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The experience of the WHO-CHOICE Method for setting priorities

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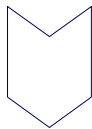
Outline

- ▶ • Why WHO-CHOICE?
- What is WHO-CHOICE?
- Progress and future developments



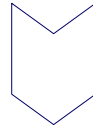
Three fundamental health financing problems

Revenue collection



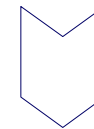
Raise sufficient funds, and raise them efficiently and equitably

Pooling



Share the financial risks of falling ill and using services

**Purchasing/
Provision**



Ensure efficiency and equity in the way resources are used



The Health Financing Agenda

1. *Raise additional funds where health needs are high and revenues insufficient – external and domestic;*
2. *Reduce reliance on out of pocket payments where they are high, by moving towards pre-payment;*
3. *Take additional steps where necessary to improve social protection by ensuring the poor and other vulnerable groups have access to needed services, personal and non personal;*
4. **Improve efficiency of resource use by focusing on the appropriate mix of activities to fund,** *appropriate inputs in production of health services, provider payment methods and other incentives for efficient service provision and use, and financial, contractual and other relationships with the non-government sector;*
5. *Promote transparency and accountability in health financing systems.*



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CHOosing Interventions that are Cost-Effective (WHO-CHOICE)



Policy Questions:

- ò Do the resources currently devoted to a particular health problem achieve as much as they could?
- ò Do the resources currently devoted to the health sector achieve as much as they could?
- ò What services should be in an insurance package or subsidized by government?
- ò How best to use additional resources if they become available?

www.who.int/choice



Rationale for WHO-CHOICE

- Limited consistent data on the costs & effects of different health interventions with which to support investment decisions
- Not feasible or affordable to generate all evidence needed via empirically-based trials in every country
- Methodological limitations of conventional, modes of economic analysis (context-bound; heterogeneous methods/settings; failure to account for economies of scope and scale) to allow translation across or within settings



CHOICE Methods

1. Evaluate both existing and possible new interventions
– is the current mix efficient, then start asking about how to use additional resources
2. Evaluate interventions undertaken by themselves and in all possible combinations – economies of scope + interactions in terms of effectiveness
3. Build in possible economies and diseconomies of scale
– 3 standard levels of coverage – 50%; 80%; 95%



CHOICE Analyses

Step 1: WHO (with partners) provide estimates for 14 sub-regions of the world in a way that countries to modify and adapt themselves – Generalizable

Step 2: work with countries to localize the sub-regional analyses – country-contextualization



Regional CHOICE Databases

Three major phases of documentation

- **Methodology:** >10 peer reviewed publications plus book – Tan-Torres Edejer et al. *Making Choices in Health: WHO Guide to Cost-Effectiveness Analysis, 2003*
- **Risk factors** – World Health Report 2002; Lancet (Murray et al. 2003) systolic blood pressure and cholesterol; BMJ (Shibuya et al. 2003) tobacco control.
- **Millennium Development Goals** for health – 7 papers published in the British Medical Journal 2005-6 on CE of interventions for HIV/AIDS, TB, malaria, child and maternal health as well as methods

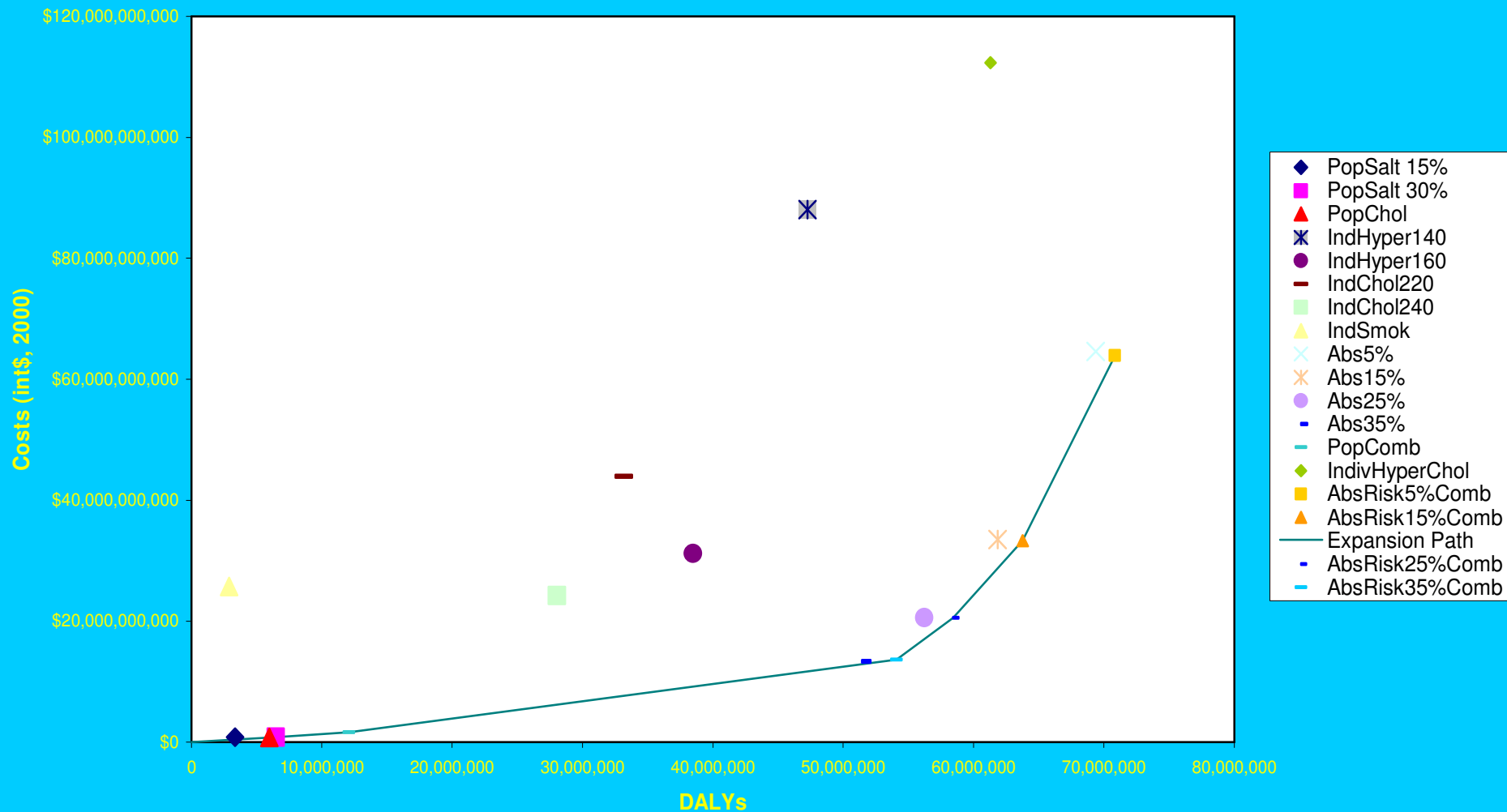


Risk Factors

- Unsafe sex
- Associated with cardiovascular disease (e.g. blood pressure, cholesterol);
- Smoking;
- Heavy alcohol use;
- Associated with children under 5 years – e.g. micronutrient deficiencies
- Associated with maternal mortality and morbidity – particularly iron
- Unsafe water and sanitation

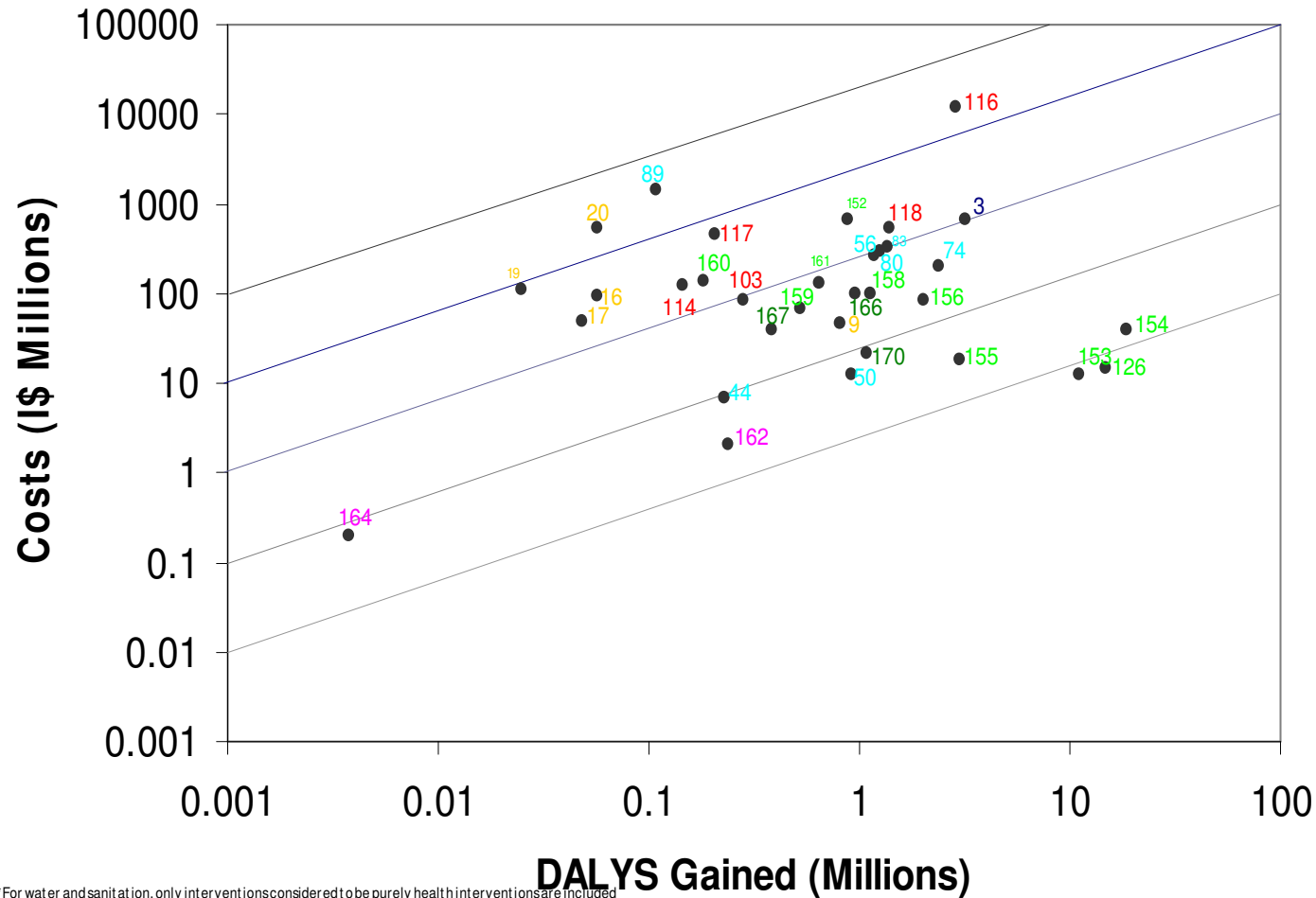


Expansion Path for CVD Risk factor interventions AmrB



Cost and Effects

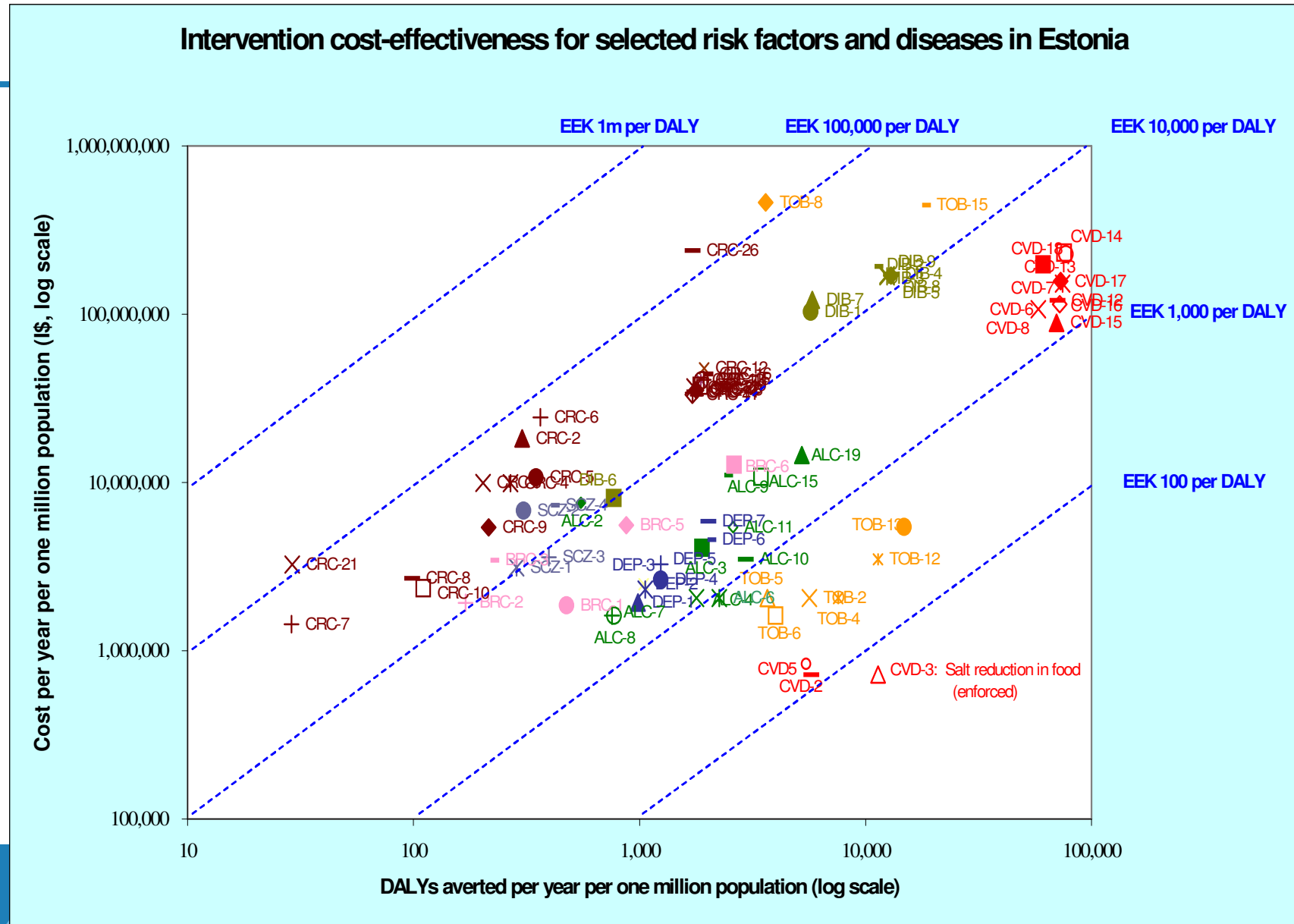
Selected Interventions AmrB (Log Scale)



*For water and sanitation, only interventions considered to be purely health interventions are included



Level 2: National database (e.g. Estonia)



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What have we learnt?

- Prevention is not necessarily better than cure. Some is, some is not. e.g. tax based prevention is often very c/e
- Prevention is not necessarily cost saving, certainly in terms of financial costs. But it can be a very effective way of improving health
- Cost-effectiveness ratios tell only part of the story – the size of the potential health benefit is also important
- Interactions between interventions must be considered – the c/e of screening cholesterol varies with the existence of prevention and promotion
- Cost-effectiveness of expanding coverage is not constant

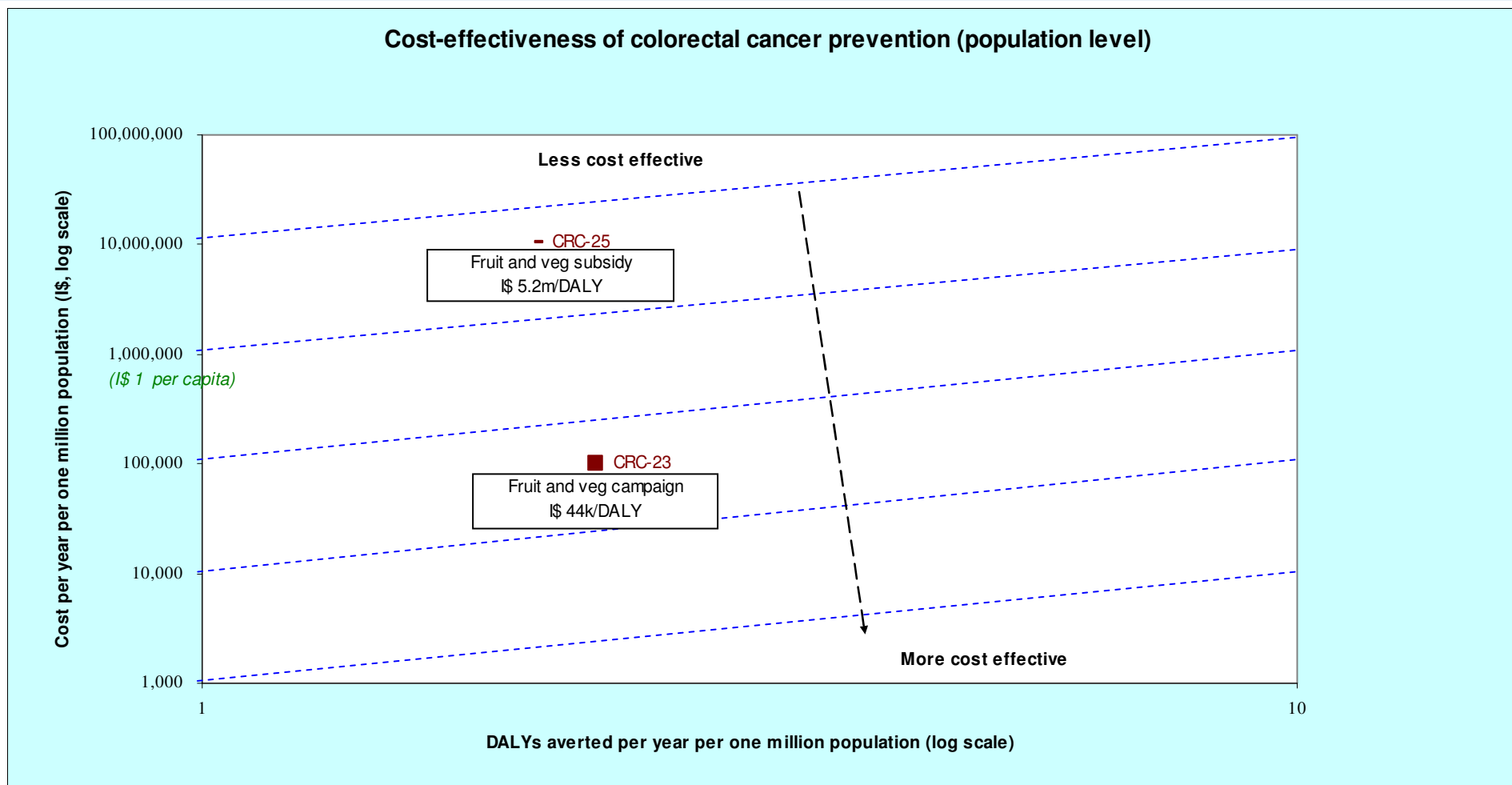


Current Activities

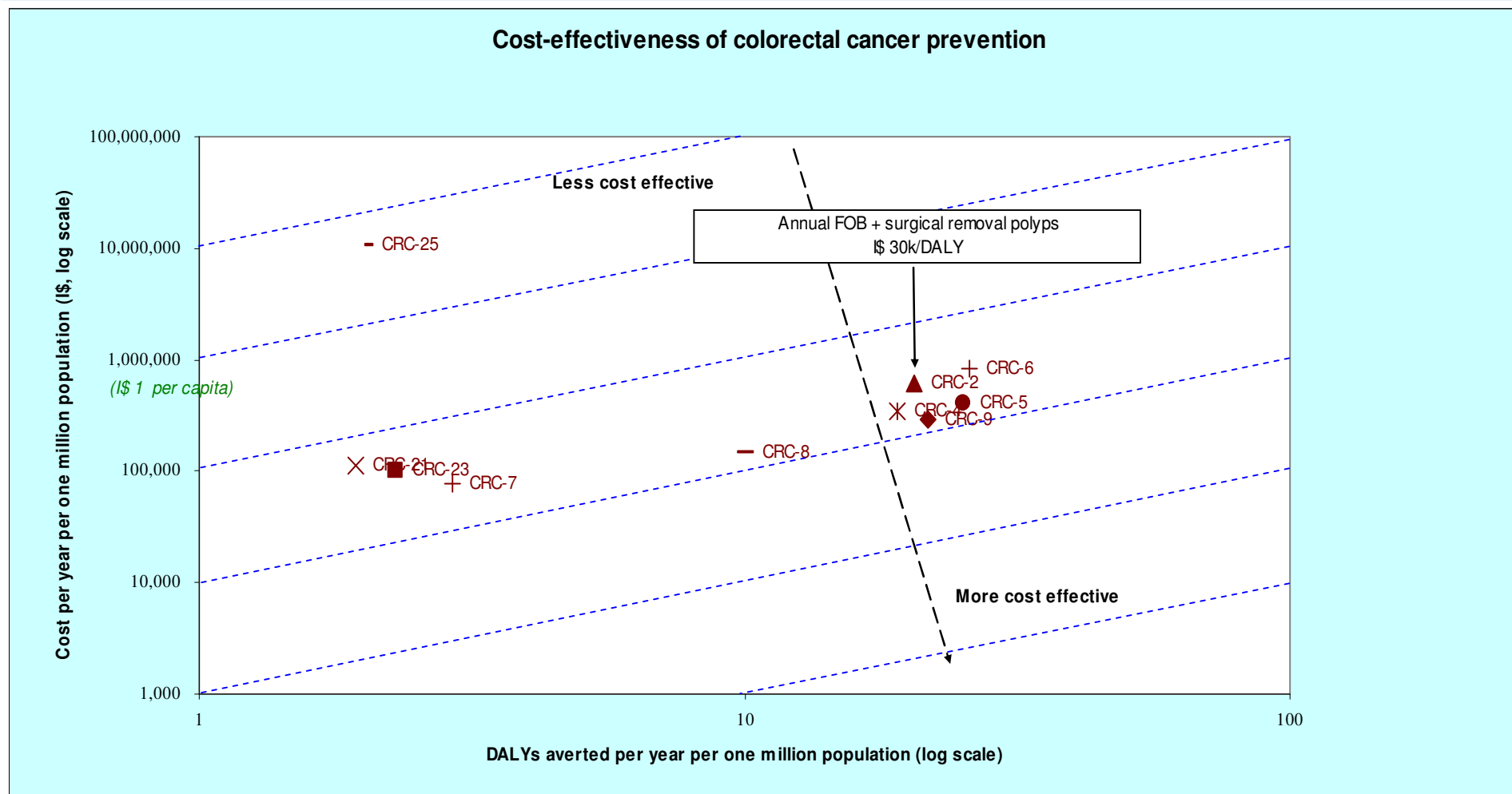
- Including CVD (including treatment and interactions with diabetes and smoking, diet and physical activity with OECD); major cancers; neuro-psychiatric; injuries; asthma; COPD; hearing loss
- Updated the unit prices for the regional analysis - <http://www.who.int/choice/country/en/index.html>
- Country contextualization: Thailand (full). Sri Lanka, Ghana (mental health). Kyrgyzstan, Argentina (CVD).
- 2008/9: Road traffic injury prevention, tobacco control: Viet Nam; CVD prevention and control, Colombia



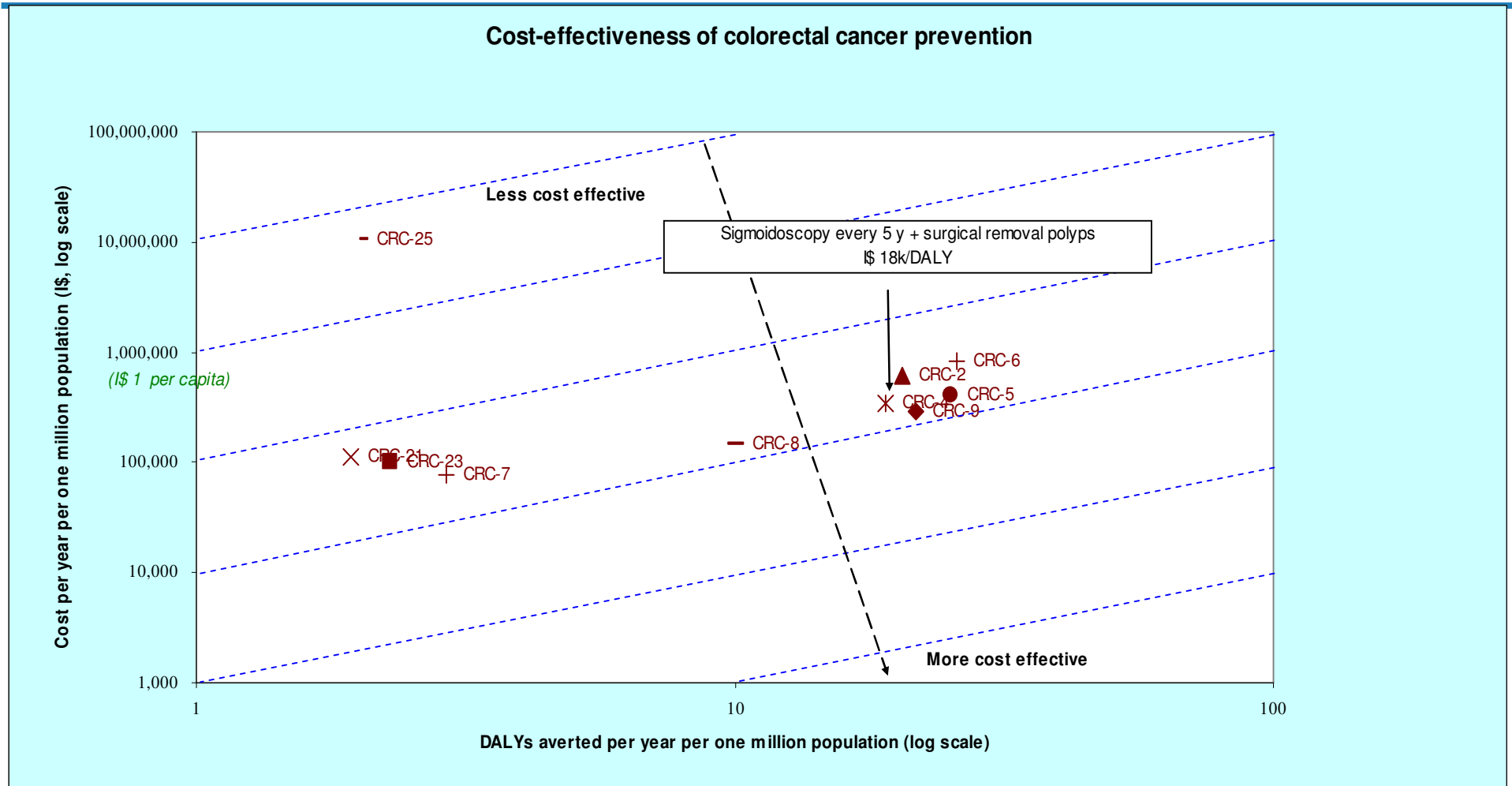
- Starting with colorectal cancer (higher burden), some population-level preventive interventions are potentially of interest:
 - Fruit and vegetable campaign (I\$ 44k / DALY)
 - Fruit and vegetable subsidy (I\$ 5.2m / DALY).



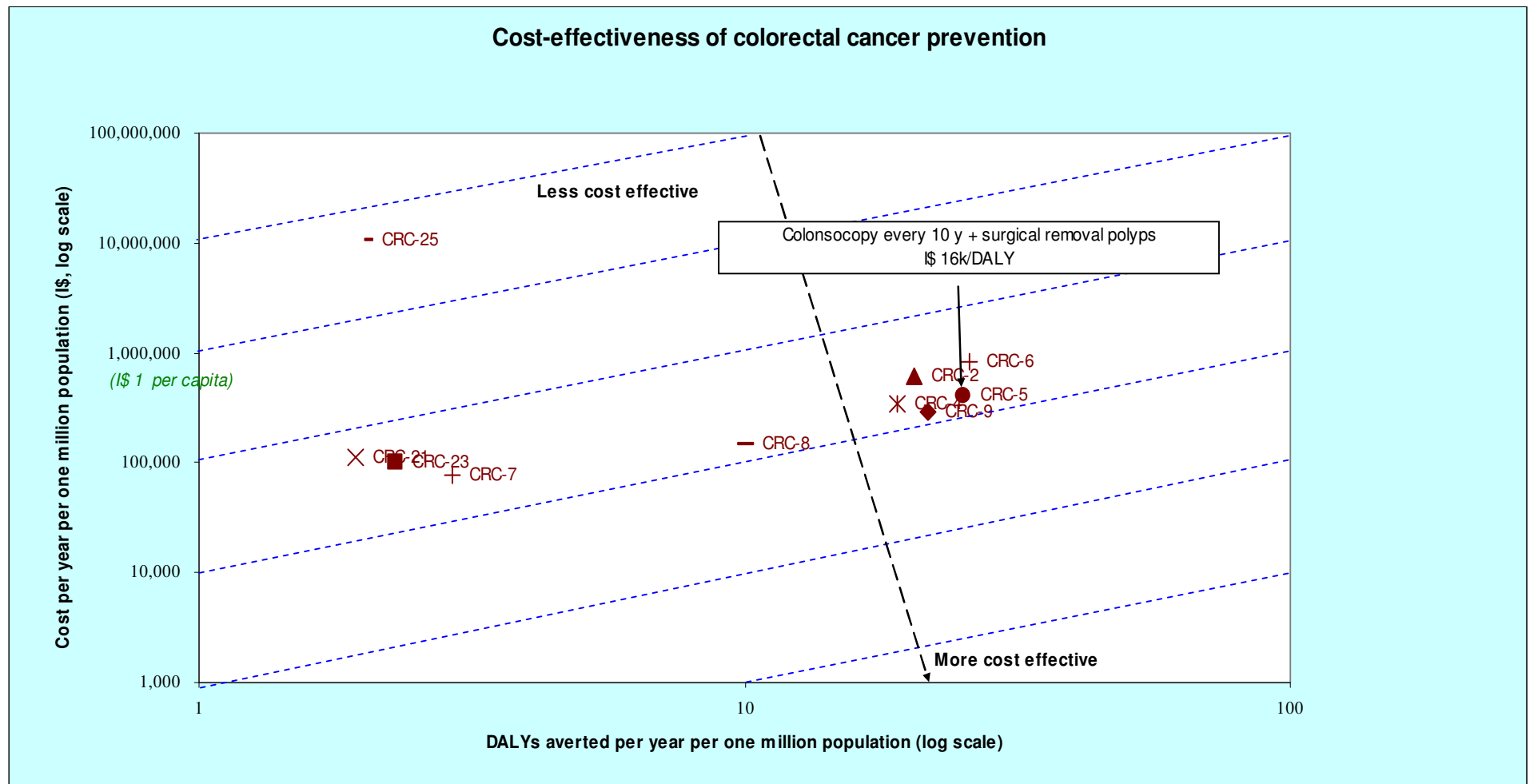
- **Screening is more cost-effective:**
 - **Annual FOB plus polyp removal (\$ 30k / DALY).**



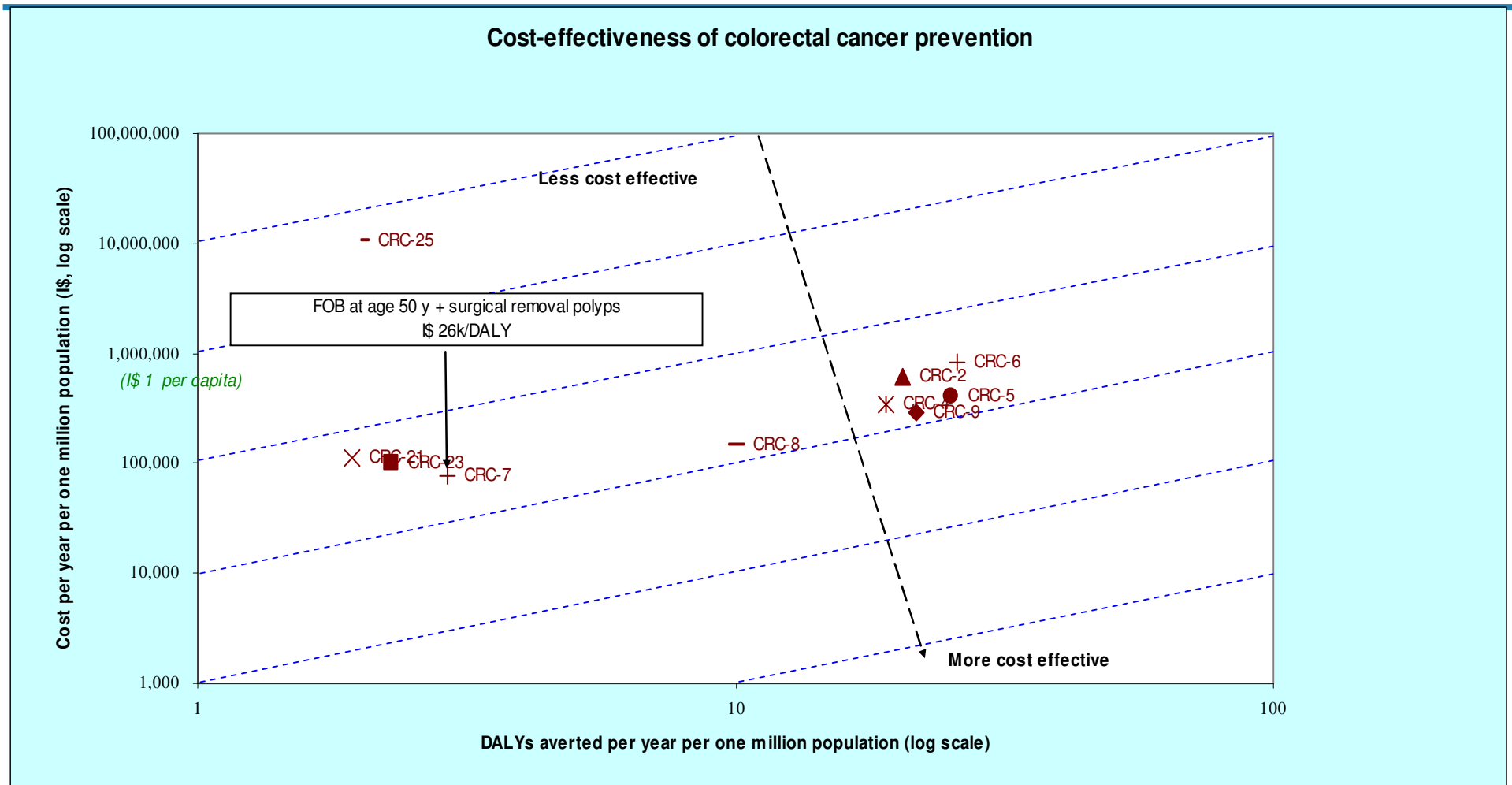
- Or, sigmoidoscopy every 5 years plus polyp removal (I\$ 18k/DALY)



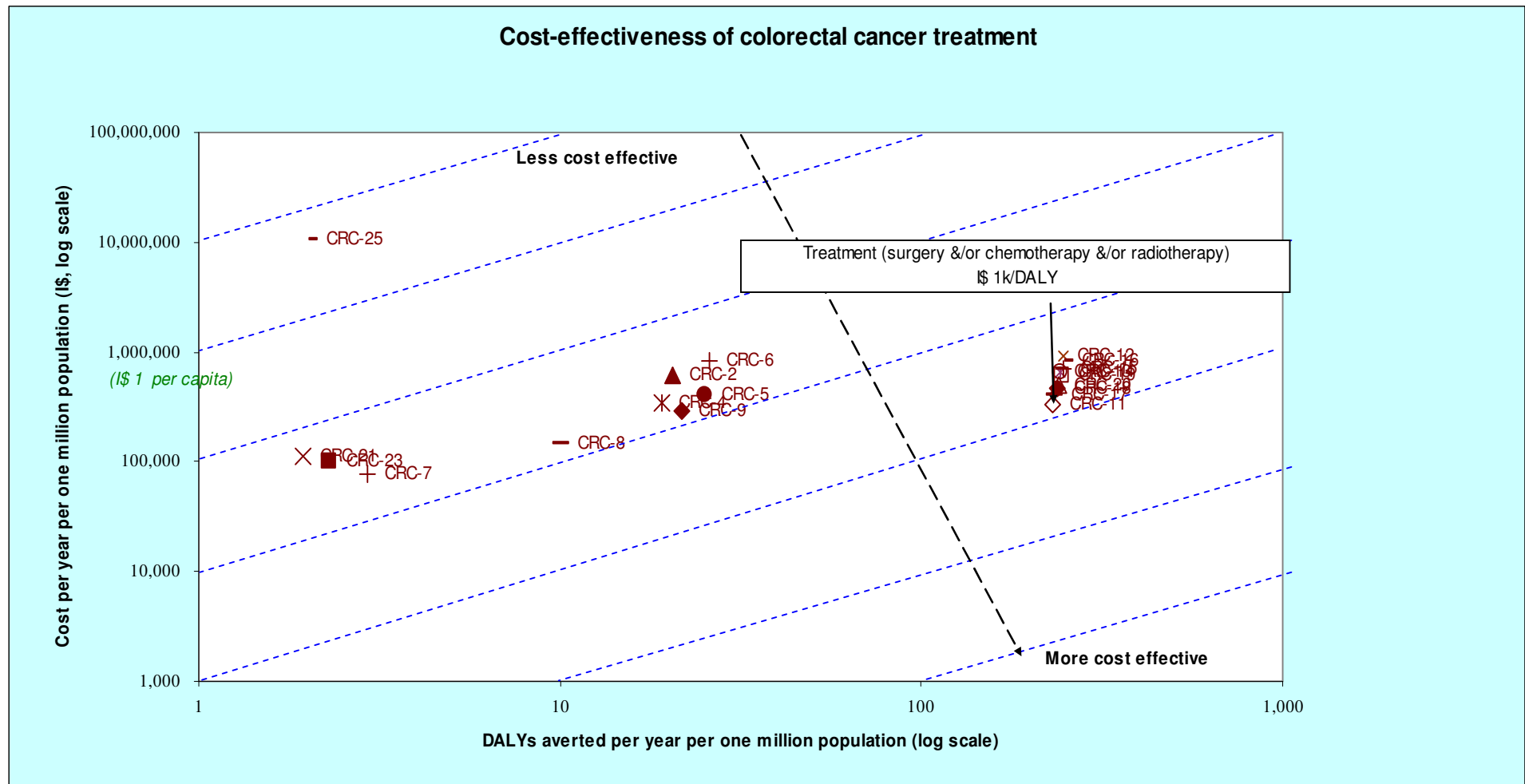
- Or, colonoscopy every 5 years plus polyp removal (I\$ 16k/DALY).



- **Once-per-lifetime screening at age 50 may also be an attractive option for developing countries**



Treatment for cancer is also relatively cost effective, as is treatment and screening combined



Conclusions

- 1. Encouraging the use of efficient interventions – important part of an overall approach to health system financing**
- 2. Can apply to govt services/actions, insurance package, or activities govt wants to encourage in private sector**
- 3. Only one part of the efficiency story**
- 4. Only one part of priority setting – practicality; acceptability; equity; ethical issues – experimenting with deliberative polling**



Spare slides



A long way to go

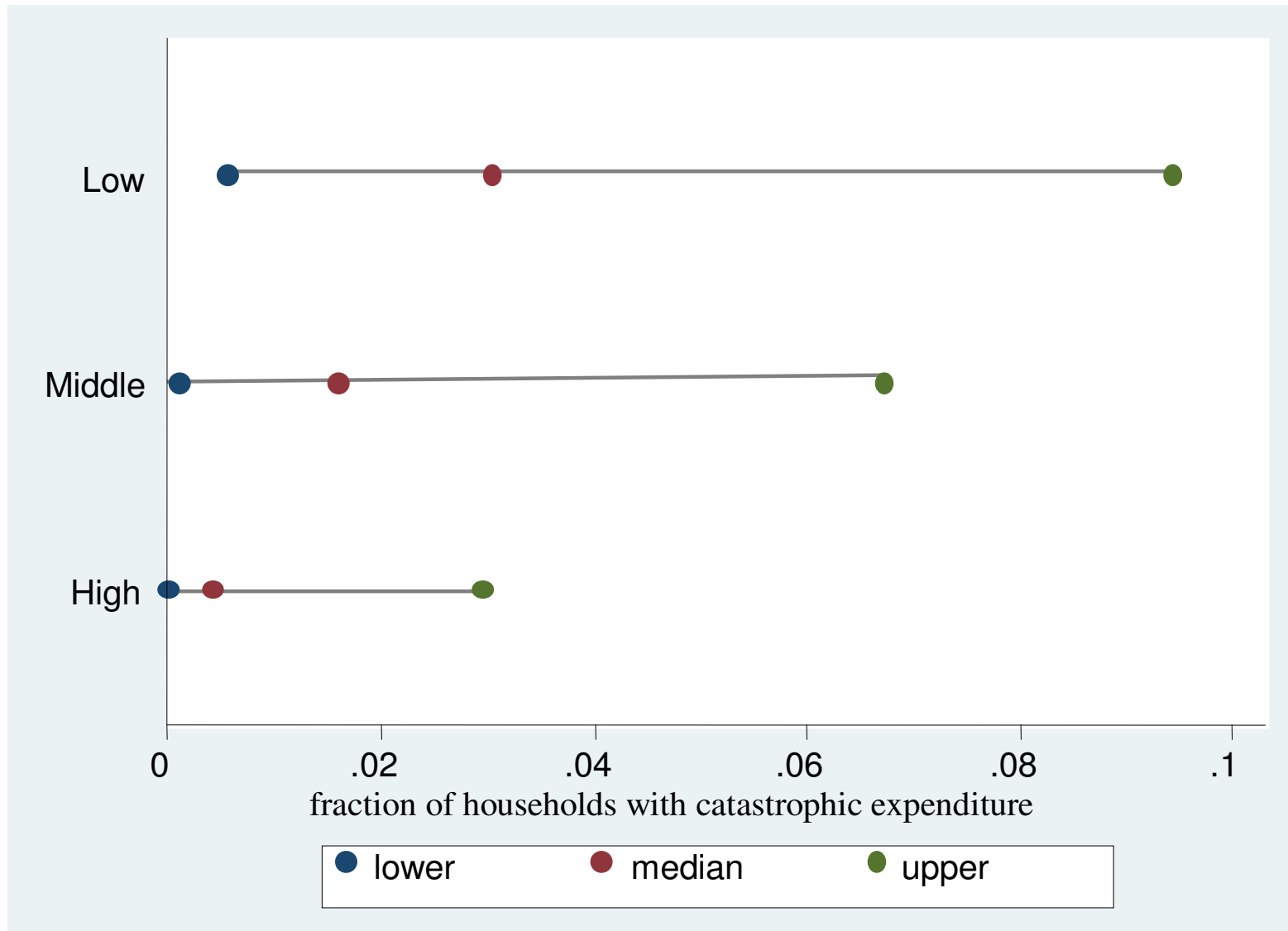
- In 2005, 58 Member States spent less than US\$50 per person per year on health, from all sources – public, private, NGO and external sources (e.g. donors, lending agencies)
- 33 spent < 25\$ per person per year
- 11 spent < \$10/person per year
- Compares to approximately \$2500 OECD, >\$6600 USA

- ❖ *75% of health expenditure in typical low income country raised domestically, over 50% from user fees*
- ❖ *results in 150 million people suffering financial catastrophe and 100 million pushed under poverty line, simply because of user-fees*
- ❖ *Considerable non-use and non continuation, though harder to estimate accurately*

- ❑ The rich benefit more from public funding than the poor in many settings
- ❑ **Very cost-effective interventions are not undertaken, when high cost, low effectiveness interventions are done**



Figure 2. Distribution of catastrophic expenditure among countries by income group



Leading Causes of Mortality and Burden of Disease Latin America and Caribbean, 2004

Mortality

%

• Ischaemic heart disease	11.4
• Cerebrovascular disease	8.2
• Lower respiratory infections	5.5
• Diabetes mellitus	5.0
• Violence	3.9
• COPD	3.1
• Road traffic accidents	3.0
• Hypertensive heart disease	2.4
• Cirrhosis of the liver	1.9
• Nephritis and nephrosis	1.9

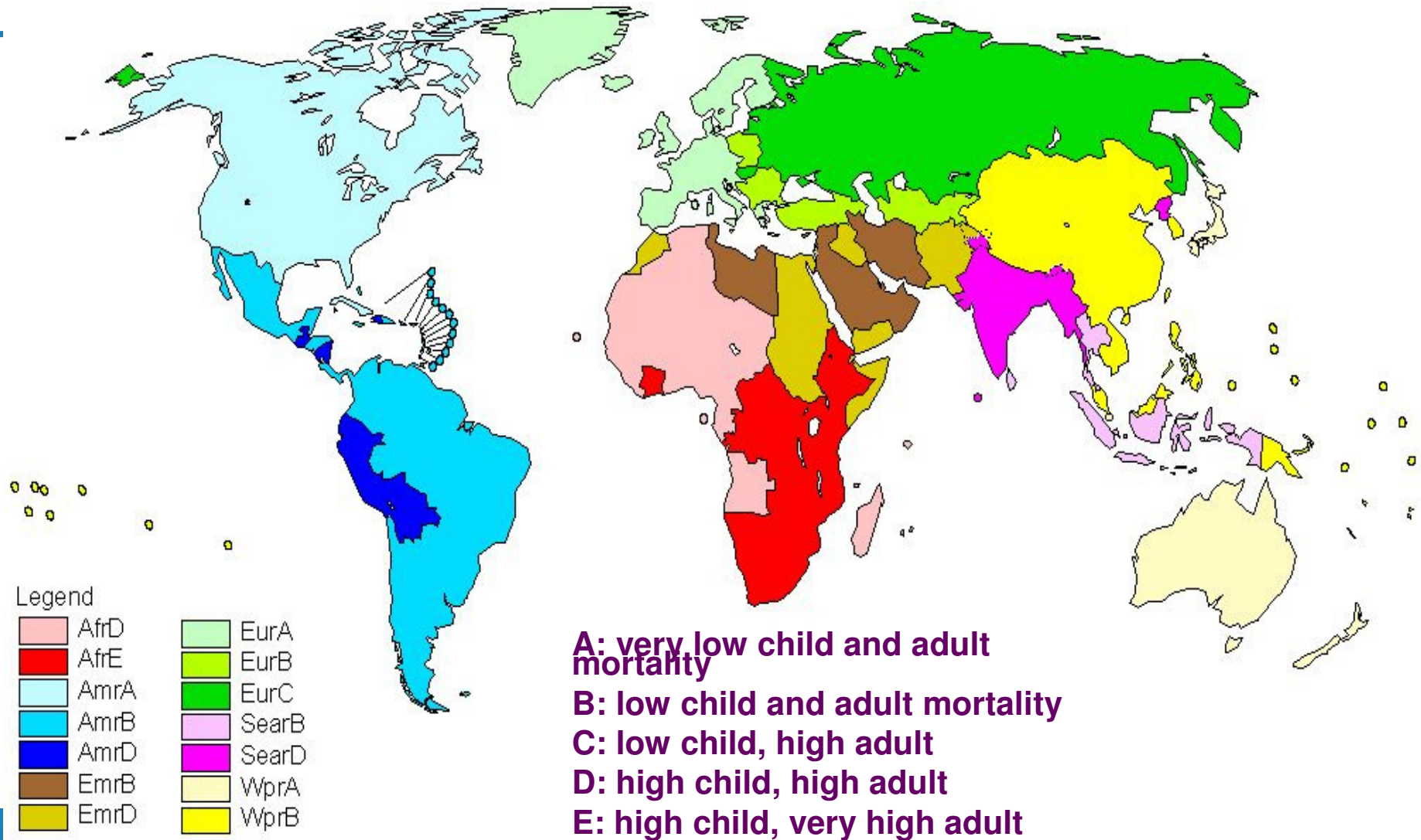
DALYs

%

• Depression	6.3
• Violence	6.0
• Ischaemic heart disease	3.5
• Lower respiratory infections	3.4
• Road traffic accidents	3.3
• Alcohol use disorders	3.0
• Cerebrovascular disease	2.7
• Diabetes mellitus	2.7
• Diarrhoeal diseases	2.5
• Congenital anomalies	2.3



14 WHO mortality sub-regions



Level 1: Regional database

