# Better decisions. Better health.

Value is in the eye of the beholder Kalipso Chalkidou, MD, PhD (with thanks to Ryan Li, PhD) Director of Global Health Policy and Senior Fellow, Center for Global Development Professor of Global Health Practice, Imperial College London Director, international Decision Support Initiative iDSI responds to policymaker demand, strengthening incountry networks to translate evidence into policy We work in partnership with countries to build long-term institutional capacity for priority-setting and sustainable UHC.

# Strengthening health systems and institutions

Proven track record supporting Asian governments with evidence-informed analysis and institutional strengthening

iDSI has supported India, China, Indonesia, Vietnam and Philippines in establishing national health technology assessment (HTA) laws and institutions, and building institutional capacity to use HTA in UHC health benefit package listing and procurement.

> Center © Global

Development



Growing footprint in Africa to enhance preparedness for aid transition

iDSI is informing NHI benefits planning and procurement in **Ghana**, and the Essential Medicines List in **Tanzania. South Africa** has committed US\$29m towards NHI/UHC reforms, creating an HTA Unit as an integral component.

In **Kenya**, iDSI's work with GFATM and UNITAID to optimise novel HIV ART rollout has led government to request iDSI support in embedding HTA into NHI and benefit package design

# What is the most difficult ethical dilemma facing science today?

DA: How far do you go to preserve individual human life?

I mean, what are we to do with the NHS? How can you put a value in pounds, shillings and pence on an individual's life? There was a case with a bowel cancer drug – if you gave that drug, which costs several thousand pounds, it continued life for six weeks on. How can you make that decision?

RD: That's a good one, yes.

## **The Guardian**

Sat 11 Sep 2010

### Interview

### Of mind and matter: David Attenborough meets Richard Dawkins

### David Attenborough and Richard Dawkins

We paired up Britain's most celebrated scientists to chat about the big issues: the unity of life, ethics, energy, Handel - and the joy of riding a snowmobile



A David Attenborough meets Richard Dawkins: Do great minds really think alike? Photograph: Alastair Thain for the Guardian

Status quo, unfair and unsustainable: Between 20-40% of the ~\$8 trillion spent annually on healthcare is wasted.\*

## OECD: Tackling Wasteful Spending on Health 2017

http://www.oecd.org/health/tackling-wasteful-spending-onhealth-9789264266414-en.htm about one fifth of resources wasted (Jan 2017)



OECD

### \*World Health Report 2010

#### \* http://www.who.int/whr/2010/en/







"For every US\$100 that goes into state coffers in Africa, on average US\$16 is allocated to health, only US\$10 is in effect spent, and less than US\$4 goes to the right health services."

100 90

80

70 60

50 40

Source: authors' estimates, from Ministry of Finance (Benin, Burkina

Tanzania, and Togo), BOOST (Ethiopia, Kenya, and Mozambique), a

# Public Financing for Health in Africa: rom Abuja to the SDGs (A) World Health Organization

#### Mali (2014) Kenya (2011) Togo (2014) Benin (2014) (2014) (2014) (2011) (2014) (2014) (2014) DRC (2013) Ethiopia (2013) uritania (2014) Tanzania (2014) ory Coast (2014) 201 Guinée ( Chad ( Gabon ( Burundi ( Faso Unspent budget Realized expenditure

Figure 5: Share of health budget spent and unspent, % of total sector allocations

Healthcare budgets often underspent

### Not Just about the Money....



Figure 14: Maternal mortality and public expenditure on health, deviations from estimates based on per capita income (2011 PPP), 2014



health International Monetary Fund, World Economic Outlook Database, April 2016. WHO, UNICEF, UNFPA, The World Bank, and the United Nations Population Division. Trends in Maternal Mortality: 1990 to 2015. Geneva, World Health Organization, 2015. All data extracted using wbopendata in Stata

World Health Assembly resolution on Health Intervention and Technology Assessment, 2014

"to integrate health intervention and technology assessment concepts and principles into relevant strategies and areas...including, but not limited to, universal health coverage, health financing, access to and rational use of quality-assured medicines, vaccines and other health technologies, the prevention and management of noncommunicable and communicable diseases, mother and child care, and the formulation of evidence-based health policy"

# 5 Step-HTA process



Value for money and Health Tech Assessment matters for development partners...

# S The Global Fund

Market Shaping Strategy, 2015

"On product selection issues and especially cost effectiveness analysis, the Global Fund will partner with organizations that have expertise in HTA...as well as in-country HTA agencies, such as Thailand's HITAP...**an opportunity to build country capacity for health technology assessment** and how to incorporate this into product selection decisions.

### DFID's Performance Agreement, 2016

Department for International Development

#### Performance Agreement

United Kingdom and The Global Fund to Fight Aids, Tuberculosis and Malaria



## Achieving Maximum Impact

The Global Fund has helped to save 20 million lives since it was established in 2002, and aims to save a further 8 million lives through the Fifth Replenishment. It has been highly successful, but it must continue to improve to achieve even greater impact. We have a duty to people affected by HIV/AIDS, TB and malaria to ensure the Global Fund continues to be as effective as possible. To support the Global Fund, and to ensure that UK taxpayers' contributions deliver the greatest possible impact, we have agreed ten areas which the Global Fund will prioritise for further improvement.

#### Maximising lives saved

Given the wide variation in the cost effectiveness and impact of different interventions, utilising the most cost-effective interventions and products can significantly increase the effectiveness and Value for Money of our efforts. The Global Fund must implement rigorous processes to ensure that the specific interventions and products used in preventing and tackling the three diseases are the most cost-effective possible. The Global Fund will set clear expectations to countries that they splue to use the highest value interventions, evaluated using internationally accepted standards for economic evaluation, develop a Value for Money framework for countries to guide the design and implementation of Global Fund grants in the most cost effective manner, and report on the framework's progress and impact.

#### Payment by Results at country level

The UK will support the Global Fund to increase its focus on results, such as the number of HIV patients using antiretroviral drugs and bednet coverage for malaria. As part of this, the Global Fund will strengthen its work to improve the quality of information about Global Fund supported programmes, particularly in the worst affected countries and most difficult environments. Over the three years of the replenishment we expect to see at least 15% of Global Fund investments in developing countries only being released in proportion to concrete, proven results.

#### Cutting out inefficiency

Two of the greatest sources of inefficiency in health are inefficient procurement and weak supply chains. Delivering savings on the price of life saving health commodities, such as bed nets and anti-retrovirals, enables the Global Fund to reach more people with its money. The Global Fund will continue to use its market power to drive down prices and further develop its procurement model to deliver substantial cost savings worth at least \$250m by 2019. Weak supply chains are a critical barrier to progress against the three diseases. The Global Fund will work with and learn from the private sector to assess supply chain inefficiencies in the highest impact countries and implement a results based financing approach to address them.

#### **Rooting-out corruption**

The UK demands clear action to root out corruption throughout the international aid system. This includes the Global Fund. The Global Fund must deliver in full the commitments it made in its "prioritized Action Plan' to strengthen risk management, fiduciary oversight and results monitoring. This includes ensuring that its risk management and audit functions provide sufficient coverage of high risk programmes. The UK supports

"We welcome the commitment of the Global Fund to...driving value for money and ensure additional expert support in country teams. ...the UK will work to strengthen independent advice and scrutiny of the Global Fund to ensure that it is following best practice in seeking **value for money**."

# ...and, most importantly, for national governments...

National Health Insurance Act of 2013, Section 11- Excluded Personal Health Services "The Corporation shall not cover expenses for health services which the Corporation and the DOH consider cost-ineffective through health technology assessment..."

#### Minister of Health's Decree No. 71 /2013 Article 34

(5)Health Technology Assessment Committee provide policy recommendation to the Minister on the feasibility of the health service as referred to in paragraph (4) to be included as benefit package of National Health Insurance

"the India Medical Technology Assessment Board for evaluation and appropriateness and cost effectiveness of the available and new Health Technologies in India...**standardized cost effective interventions that will reduce the cost and variations in care, expenditure on medical equipment...overall cost of treatment, reduction in out of pocket expenditure of patients...**". Ref: MTAB, Ministry of Health & Family Welfare, Government of India







中国卫华、策与技术评估研究网络启动会 Annology Assessment Research Launch Meeting

National Health Law change to include HTA for informing EDL and insurance. National HTA network with 12 provincial health bureaus; 33 academic institutions; One Belt One Road support. Minister Ma of National Health Commission committed to economic evaluation input to decision making.





# ...and, most importantly, for national governments...

#### Service coverage (5.3):

"Detailed treatment guidelines, based on available evidence about cost-effective interventions, will be used to guide the delivery of comprehensive health entitlements. Treatment guidelines will be based on evidence regarding the most costeffective interventions."

HTA unit budgeted @R368m in 2018 budget by country's Treasury



health

- "Define an evidence-based benefit package for Kenyans under Universal Health Coverage: (A list of services that should be prioritized and made available taking into account the cost effectiveness, impact on financial protection, and equity in access across the population). Define a framework for
- Define a framework for institutionalization of Health Technology Assessment (HTA)."

Cabinet Secretary, Government Gazette, July 2018





#### Strengthening EU cooperation beyond 2020

In 2016, the European Commission started work on strengthening EU cooperation on Health Tachnology Assessment in response to calls from EU countries, the European Parliament, and interested parties to ensure its sustainability beyond 2020. In its 2017 Work Programme, the European Commission announced that this would extend to improving the functioning of the single market for health technologies.

#### Legislative proposal

A legislative proposal was adopted by the European Commission on 31 January 2018. It is the result of an extensive reflection process following the results of the impact assessment outlined below. It has been sent to the European Parliament and the Council with the aim of adoption by 2019. The proposal and related information can be found here:



3rd Edition, 2017

- "MOH should develop a transition plan to ensure sustainable financing and operational management of the supply chain to transition to a government led supply chain system
- MOH should establish a National Pricing Committee for Medicines
- MOH should institutionalise Health Technology Assessment to provide technical advice to the NPC"

National Health Summit 2018 - plan

Ministry of Health Ghana



2018 Aide Memoire

# ...who use HTA to decide listing and pricing of new

the Success of HTA Develop







Outcome Report On "Health Technology Assessment of Intraocular Lenses for treatment of Age-related Cataracts in India"

> "The benefit packages for Phacoemulsification with foldable lens and small incision cataract surgery with rigid PMMA lenses may cost as 9606 INR and 7405 INR respectively"

Health Technology Assessment in India (HTAIn) Secretariat, Department of Health Research, Ministry of Health and Family Welfare

> July-2018 New Delhi



# Systematic assessment of value makes markets work better: Evidence from South Africa



"Standards of care, evidence-based treatment protocols and processes for conducting [HTA] to assess the impact, efficacy and costs of medical technology, medicines and devices relative to clinical outcomes must be developed. Findings... should be published to **stimulate competition** in the market, to **mitigate information asymmetry**, and to **inform decisions about strategic purchasing by the public and private sectors**."



### But wise choice of products and evidence informed purchasing not enough

While procurement remains the largest cost category, 60% of the final Price to Patient is determined by National and sub-National distribution.



### **Commercial margins for medicines suffer from great disparity** On paper, the price list allows an average mark-up of 111% from import or manufacture – to cover taxes and distribution to patient.

As an example: the average mark-ups for the top 20 most commonly claimed for medicines in one West African country – from 90 facilities with an electronic claims system (provisional analysis).



Mark-up %

Importation / manufacturing price

Margin for distribution / taxes

These price and margin disparities are echoed across many countries in Sub-Saharan Africa.



This document is confidential and is intended solely for the use and information of the client to whom it is addressed.

### Health Commodity Market Size in 50 Low and Middle Income Countries, 2015

Private, government, and donor/NGO financing as a share of the total estimated market for health commodities by country income groups Note: Percentages may add to more than 100 due to rounding

100 Share (%) of total estimated market size 75 50 25 0 low-income (n=18) \$4.4B lower-middle-income (n=25) \$45.4B upper-middle-income (n=7) \$13.2B government donor/NGO Share/Embed

In the \$45bn LIC and LMIC market, as countries become richer and donor funding subsides, private (mostly OOP) financing of commodities dominates.

# HTA in Thailand: \$768 Million Dollars Saved within 5 Years





Threshold analysis for price of oxaliplatin

#### Use of HITA information in price negotiation

	Medicine	Original price (THB)	Reduced price (THB)	Potential saving (THB per year)
	Tenofovir	43	12	375 million
	Pegylate interferon alpha-2a (180 mcg)	9,241	3,150	600 million
	Oxaliplatin (injection mg/25 ml)	50 8,000	2,500	152 million

From 2010-2014 Using Purchasing price in 2009 as basic price			
Item	Saving (Bht)		
ARV Non CL	5328.59 million Bht (177.61 million USD)		
ARV CL	10165.19 million Bht (353.84 million USD)		
J2 and Clopidogrel	6830.37 million Bht (227.68million USD)		
Flu vaccine	266.47 million Bht (8.88 million USD)		



#### Journal of Evidence, Training and Quality in Health Care



Volume 108, Issue 7 , 2014, pages 397-404

What is the contribution of health-related evaluations to decision-making in healthcare? Experiences from 7 selected countries

#### main emphasis

The use of economic evaluation for the pharmaceutical industry in Thailand

Cost-benefit assessments as an instrument for establishing the list of medicines to be reimbursed in Thailand

Yot Teerawattananon <sup>1</sup>, Nattha tritasavitol <sup>1</sup>. 🎍 🎴, Netnapis Suchonwanich <sup>2</sup>, Pritaporn Kingkaew <sup>1</sup>



With in 5 years implementation: Saving 768 million USD

# The time is now!: Evidence from the UK

"10 studies analysed provided a potential netbenefit of  $\pounds$  3.0 billion based on a value of  $\pounds$  20,000 per QALY, and  $\pounds$  5.0bn based on a value of  $\pounds$  30,000 per QALY. The cost of the HTA Programme since 1993 was  $\pounds$  317m, with the estimated overall cost of the HTA Programme £367m. We conclude that **12 per cent of the** calculated potential net benefit would cover the total cost of the HTA Programme from 1993 to 2012."



Returns on research funded under the NIHR Health Technology Assessment (HTA) Programme

Economic analysis and case studies

Susan Guthrie, Marco Hafner, Teresa Bienkowska-Gibbs, Steven Wooding



"Action expresses priorities."

— Mahatma Ghandi



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# Thank you!