>d</sup>, Karen Stanecki<sup>e</sup>, Wilford Kirungi<sup>f</sup>, Txema Garcia-Calleja<sup>g</sup> and Peter D. Ghys<sup>a</sup>

# Key words to better data collection

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**Partnerships**

**Capacity building**







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Thank you