



DCP3

Disease  
Control  
Priorities

*economic evaluation for health*

ACE Meeting  
March 13-15, 2013  
Washington, DC

# Volume 5: Cardio-metabolic and Respiratory Diseases

## Volume Editors

D. Prabhakar, CCDC, India

Tom Gaziano, Harvard Medical School

Jean Claude Mbanya, University of Yaounde

Yangfeng Wu, The George Institute Beijing

Rachel Nugent, UW Global Health

# Scope and Status

- Vol. 5 covers the major NCDs except cancer
- Large editorial team not all fully engaged
- Currently 22 chapters but consolidating
- Lead authors have been confirmed for all but 4 chapters, co-authors for many
- Roughly half of outlines received
- Have had 3 partial authors meetings
- Chapter drafts expected fall 2013



# Volume Overview

1. Global and regional burdens of morbidity and mortality
2. Risk factors for cardio-metabolic disease
3. Vascular and respiratory conditions
4. Policies and platforms to deliver services, including integrated services and health promotion
5. Economics of addressing cardio-metabolic and respiratory diseases

# Links to other DCP3 volumes

- Common risk factors, eg with cancer (tobacco), child development (nutrition), mental health (alcohol), air quality
- Co-morbidities, eg TB/diabetes, mental health, HIV/AIDS
- Treatment overlaps, such as acute management of stroke, surgery (CHD)
- Cross-cutting issues: drug supply chains, quality of care, integrated service delivery

# What's New?

## Part 4: Policies and Platforms

- Integrated delivery for co-morbid diseases
- Innovations in health management
  - community management (patient-driven?)
  - e-health
  - CHWs

## Part 5: Economics

- ECEAs for primary and secondary population prevention
- Multisectoral BCA?

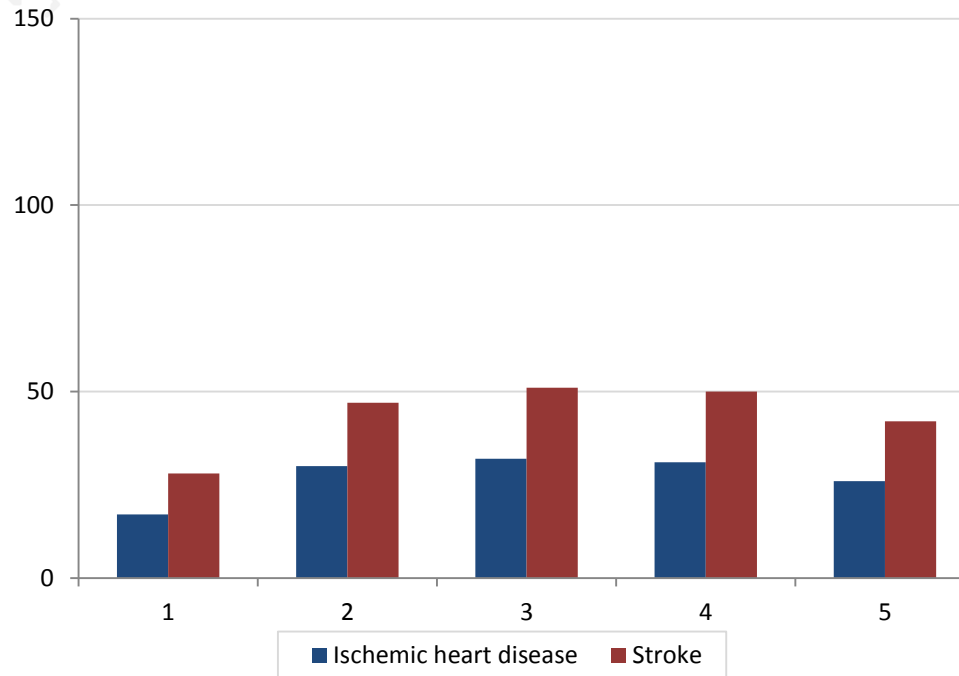
# Preliminary Messages

- Guidance on technology choices less important than guidance on access and quality improvement
- Address drug choices, adherence, supply chain
- Need combined management of risk factors
- Both over- and underweight are important
- Choose pharma intervention for primary or secondary depending on indication

# ECEA example: South Africa salt reduction

- South Africa's proposed policy is **complex**: involving **many food groups**, coverage assumptions, and a **mass media** campaign
- Target consumption is **5g/day** for all ethnic groups
- Our preliminary intervention is “**whatever policy is required**” to reach 5g/day in each quintile
- The **difference** between current and target **salt consumption levels** was used to **calculate reductions in blood pressure** (He and MacGregor 2004)

# CVD deaths averted



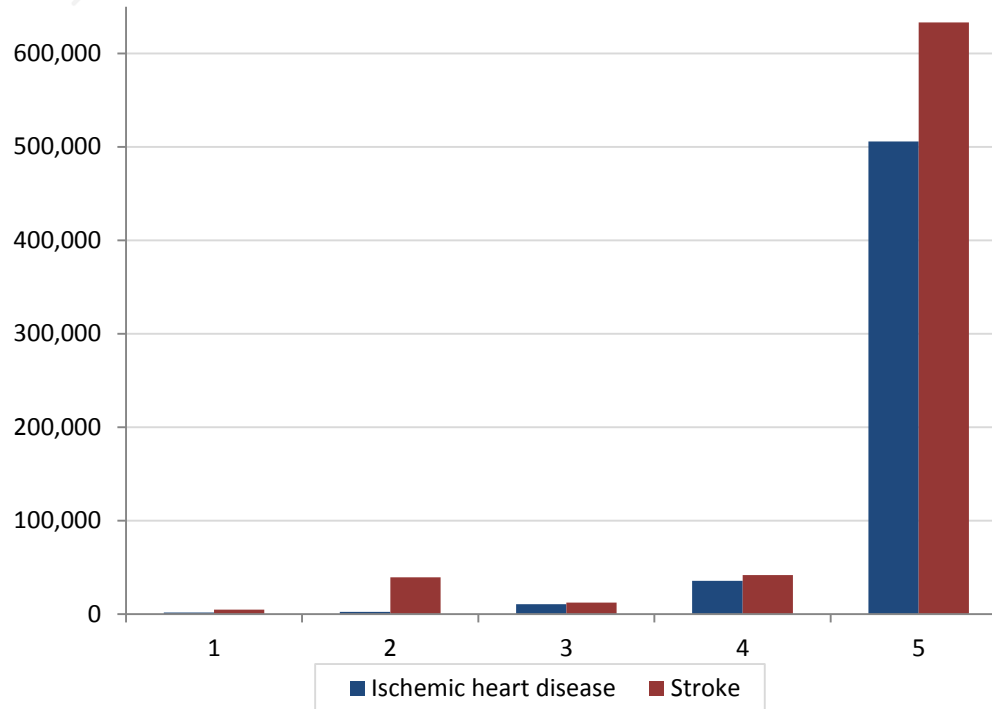
	Q1	Q2	Q3	Q4	Q5	total
<b>Stroke</b>	28	47	51	50	42	<b>218</b>
<b>Ischemic heart disease</b>	17	30	32	31	26	<b>136</b>

354 CVD deaths averted per 1 million adult population over 40 years

→ Projected **4425 total deaths averted nationally in 1 year**



## Private expenditures averted (ZAR)



	Q1	Q2	Q3	Q4	Q5	total
<b>Stroke</b>	4533	39339	12031	41587	633169	<b>730659</b>
<b>Ischemic heart disease</b>	1599	2160	10497	35617	505687	<b>555560</b>

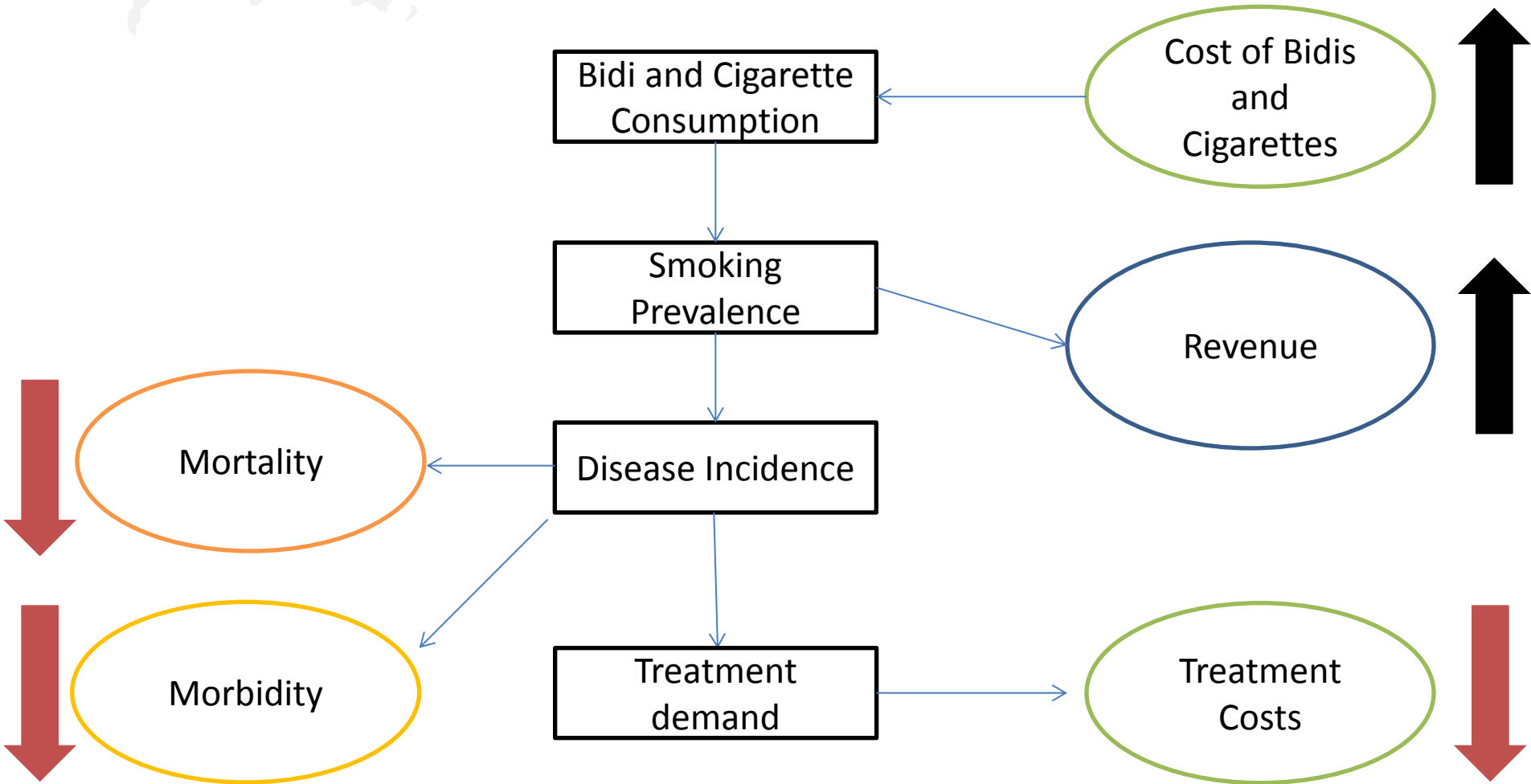
ZAR 1.3 million (~USD 160,000) total; ZAR 1.1 million in Q5

**Why so much financial protection for the wealthiest?**

# Tobacco Taxation

- Tobacco taxation can reduce smoking and increase government revenue.
- Effects may vary across income quintiles.
- Concerns that a tax will disproportionately harm the poor.
- Need to understand how a policy will impact different groups to make appropriate policy recommendations.

# Modeling Economic and Health Costs of Tobacco



# Conclusions

- Tobacco taxation reduces smoking-related mortality across all income groups with the bulk of those health gains being concentrated in the two lowest income quintiles.
- We also find that individuals reduce their expenditures on both tobacco- and medical treatment related to tobacco consumption.
- Tobacco taxation in India produces health gains for all income quintiles and reduces total tobacco-related expenditures in all but the richest quintile.