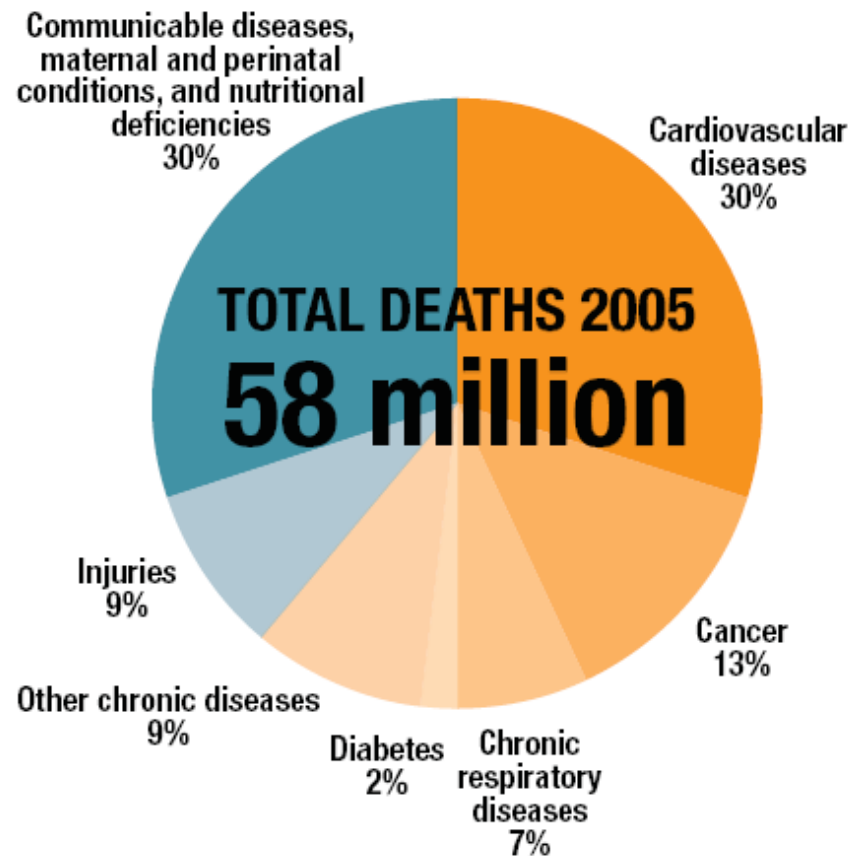


HEALTH PROMOTION FOR OVERCOMING HEALTH WORKFORCE SHORTAGE AGAINST CHRONIC, NON- COMMUNICABLE DISEASES THREATS IN THE ASIA-PACIFIC REGION



Masamine Jimba
The University of Tokyo, Japan
1 December, 2009 in HK

NCDs' IMPACT



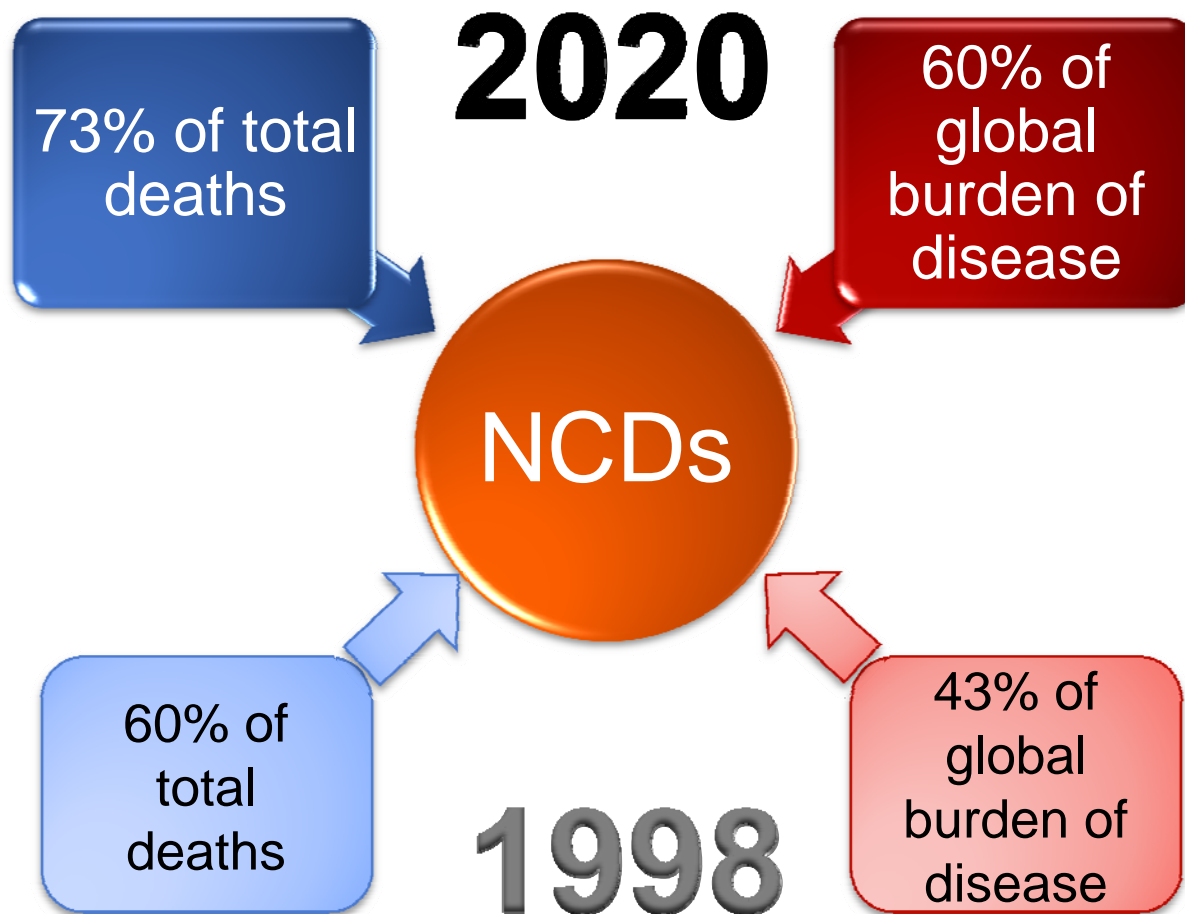
60% of all deaths are due to NCDs



80% of them: in low- and middle-income countries

Source: Preventing CHRONIC DISEASES a vital investment, WHO 2005

BASED ON CURRENT TRENDS,



Source: 2008-2013 Action Plan for the Global Strategy for the Prevention and Control of Non communicable Diseases, WHO 2008

LITTLE GLOBAL COMMITMENT FOR NCDS

US\$2.9 billion

**Official Development Aid
(ODA) to the health sector
in 2002**

0.1%

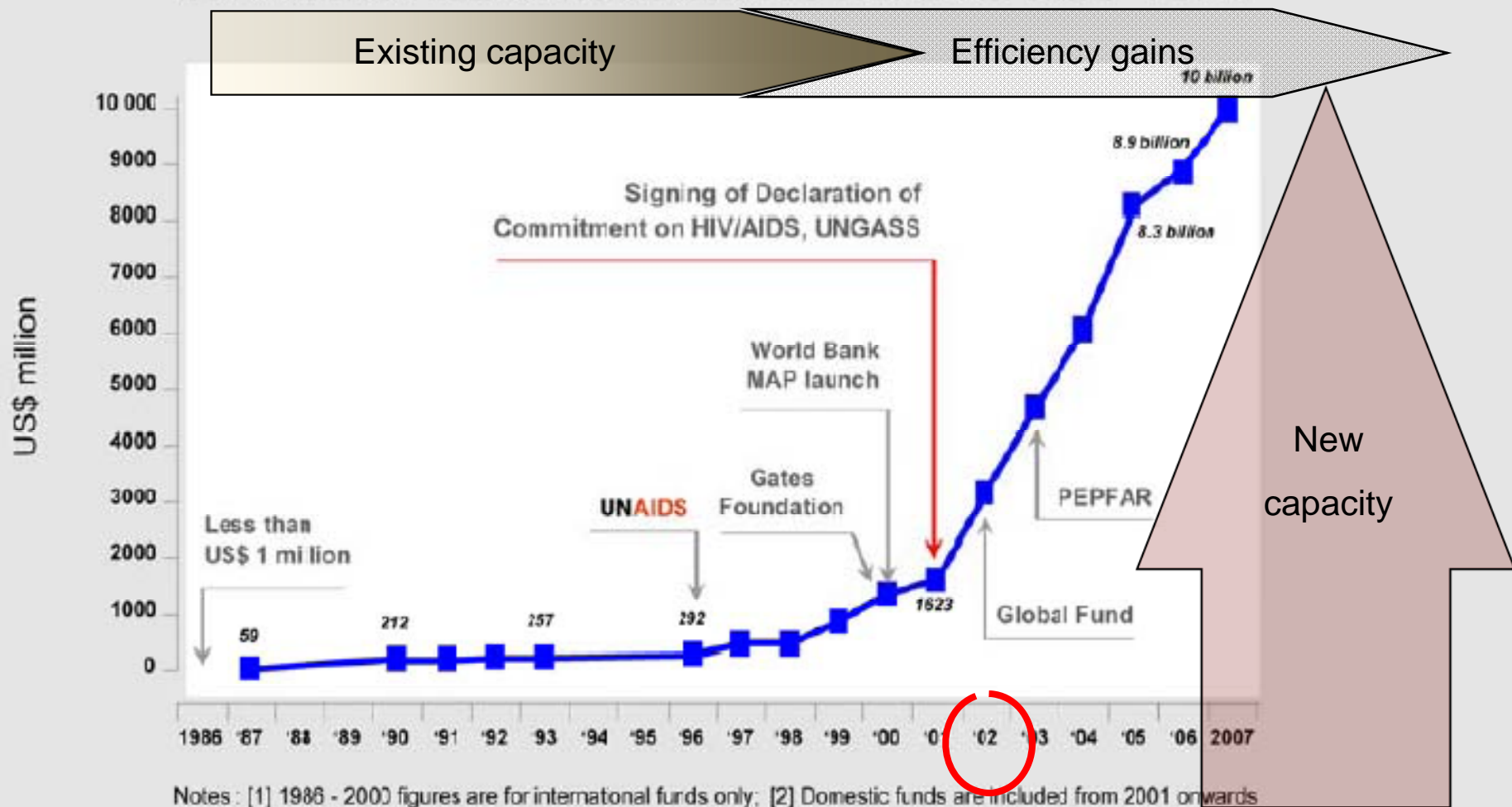
**Allocated to
noncommunicable diseases
and mental health**

*Increased health support by donors is mostly directed towards
HIV/AIDS, not non-communicable diseases*



PREVIOUSLY UNTHINKABLE AMOUNT OF FUNDING FOR HIV/AIDS FROM GLOBAL FUND, PEPFAR, ETC.

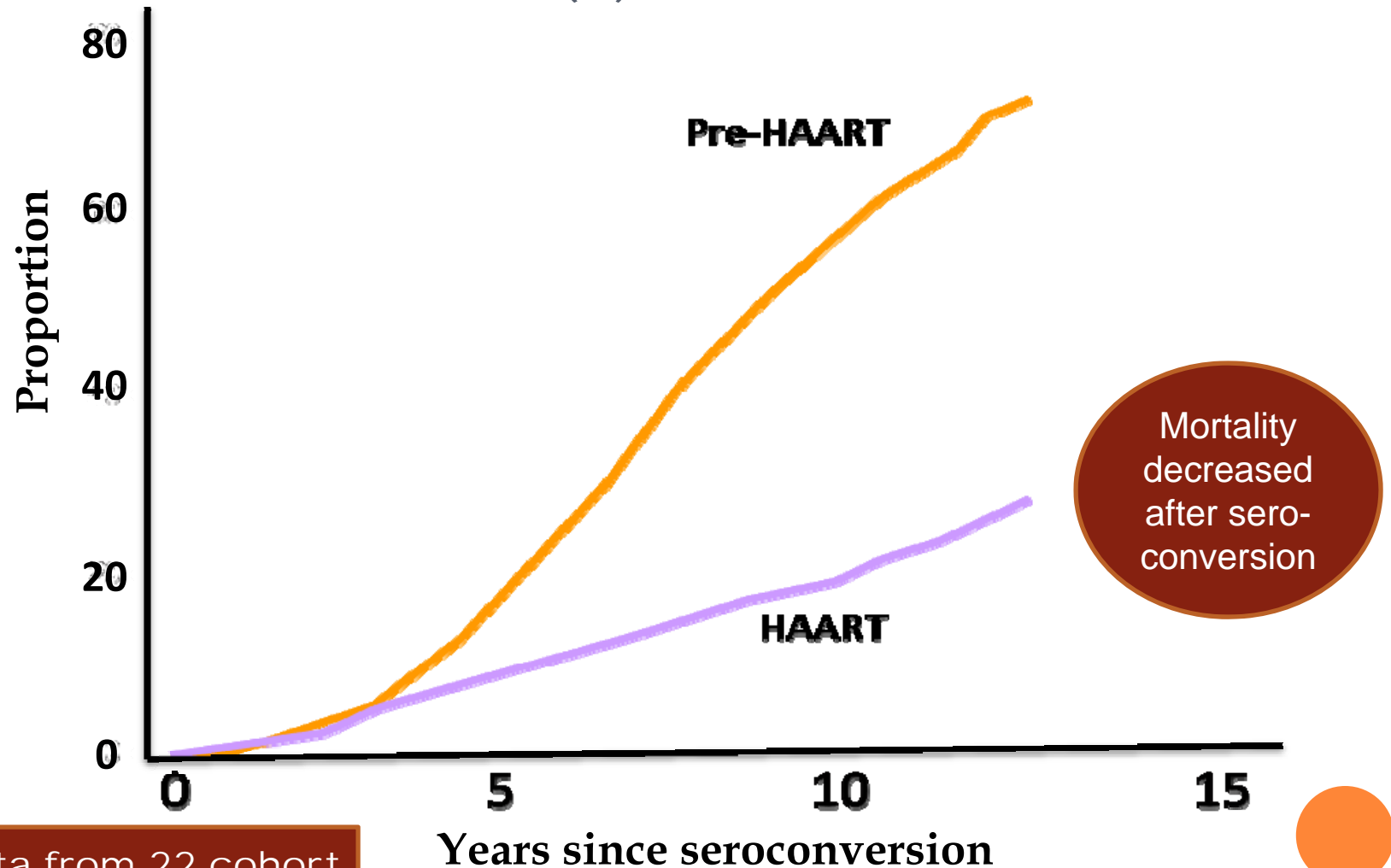
Total annual resources available for AIDS 1986 - 2007



Notes : [1] 1986 - 2000 figures are for international funds only; [2] Domestic funds are included from 2001 onwards

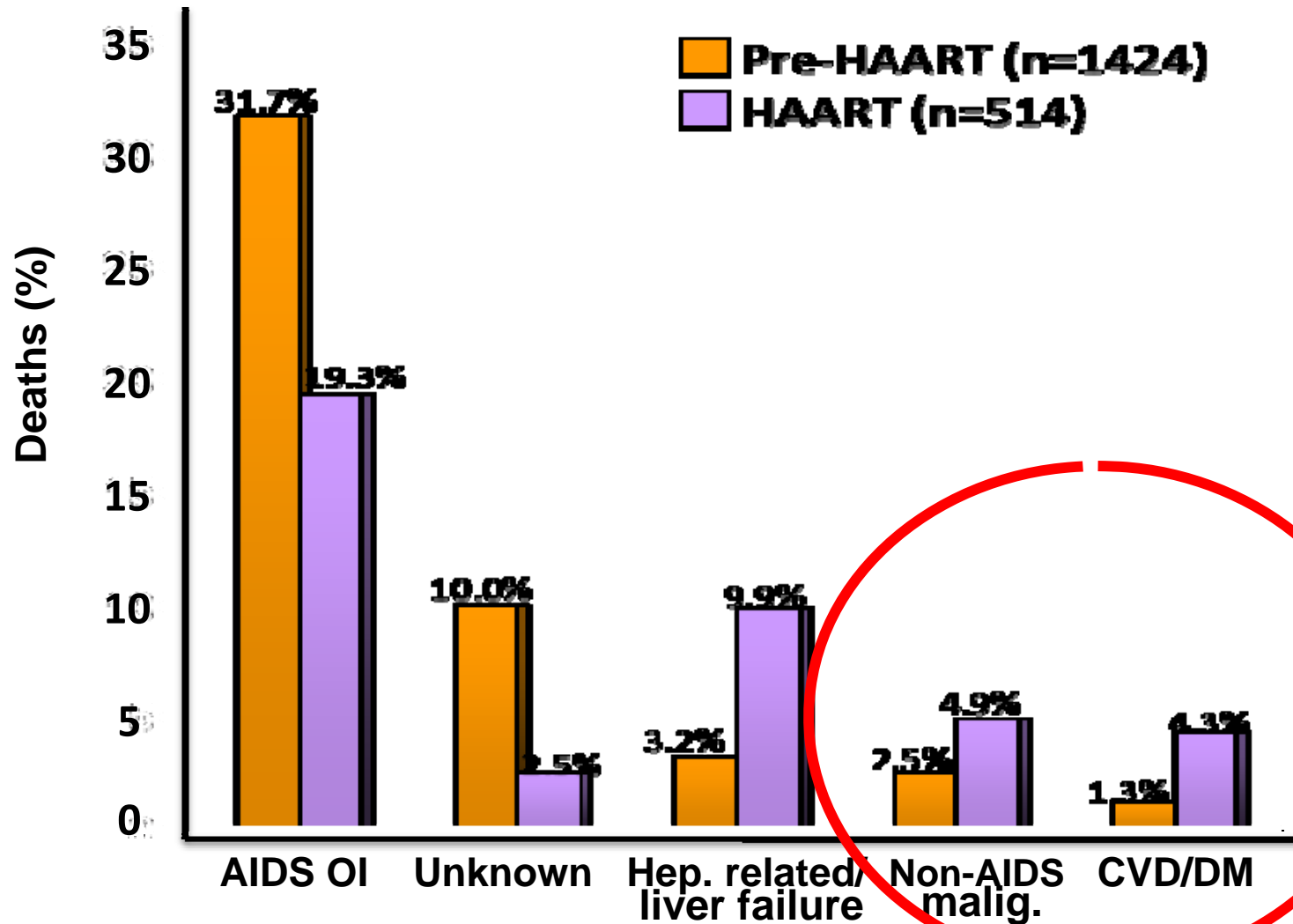
[i] 1996 - 2005 data: Extracted from 2006 Report on the Global AIDS Epidemic (UNAIDS, 2006)
 [ii] 1986 - 1995 data: AIDS in the World II. Edited by Jonathan Mann and Daniel J. M. Tarantola (1996)

HIV INFECTION IS GETTING CHRONIC: MORTALITY AMONG HIV(+) INDIVIDUALS



Data from 22 cohort studies in Europe, Canada, Australia

CAUSES OF DEATH AMONG HIV(+) INDIVIDUALS



Estimated number of people receiving antiretroviral therapy, people needing antiretroviral therapy and percentage coverage in low- and middle-income countries according to region, December 2003 to December 2007^a

Geographical region	Estimated number of people receiving antiretroviral therapy, December 2007 (range) ^b	Estimated number of people needing antiretroviral therapy, 2007 (range) ^a	Antiretroviral therapy coverage, December 2007 (range) ^c	Estimated number of people receiving antiretroviral therapy, December 2006 (range) ^b	Estimated number of people needing antiretroviral therapy, 2006 (range) ^a	Antiretroviral therapy coverage, December 2006 (range) ^c	Estimated number of people receiving antiretroviral therapy, December 2003 (range) ^b
Sub-Saharan Africa	2 120 000 [1 925 000–2 315 000]	7 000 000 [6 250 000–7 900 000]	30% [27%–34%]	1 375 000 [1 280 000–1 470 000]	6 700 000 [5 900 000–7 600 000]	21% [18%–23%]	100 000 [75 000–125 000]
Eastern and southern Africa	1 690 000 [1 560 000–1 820 000]	5 300 000 [4 700 000–6 000 000]	32% [28%–36%]	1 115 000 [1 050 000–1 180 000]	5 100 000 [4 400 000–5 700 000]	22% [20%–25%]	75 000 [56 000–94 000]
Western and central Africa	430 000 [370 000–490 000]	1 700 000 [1 400 000–2 100 000]	25% [20%–31%]	260 000 [230 000–290 000]	1 600 000 [1 400 000–2 100 000]	16% [12%–19%]	25 000 [19 000–31 000]
Latin America and the Caribbean	390 000 [350 000–430 000]	630 000 [550 000–770 000]	62% [51%–70%]	345 000 [305 000–385 000]	600 000 [510 000–740 000]	58% [47%–68%]	210 000 [160 000–260 000]
Latin America	360 000 [320 000–400 000]	560 000 [490 000–700 000]	64% [51%–73%]	325 000 [290 000–360 000]	530 000 [450 000–670 000]	61% [49%–72%]	206 000 [156 000–255 000]
The Caribbean	30 000 [25 000–35 000]	70 000 [60 000–80 000]	43% [38%–50%]	20 000 [15 000–25 000]	65 000 [50 000–75 000]	31% [27%–40%]	4 000 [3 000–5 000]
East, South and South-East Asia	420 000 [375 000–465 000]	1 700 000 [1 300 000–2 100 000]	25% [20%–32%]	280 000 [225 000–335 000]	1 600 000 [1 220 000–2 060 000]	18% [14%–23%]	70 000 [52 000–88 000]
Europe and Central Asia	54 000 [51 000–57 000]	320 000 [240 000–440 000]	17% [12%–22%]	35 000 [33 000–37 000]	260 000 [180 000–380 000]	13% [9%–19%]	15 000 [11 000–19 000]
North Africa and the Middle East	7 000 [6 000–8 000]	100 000 [70 000–135 000]	7% [5%–10%]	5 000 [4 000–6 000]	97 000 [66 000–130 000]	5% [4%–8%]	1 000 [750–1 250]
Total	2 990 000 [2 700 000–3 280 000]	9 700 000 [8 700 000–11 000 000]	31% [27%–34%]	2 040 000 [1 850 000–2 230 000]	9 300 000 [8 200 000–10 600 000]	22% [19%–25%]	400 000 [300 000–500 000]

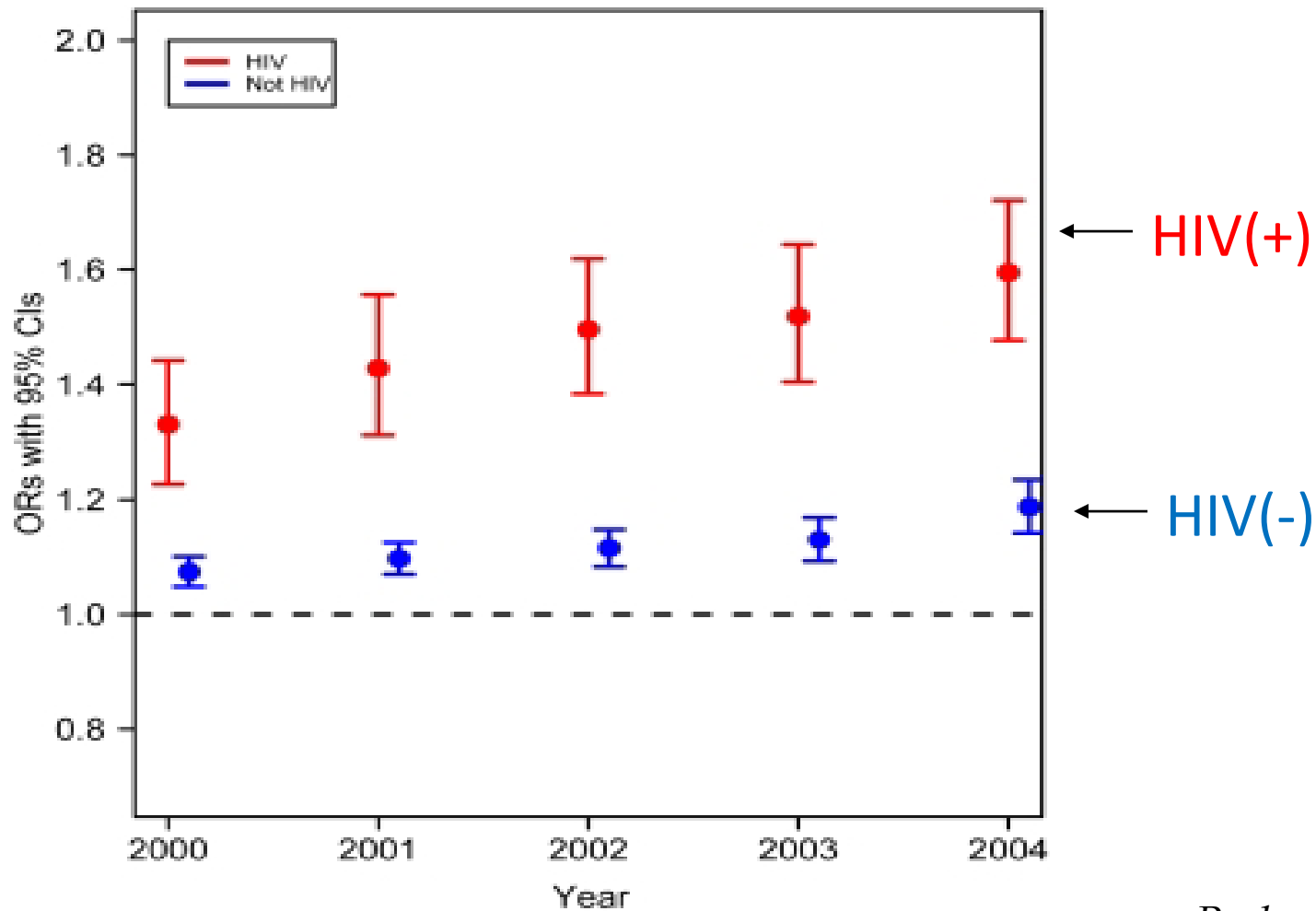
Note: some numbers do not add up due to rounding.

a For an explanation of the methods used, see explanatory notes to Annex 1.

b Data on children – when available – are included.

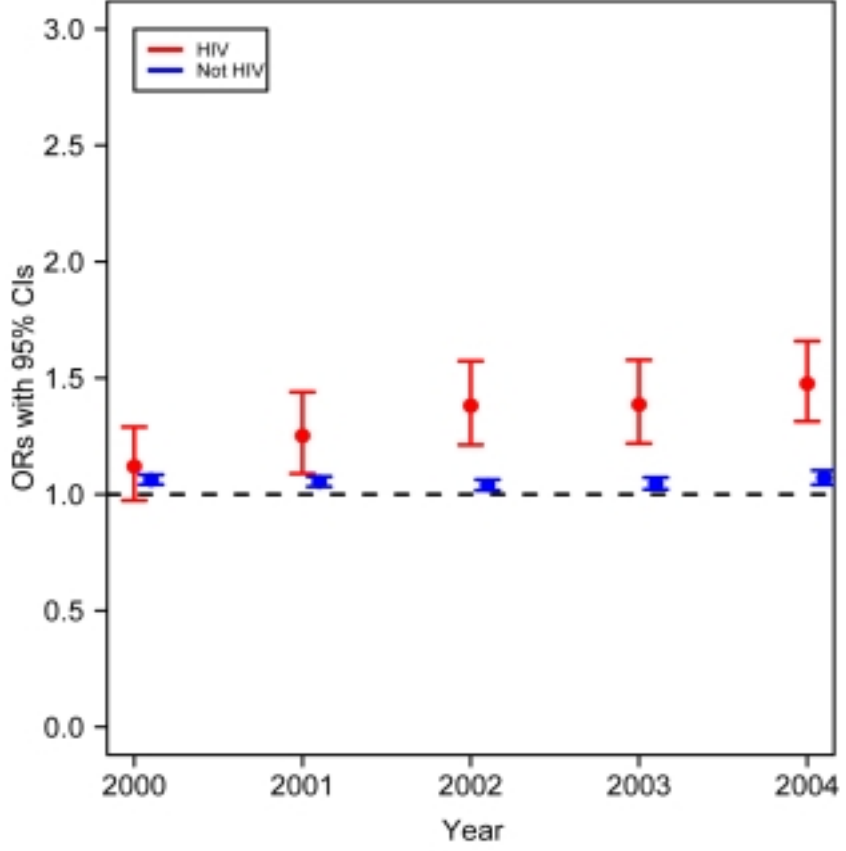
c The coverage estimate is based on the estimated numbers of people receiving and needing antiretroviral therapy.

NON-HIV-RELATED CAUSES OF DEATH AMONG HIV(+) INDIVIDUALS IN BRAZIL

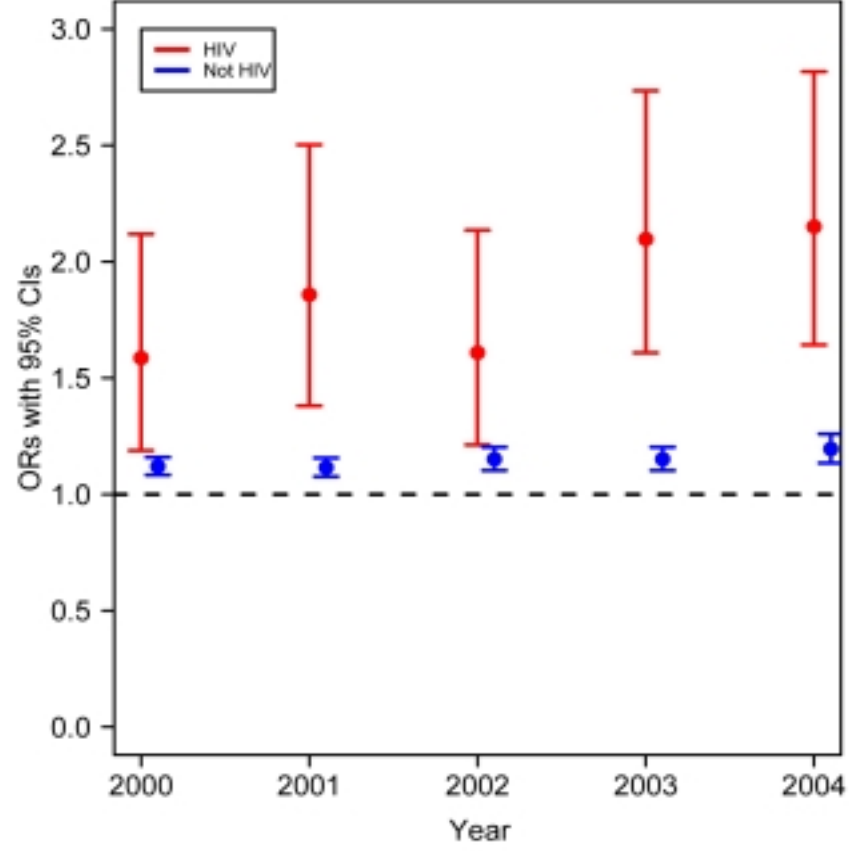


CD AND DM MORTALITY IS HIGHER AMONG HIV(+) INDIVIDUALS

Cardiovascular disease



Diabetes mellitus

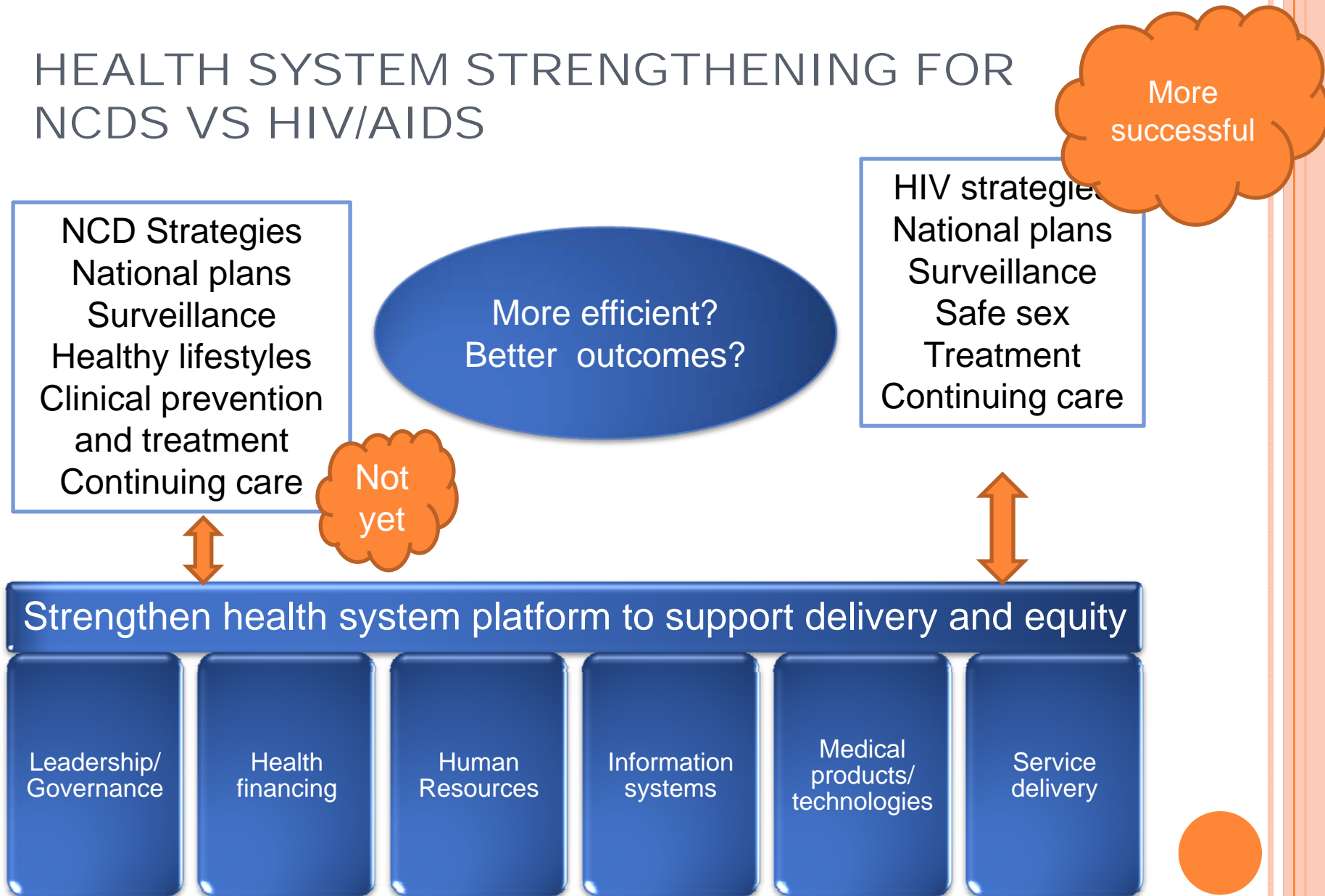


BOTH HIV AND NCDs

- Success in HIV programs will fail if nothing is done for NCDs



HEALTH SYSTEM STRENGTHENING FOR NCDS VS HIV/AIDS



Source: WPRO/NCD

HEALTH WORKFORCE CRISIS

**4 million
health workers
needed**

2.4 million:
physicians,
nurses and
midwives

Other:
paraprofessionals
etc.

**57 countries
under crisis**

36 in sub-Saharan
Africa

2006 World Health
Report, WHO

GOAL STATEMENT

“ Every person, in every village, everywhere, should have access to a skilled, motivated and supported health worker.”

**J W Lee, Late WHO Director-General
(2006 World Health Report, WHO)**



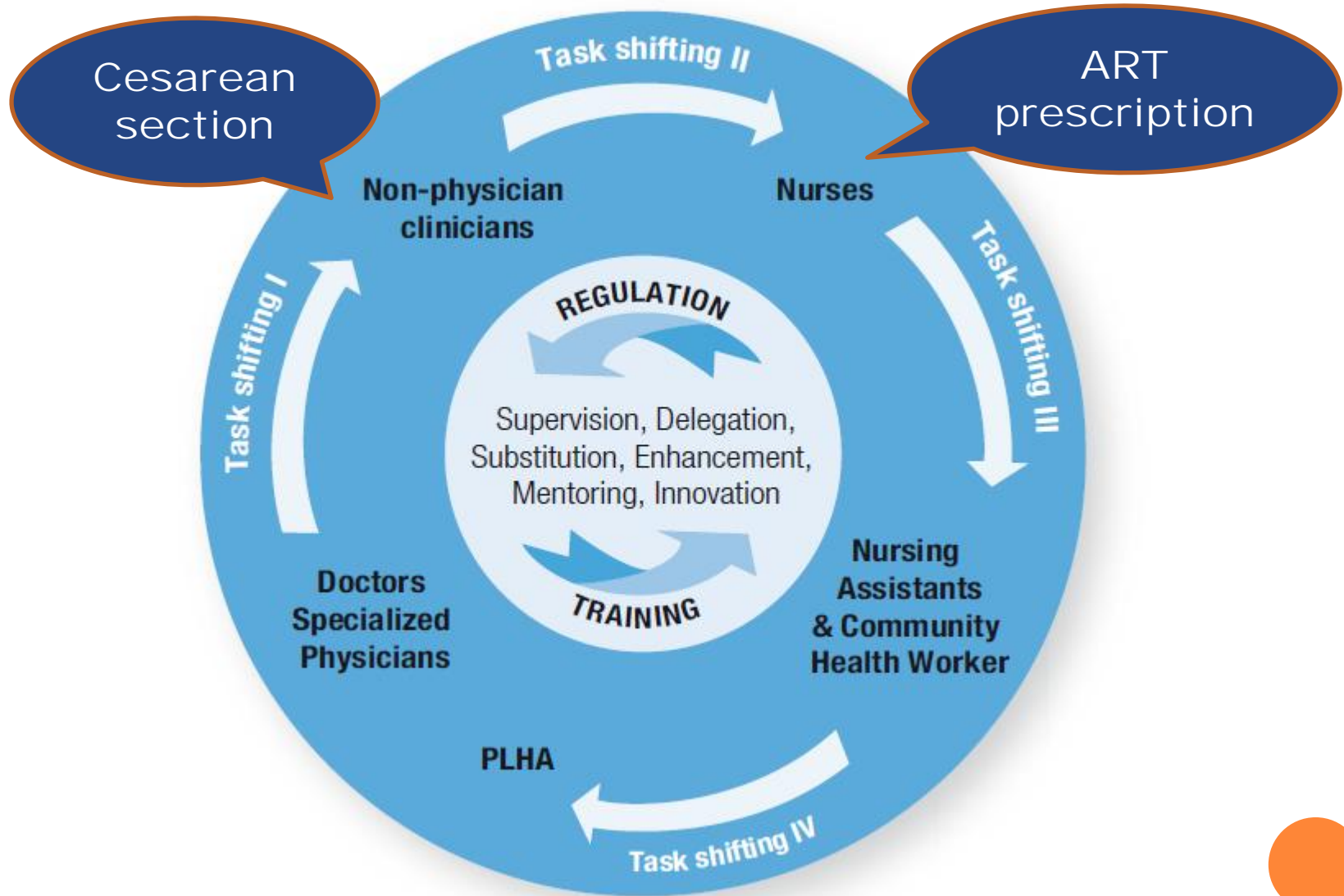
Task Shifting in HIV care

Definition: A process whereby specific **tasks are moved**, where appropriate, to **health workers with shorter training** and fewer qualifications.

Production: Make more **efficient use of existing human resources** and ease bottlenecks in service delivery.

(WHO: Task shifting: rational redistribution of tasks among health workforce teams: global recommendations and guidelines. 2008.)

Task shifting: expanding the pool of human resources for health



WHO: Task shifting to tackle health worker shortages. 2007.

TASK SHIFTING: EXAMPLE FOR HIGH BLOOD PRESSURE CONTROL PROGRAM IN DIABETIC PATIENTS

Background

- A model is needed to improve BP control among DM patients, particularly in the context of health workforce shortage.

Objective

- To evaluate the efficacy of a BP control program of community pharmacists and nurses among DM patients.

Results

- Community pharmacist and nurse team, can have a major effect on BP control among DM patients.

DL McLean et al. A randomized trial of the effect of community pharmacist and nurse care on improving blood pressure management in patients with diabetes mellitus: Study of Cardiovascular Risk Intervention by Pharmacists-Hypertension (SCRIP-HTN). *Arch Intern Med* 2008; 168(21): 2355-2361. (Canada)

NOT ONLY MEDICAL SKILLS, BUT POWER IS ALSO SHIFTING

Medical Doctors

Non-physician Clinician
(CS is up to here)

Nurses

Post WWII Okinawa,
Ghana

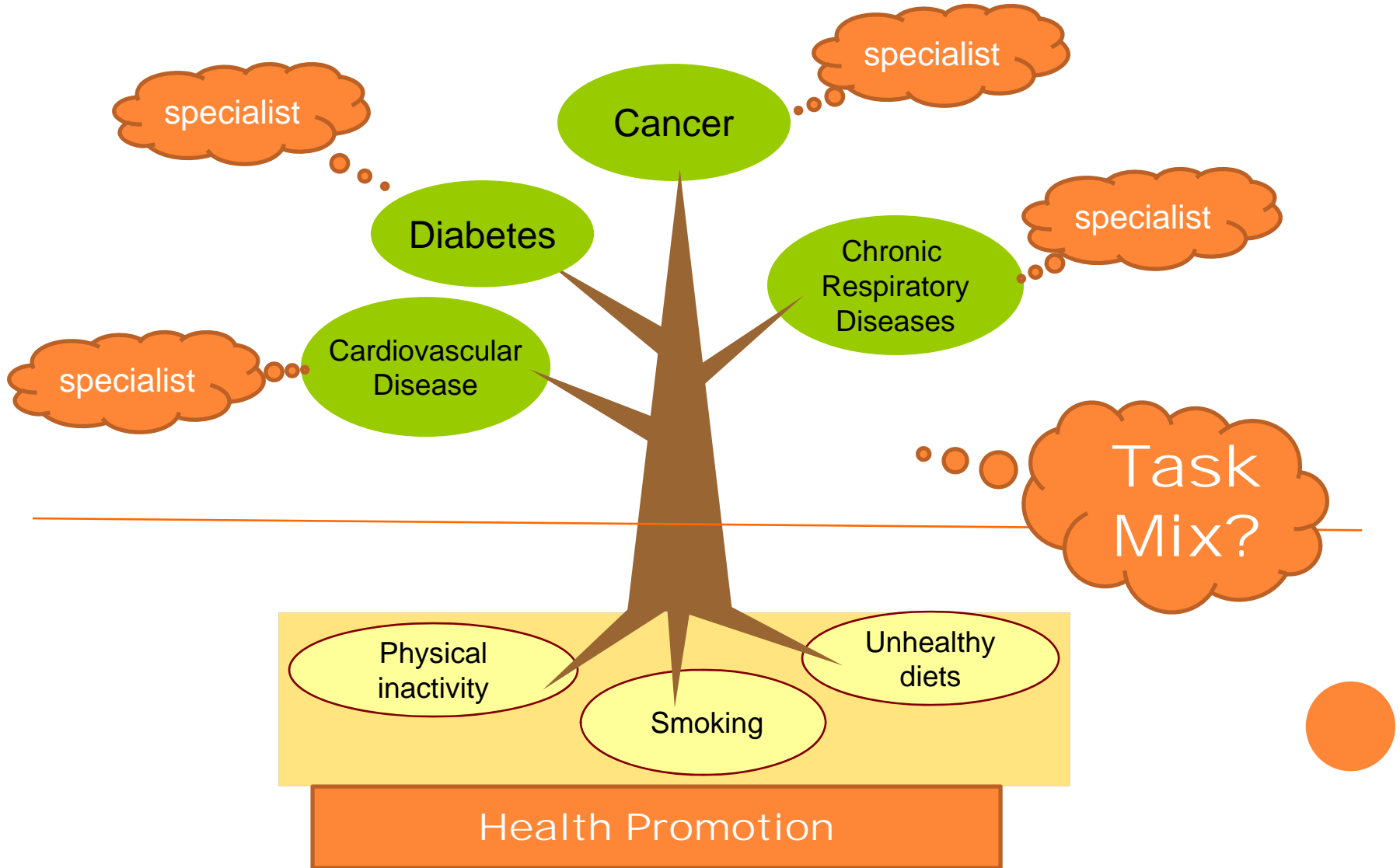
P

POWER OF HIV POSITIVE PEOPLE IN NEPAL

- HIV(+):70,000(2007)
- NGOs :11(~200?)
- >85% NGO staff members in 11 NGOs are HIV+.
 - Using fund from UNDP, they give incentives for MDs in the public sector, to improve ART adherence.

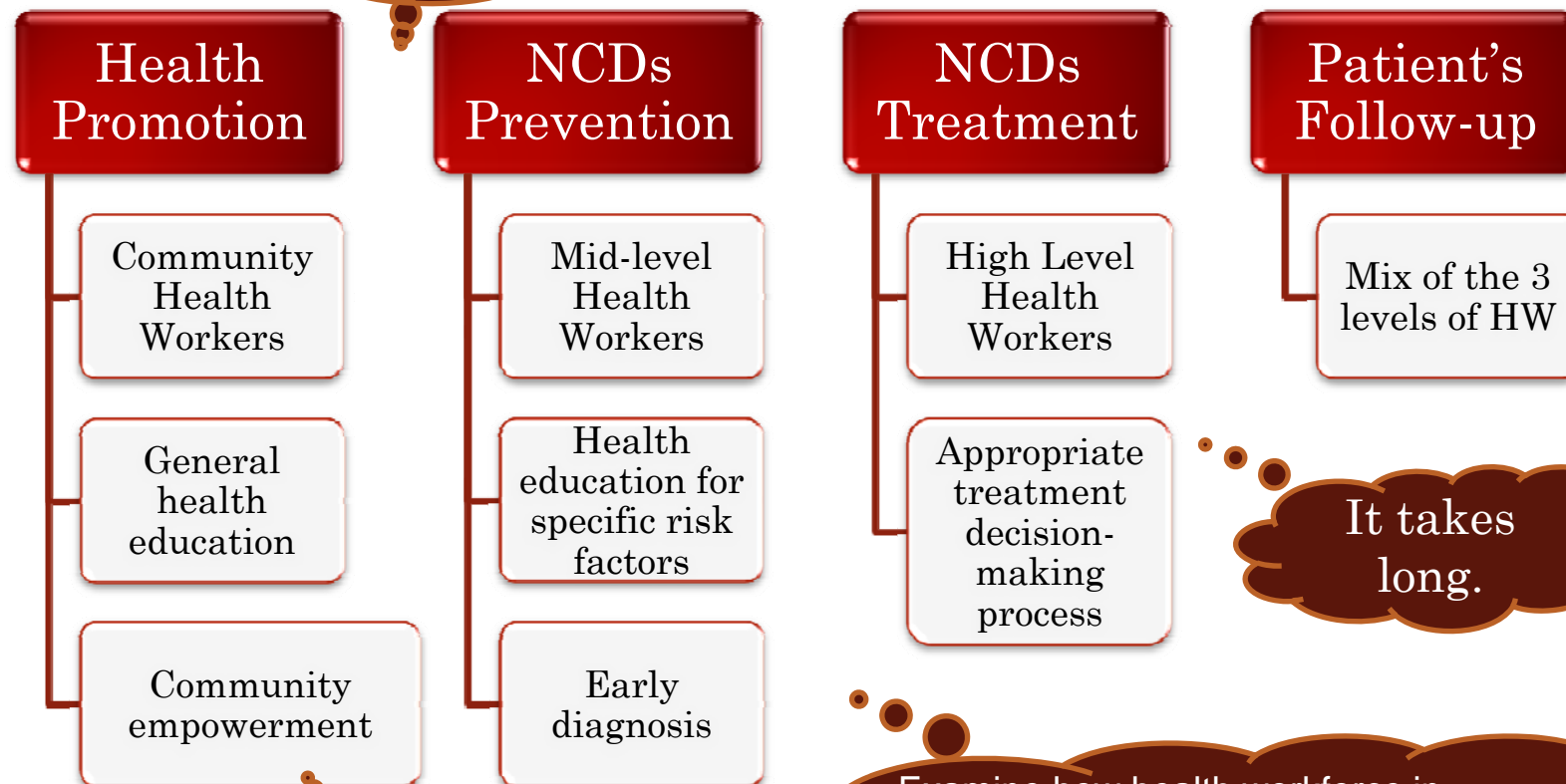
Power of survival efforts!
Can we expect this power for NCD patients?

WHAT KIND OF HEALTH WORKFORCE?



HEALTH WORKFORCE STRENGTHENING FOR NCDs

Can be strengthened.



It takes long.

For low income countries?

Examine how health workforce in TB/HIV/ Malaria programs can be mobilized or shifted to NCD programs .

STATUS OF HRH: PRIMARY INDICATORS

(BOSSERT T ET AL. ASSESSING FINANCING, EDUCATION, MANAGEMENT AND POLICY CONTEXT FOR STRATEGIC PLANNING OF HUMAN RESOURCES FOR HEALTH, WHO, 2007.)

- **HRH level:** numbers of physicians, nurses, other categories (e.g. dentists), per 10,000 population.
- **HRH geographic distribution:** ratio highest/lowest physician and other densities by region
- **HRH gender distribution:** ratio m/f by HRH categories
- **HRH skills distribution:**
 - Ratio: nurses: physicians
 - Ratio: unskilled: skilled HRH
 - Ratio: public : private providers
- Internationally accessible databases, in-country databases, MOH documents.
- NCD specific indicators
 - How many TB/HIV/ Malaria workers at community level? (Microscopists in the Philippines, TB workers in Cambodia, etc.)
 - Of them, how many can work for health promotion or disease prevention?



STATUS OF HRH PERFORMANCE: PRIMARY INDICATORS

○ Efficiency

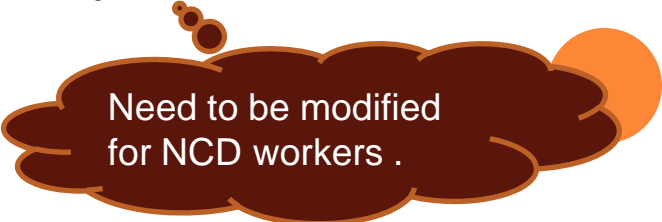
- Annual budget for HRH/total annual health budget
- Number of HRH by category/annual budget for HRH in that category
- Total per capita HRH spending
- Average annual earnings by HRH category

○ Productivity

- Average hospital length of stay
- Primary health care attendances/total staff

○ Quality

- Stockouts of essential medicines
- Number of cross infections/number of hospital patients



Need to be modified
for NCD workers .

OTHER POTENTIAL INDICATORS

- Attractiveness of profession (generalists/specialists)
 - Number of applicants per HRH category
 - Estimate of quality of applicants
- Motivation (motivation to prevent and treat NCDs)
 - Qualitative indicator: to which level motivation is a problem?



WHERE

- Cities: Hanoi, Vientiane, Phnom Penh, Parawan(?), Bangkok, Jakarta, Beijing...?
- Or, at country level?

