

Round Table 10: Essential medicines and technologies

Chair: Inniss Donville

Introduction: Public investment in NCDs in Barbados

Speaker: Hans Hogerzeil: **Overview of key issues**

Panellists:

Mahmoud Fikri: **Pooled procurement**

Ivan Dedov: **Technologies for NCDs**

David Beran: **The supply of insulin**

Nils Billo: **The supply of asthma inhalers**

Moderated discussion

Rosy Henson: **Summary of key observations, Action Points**

Inniss Donville

Minister of Health, Barbados

Essential medicines and technologies for Non-Communicable Diseases

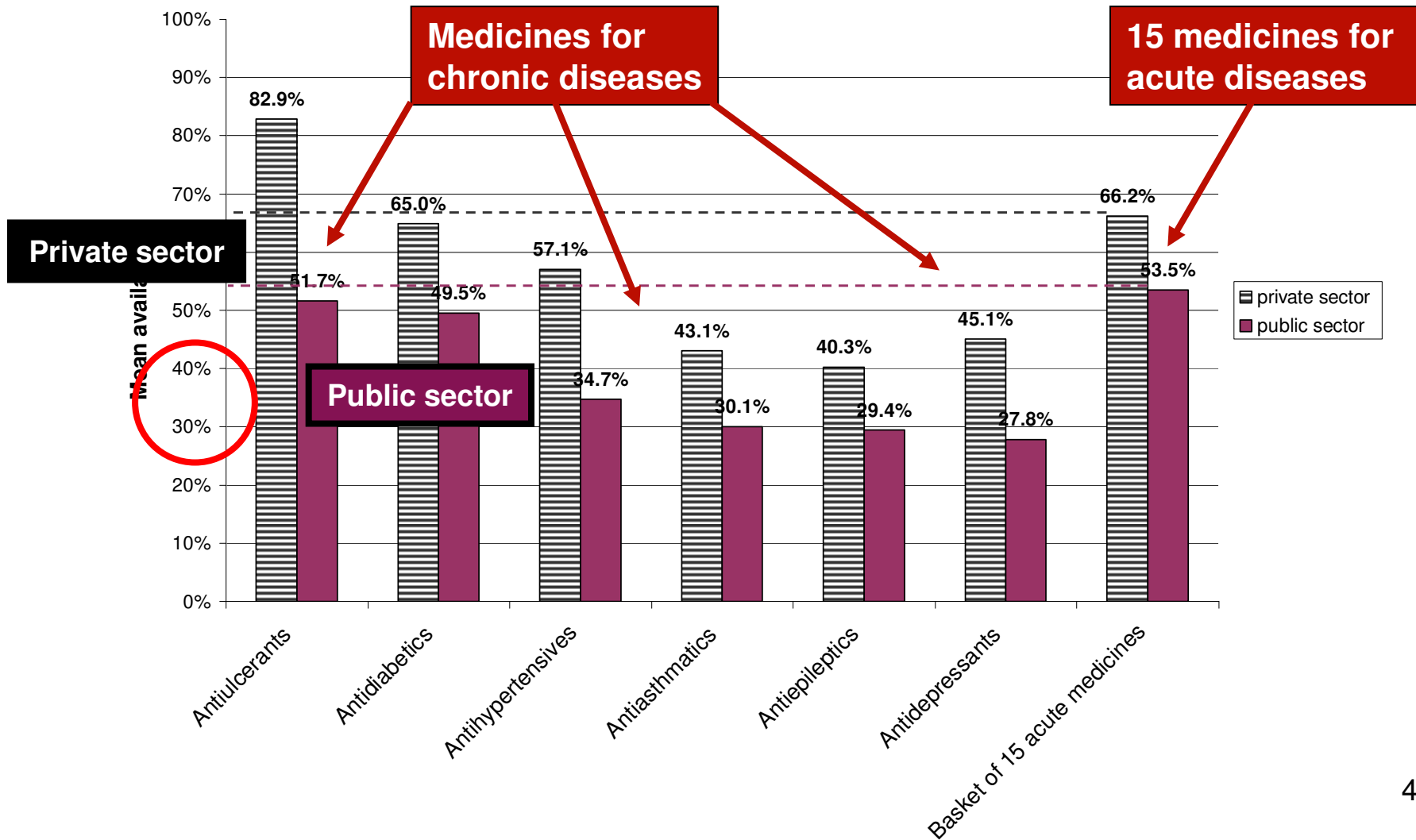


Hans V. Hogerzeil, MD, PhD, FRCP Edin



**Director, Essential Medicines and Pharmaceutical Policies
World Health Organization, Geneva**

Average availability of medicines for chronic diseases is much lower than for acute diseases (generic medicines, 40 LIC/MIC countries)

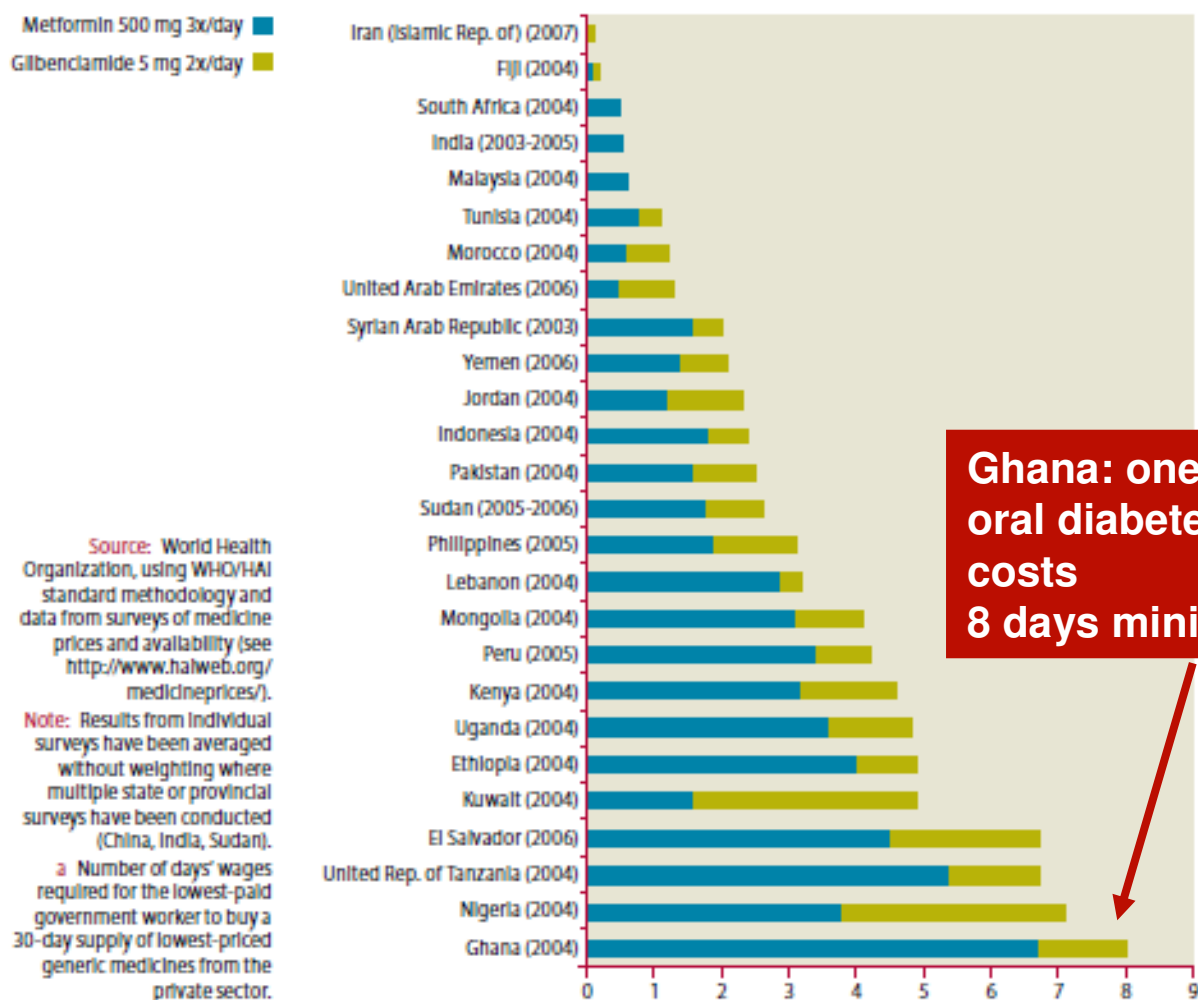


Essential Medicines for Non Communicable Diseases: What is the problem?

- The major burden of disease related to NCDs cannot be reduced without equitable access to essential medicines
- In 40 low/middle income countries essential medicines for chronic diseases are only available in 36% - 55% of health facilities
- Low availability in public sector force patients towards the private sector, where prices are unaffordable
- Chronic treatment constitutes catastrophic health expenditure, pushing people into poverty
- Quality can be a problem. For example, 20% of anti-hypertension medicines were substandard and 70% of doubtful stability (Rwanda)
- Strong involvement of pharmaceutical industry and patient groups in the development of diagnostic and clinical guidelines requires careful management of conflict of interest

Low public sector availability forces patients to the private sector, where medicines are unaffordable (diabetes, 26 countries)

Affordability of treatment for diabetes (*days' worth of wages^a*)



High prices, low availability and poor affordability can have many causes

Low public sector availability:

- lack of resources or under-budgeting**
- inaccurate forecasting**
- inefficient procurement / distribution**
- low demand/slow-moving products**

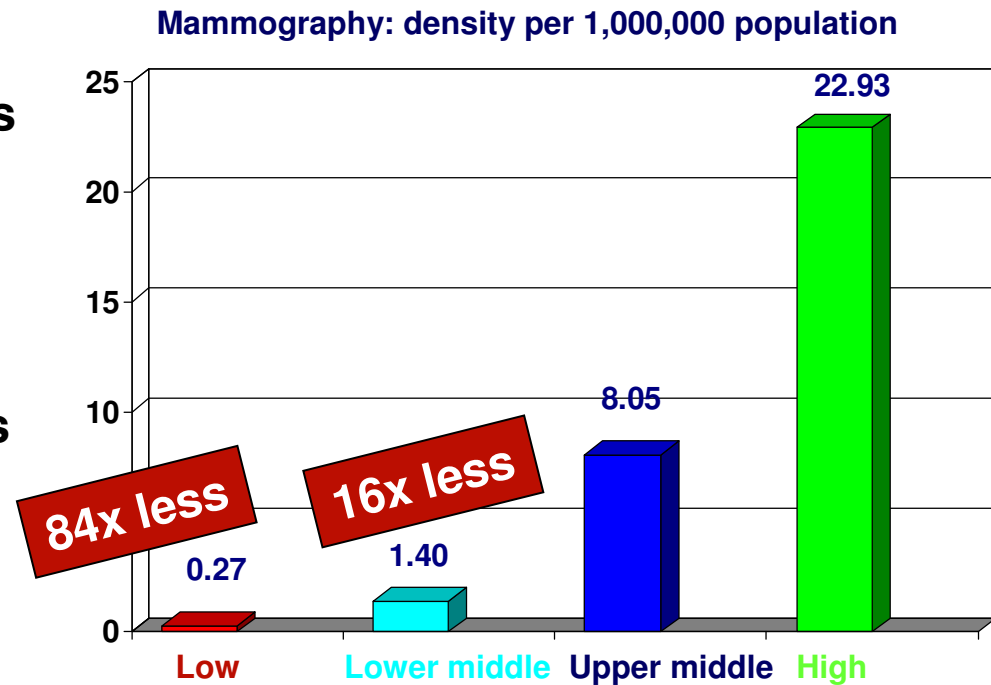
High private sector prices:

- preference for branded products**
- high manufacturer's selling price**
- high import costs, taxes and tariffs**
- high mark-ups (wholesalers, retailers, dispensing doctors)**

Medical technology for NCDs: what's the problem?

- There are 1.5 million different medical devices, in 10,000 types of generic device groups
- Devices are poorly regulated; very few countries have a national policy on devices
- The majority of the world's population do not have access to safe and appropriate medical devices
- *Example*
Computer tomography:
HICs: 1 / 65,000 population,
LICs: 1 / 3.5m population

50x less



Example: Essential Medicines for Diabetes I and II: Challenges for LICs and MICs

- **Insulin and (self) diagnostics are expensive for the national health budget and for individuals. The price of analogue insulin is 3-5x human insulin; insulin pens cost 2-3x more**
- **Low availability in public sector forces patients towards the private sector, where prices are unaffordable through preference for branded products, duties and high margins**
- **In LICs and MICs a family living on US\$1-2/day needs 25-50% of the monthly income for one vial of insulin in a private pharmacy.**
- **Insulin treatment constitutes catastrophic health expenditure, pushing people into poverty or death**



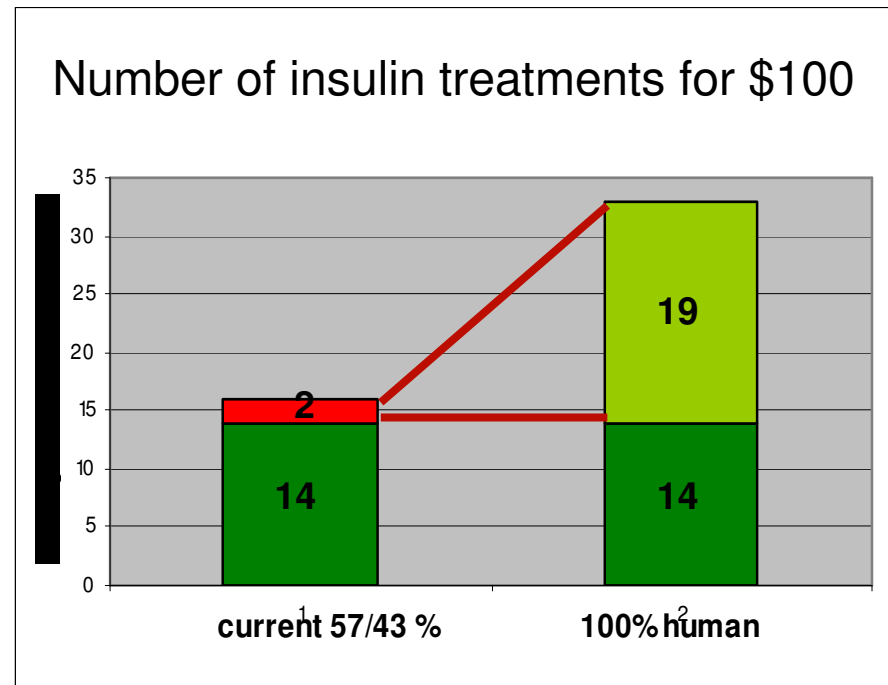
**Diagnostics and syringes
need to be added**

Policy options to improve access, quality and rational use of essential medicines and devices

- **Rational selection**: Evidence-based independently developed clinical guidelines and national lists of essential medicines and technologies (diagnostics, devices)
- **Adequate, equitable and sustainable financing**: social health insurance, focus on generic medicines and affordable devices in the public sector
- **Affordable prices**: Generic competition, controlled margins, separate prescribing and dispensing, reimbursement measures, therapeutic substitution, differential pricing, voluntary licenses

Example: Impact of rational selection on \$100 budget for insulin
Changing 57% spent on analogues into 100% generic human insulin
doubles the number of patients treated for the same budget

- **Example: In Kyrgystan (2009)**
57% of insulin expenditure is spent on new analogues
- **Analogues cost at least 10x more than human insulin**
- **The \$100 insulin budget buys \$43 (14 patients on human) plus \$57 (2 patients on analogues) = 16 insulin treatments**
- **2/16 patients on analogues consume 57% of the budget**
- **Changing 2/16 treatments from analogues to human insulin increases the total number of treatments from 16 to 33**



Policy options to improve access, quality and rational use of essential medicines for NCDs (2)

- **Medicine quality and safety**: Strong national regulatory agency, regulation of promotion, post-marketing surveillance
- **Rational use**: A dedicated national organization to promote quality use of medicines through
 - evidence-based clinical guidelines (manage conflict of interests)
 - restricted supply and reimbursement lists
 - medicines and therapeutics committees
 - prescription monitoring
 - financial (reimbursement or price) incentives

Recommendations to improve access to affordable essential devices and technologies

WHO:

- Model List of essential technologies for prevention, diagnosis, treatment
- Develop and promote better regulations for medical devices,
- Promote best practices in procurement and donations

Member States:

- Develop national units for technology planning, assessment, selection
- Promote universal access to essential medical devices

Medical technology industry, researchers and innovators:

- Better technical and financial solutions for affordable devices
- Improve distribution, maintenance and service

Professional associations:

- Capacity building in research, management and best use of devices

Funding and donating agencies:

- Promote integral solutions on appropriate technologies, maintenance and rational use

Saving lives with the right (to) medicines



[http://www.who.int / medicines](http://www.who.int/medicines)

[http://www.who.int / medical_devices/en/](http://www.who.int/medical_devices/en/)

Mahmoud Fikri

**Deputy Minister of Health,
United Arab Emirates**

Ivan Dedov

**President,
National Academy of Medical
Sciences
Russian Federation**

David Beran

**Project Coordinator
International Insulin Foundation**

Nils Billo

**Executive Director,
International Union against
Tuberculosis**

Rosie Henson

Senior Policy Adviser

**Department of Health and Human
Services, USA**

Action Points for Member States

- **Develop and implement evidence-based national clinical practice guidelines, leading to rational selection of essential medicines and technologies for training, supply and reimbursement**
- **Strengthen their national regulatory authorities to monitor and promote the quality, safety and efficacy of medicines and technologies, in support of generic policies**
- **Establish and implement national policies to promote the prescription, supply and use of generic medicines for the treatment and secondary prevention of NCDs**
- **Work closely with national public-interest NGOs in monitoring the situation, identifying and promoting successful interventions and informing the general public about the prevention and treatment of NCDs**

WHO and international community

- **WHO should update evidence-based model clinical practice guidelines for NCDs, and the Model List of Essential Medicines, to guide national governments in the selection of essential medicines and technologies for NCDs**
- **WHO should support Member States in strengthening their national regulatory capacity through (a) development of international norms and standards, (b) technical support and (c) the inclusion of priority medicines for NCDs, such as human insulin, in the WHO/UN Prequalification programme**
- **WHO and public-interest NGOs should continue to collaborate in monitoring and promoting the availability, price, affordability and use of essential medicines for NCDs**