

NUS Initiative to Improve Health in Asia (NIHA) Forum 2012

A Framework for Setting Research Priorities

Prof Ho Teck Hua
Vice President (Research Strategy)

Dimension 1: Target Disease

- Communicable Diseases (CDs)
 - ✓ Influenza
 - ✓ Tuberculosis
 - ✓ SARs

- Non-Communicable Diseases (NCDs)
 - ✓ Diabetes
 - ✓ COPD (Chronic Obstructive Pulmonary Disease)
 - ✓ Hypertension

Mortality Rates in Selected Asian countries, 2008

Countries	Age-Standardized Mortality Rates per 100,000 Population (2008)	
	CDs	NCDs
<i>Developed Countries</i>		
Japan	40	273
Singapore	66	313
<i>Developing Countries</i>		
Bangladesh	344	702
Cambodia	478	748
Lao PDR	376	771

Source: WHO. World Health Statistics, 2012.



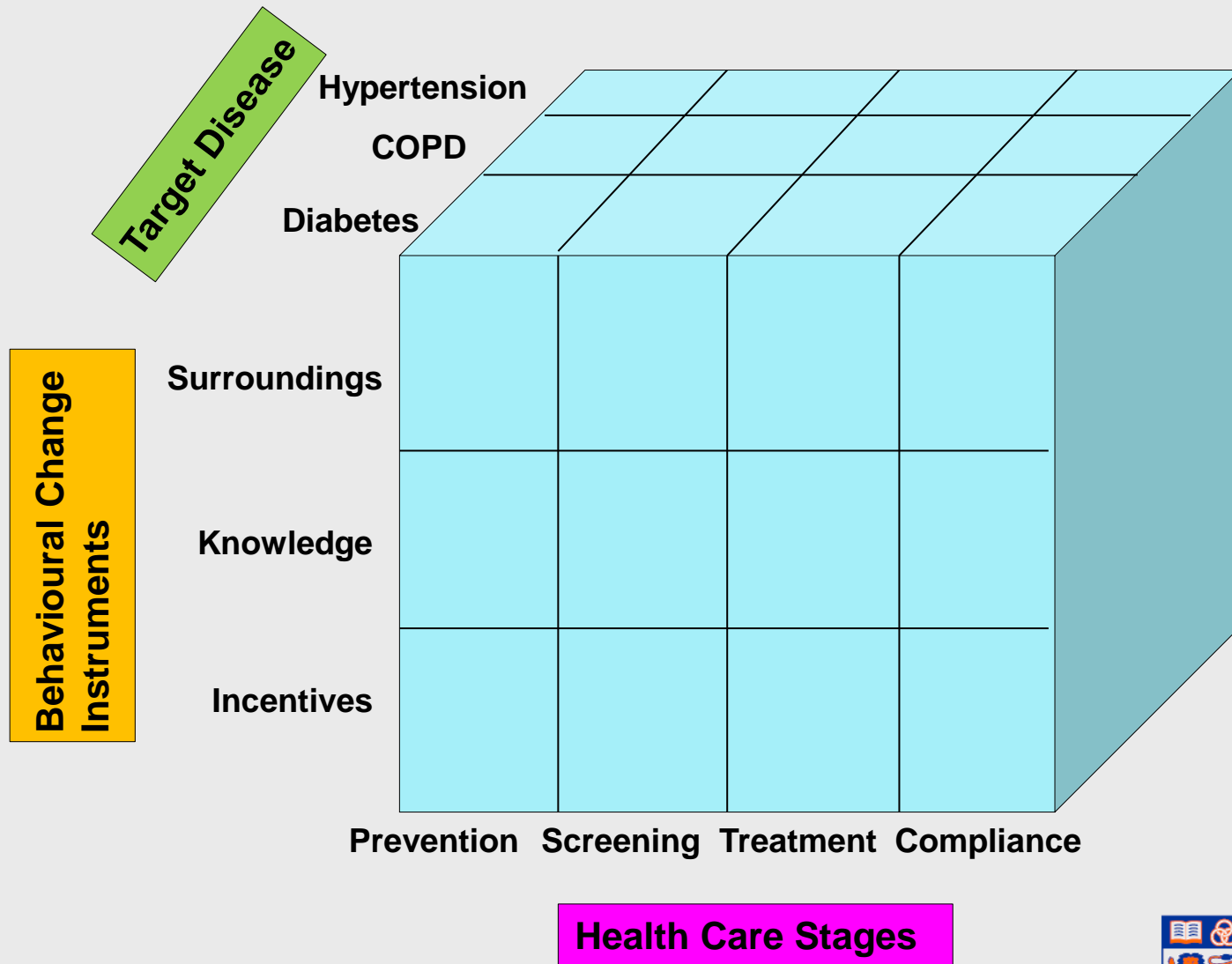
Dimension 2: Health Care Stages

- Prevention
- Screening
- Treatment
- Compliance

Dimension 3: Behavioural Change Instruments

- Surroundings
- Knowledge
- Incentives

A Research Framework

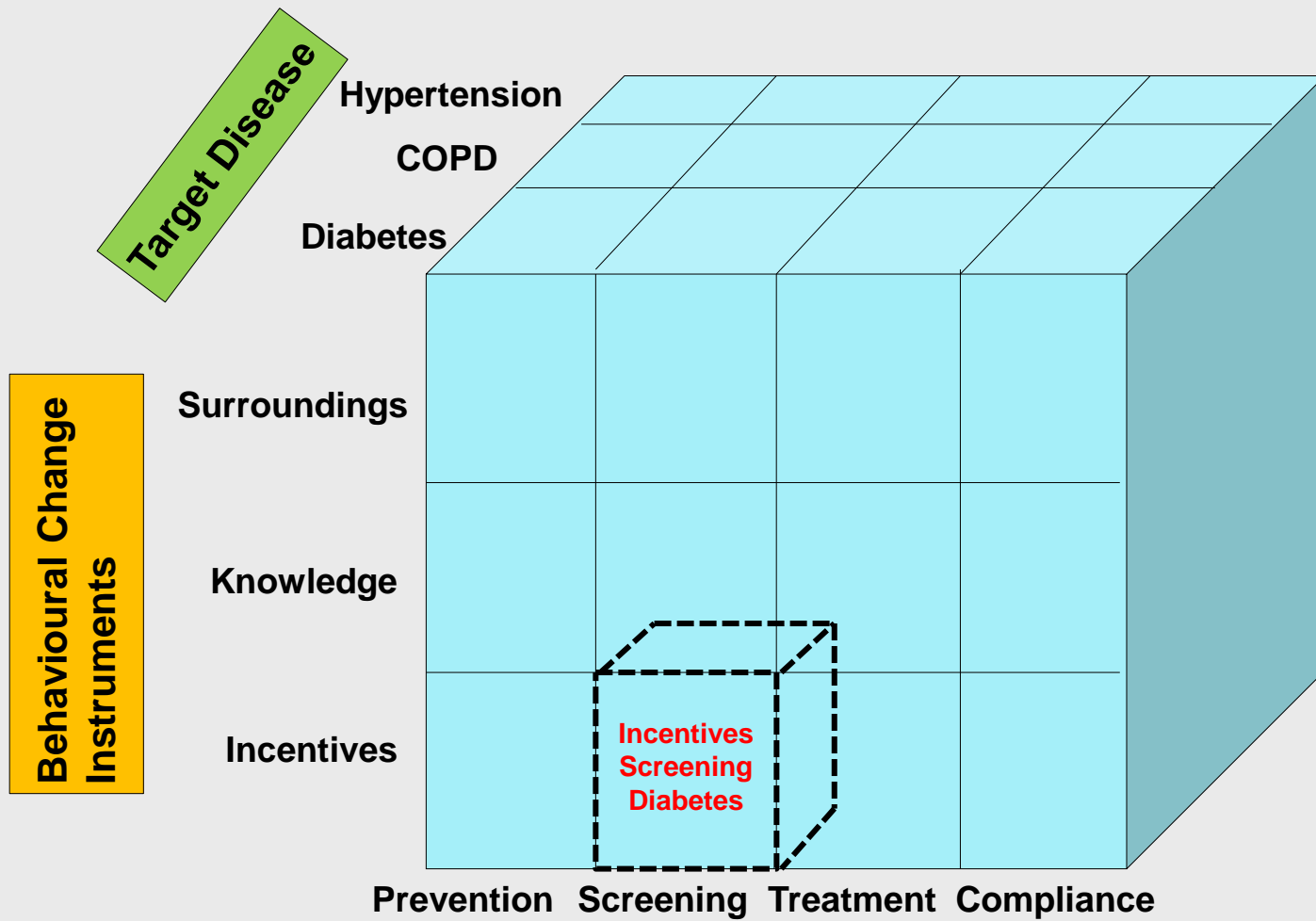


Examples on Research Priorities

Example 1: Diabetes

Countries	Projected Number of People with Diabetes in Selected Asian Countries (in Millions)	
	2011	2030
China	90.0	129.7
India	61.3	101.2
Bangladesh	8.4	16.8
Indonesia	7.3	11.8
Philippines	4.2	7.4

Source: International Diabetes Federation, *Diabetes Atlas 2011* (taken from NIHA Forum White Paper 2011, "Turning the Tide: Prevention of Diabetes in Asia" by NUS and Harvard School of Public Health).



Health Care Stages

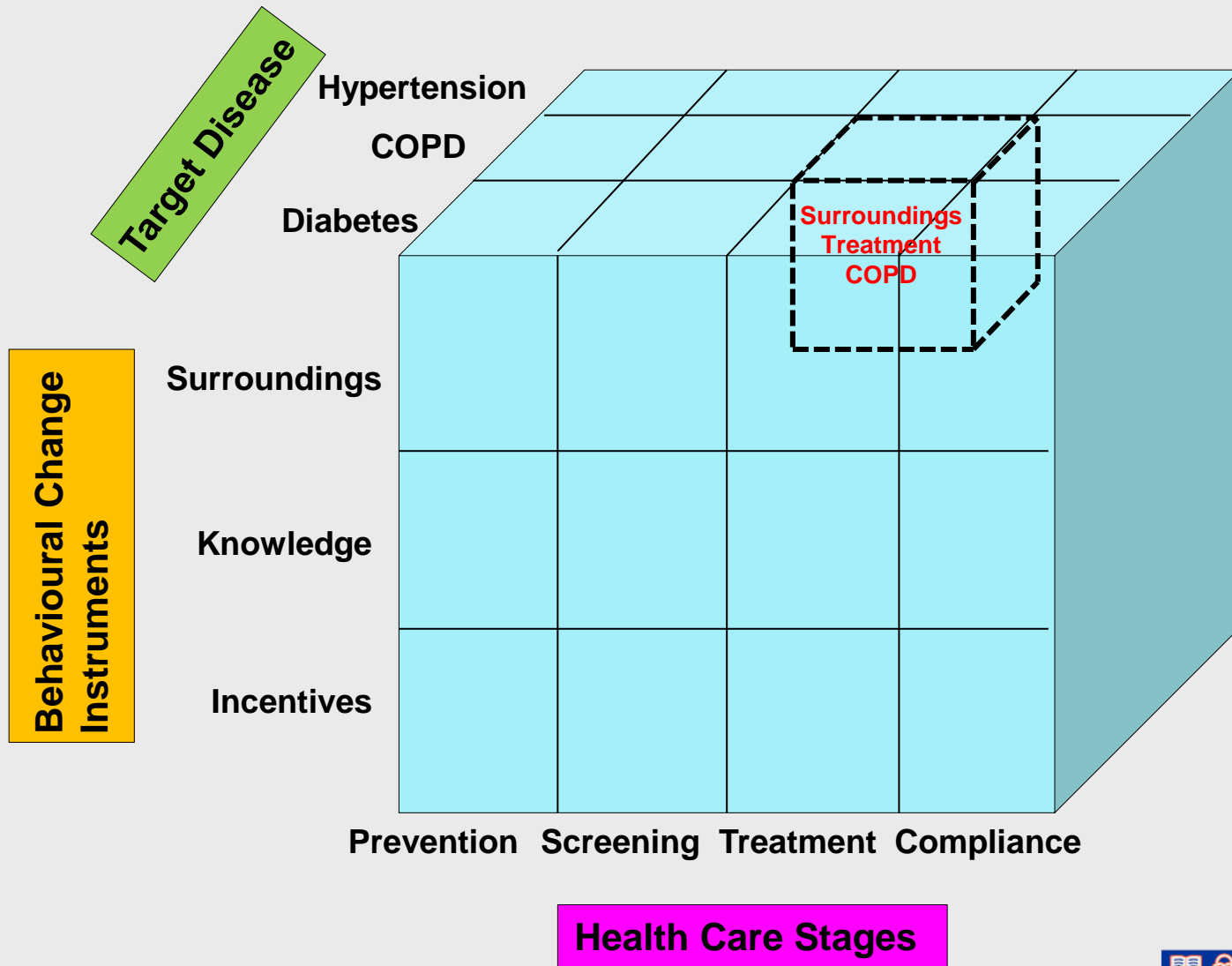
Example 2: COPD

- ✓ Primary cause of COPD is tobacco smoke (through tobacco use or second-hand smoke)
- ✓ Ranked worldwide as the sixth leading cause of death in 1990
- ✓ Projected to be the fourth leading cause of death worldwide by 2030
- ✓ More than 3 million people died of COPD in 2005 (5% of all deaths globally)
- ✓ Total deaths from COPD are projected to increase by more than 30% in the next 10 years

References:

<http://www.who.int/mediacentre/factsheets/fs315/en/index.html>

http://en.wikipedia.org/wiki/Chronic_obstructive_pulmonary_disease



Research Approaches

- Focus on '**Proof-of-Concept**' experimentation: Conduct field intervention to prove whether a concept works
- Emphasize on **scalable** behavioural change experimentation