Government of Pakistan
Ministry of National Health Services,
Regulations & Coordination

#beatNCDs

Non-Communicable Diseases

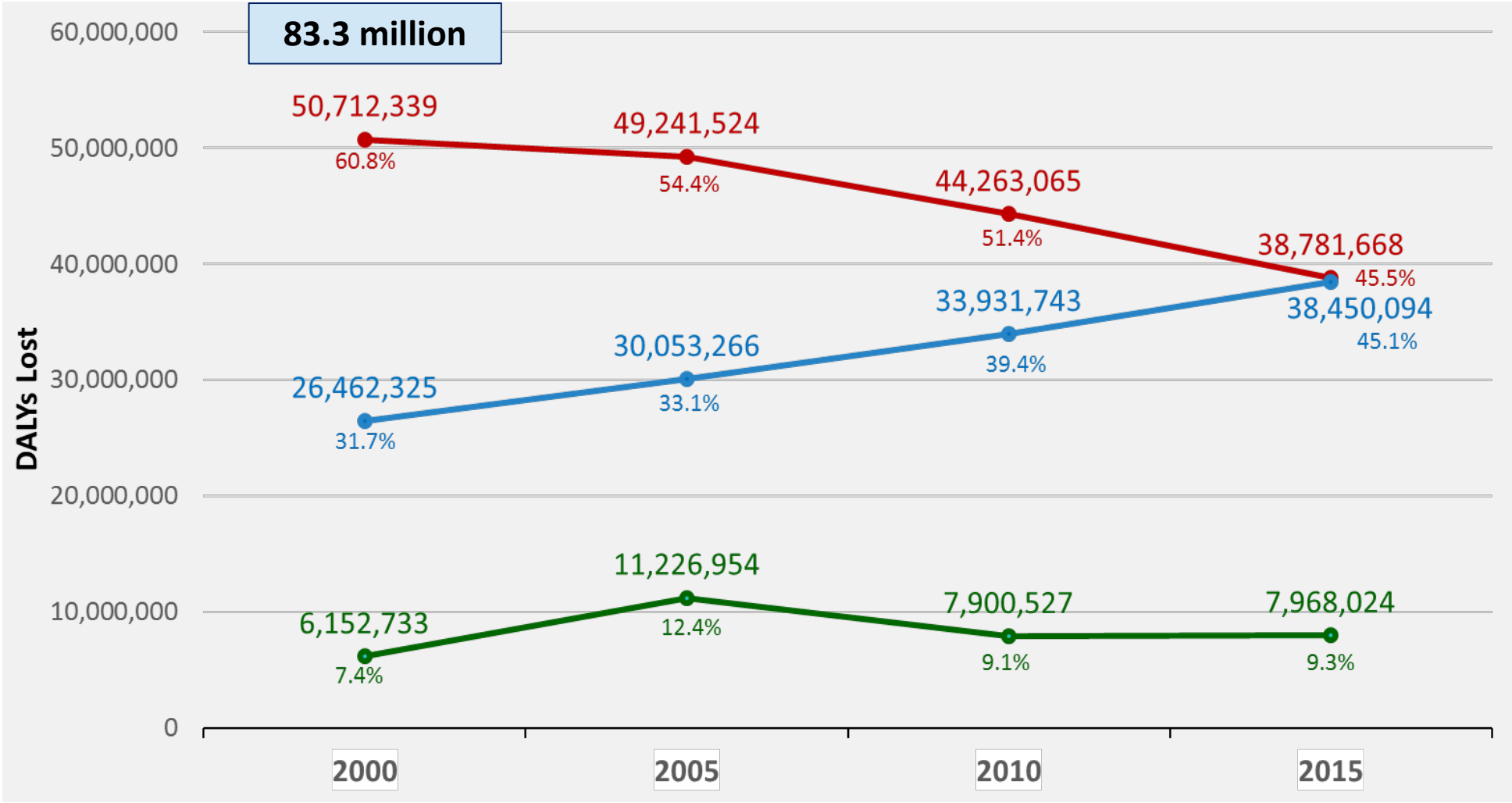
BOD, SDGs and UHC

December 2018

Malik Mohammad Safi
Health Planning, System Strengthening and
Information Analysis Unit (HPSIU)

The growing burden of disease

(Annual DALYs Lost)



IHME 2018; BOD data for Pakistan 2000-2017

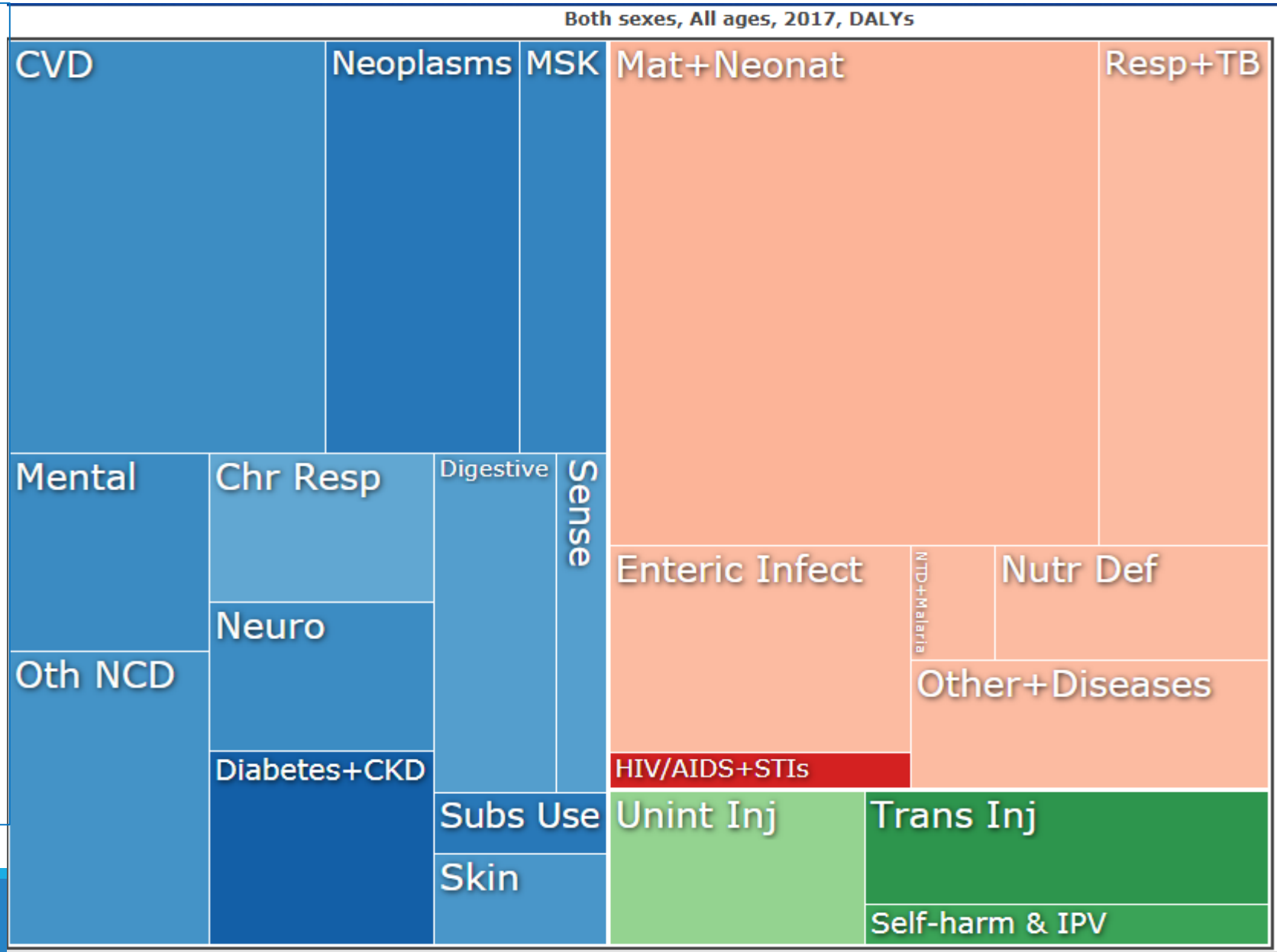
Burden of Disease in Pakistan

TOTAL BOD in 2017:
84.3 million DALYs Lost

Communicable, maternal, child & nutrition: **43.3 %**

Non-communicable diseases: **47.5 %**

Injuries: **9.1%**



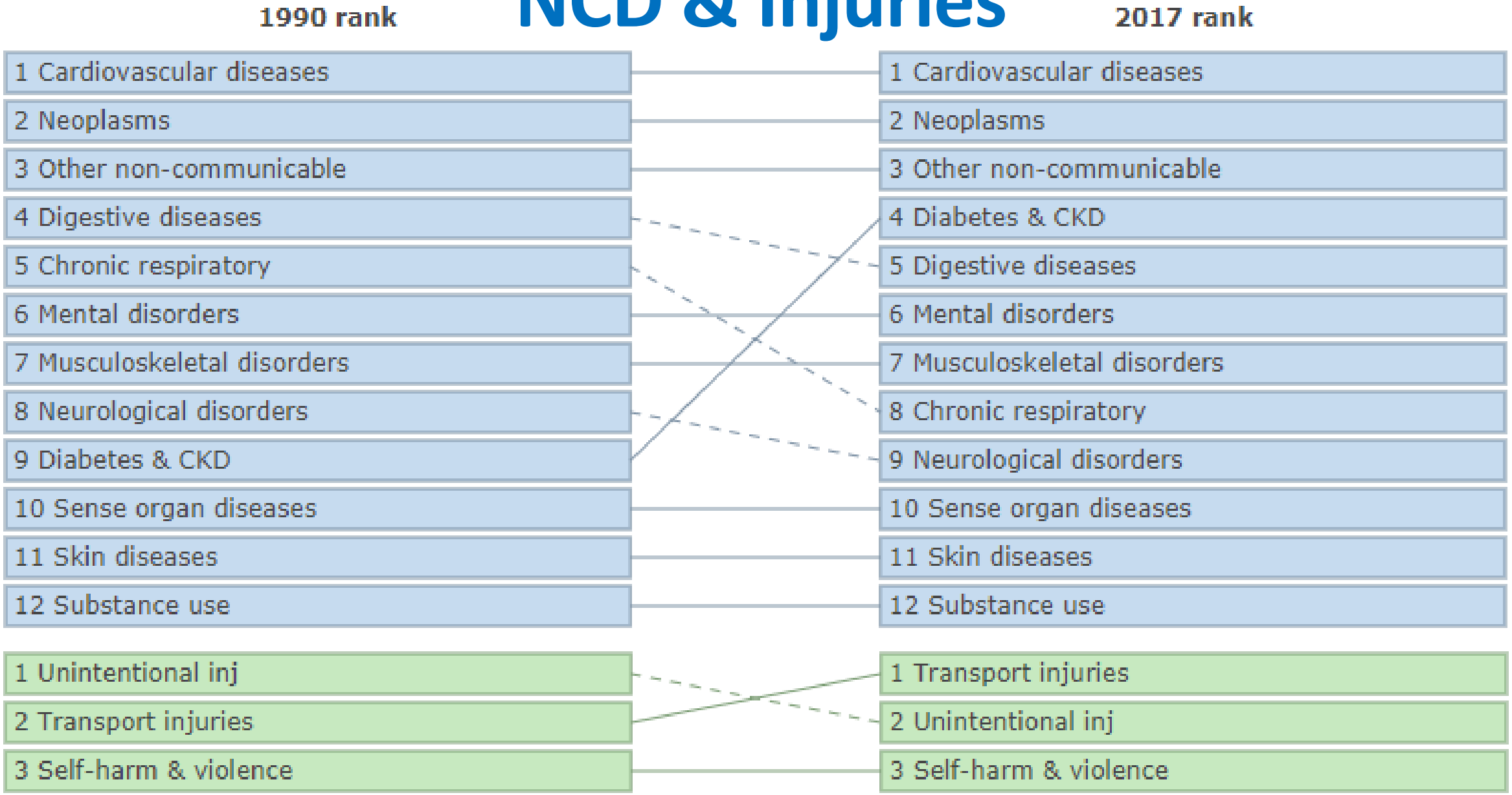
IHME 2018; BOD data for Pakistan 2017

Top Ten in 2017

Burden of Disease	Cause of Death	Risk
Maternal & neonatal	Cardiovascular diseases	Child & maternal malnutrition
Cardiovascular diseases	Maternal & neonatal	Dietary risks
Respiratory infections & TB	Neoplasms	High systolic blood pressure
Neoplasms	Respiratory infections & TB	Tobacco
Enteric infections	Diabetes & CKD	Air pollution
Other non-communicable	Digestive diseases	High fasting plasma glucose
Transport injuries	Chronic respiratory	Unsafe water & sanitation
Other infectious	Enteric infections	High body mass index
Diabetes & CKD	Transport injuries	High LDL cholesterol
Digestive diseases	Other infectious	Impaired kidney function

IHME 2018; BOD data for Pakistan 2017

NCD & Injuries



IHME 2018; BOD data for Pakistan 1990-2017

Deaths in Pakistan (2017)

CD & MNCH

account for

31.5% of total deaths

> 446k deaths

NCDs

account for

60.3% of total deaths

> 853k deaths

Injuries

account for

8.16% of total deaths

> 115k deaths

CVD

26.9% of total deaths

>381k deaths

Cancers

12.0% of total deaths

>170k deaths

Diabetes & CKD

5.5% of total deaths

>77k deaths

Digestive

5.1% of total deaths

>72k deaths

Chronic Resp.

4.9% of total deaths

>69k deaths

Neurological

2.3% of total deaths

>32k deaths

Mental disorder

0% of total deaths

<10 deaths

Musculoskeletal: 0.2%
Other NCDs: 3%
Sense organ: 0
Skin: 0.01%
Substance abuse: 0.18%

IHME 2018; BOD data for Pakistan 2017

Years Lived with Disability in Pakistan (2017)

CD & MNCH

account for

21.2% of total YLD

> 4.35 million YLD

NCDs

account for

72.5% of total YLD

> 14.8 million YLD

Injuries

account for

6.14% of total YLD

> 1.25 million YLD

CVD

2.6% of total YLD

>0.5 million YLD

Cancers

0.5% of total YLD

>0.1 million YLD

Diabetes & CKD

4.9% of total YLD

>1 million YLD

Digestive

2.5% of total YLD

>O.5 million YLD

Chronic Resp.

4.5% of total YLD

>0.9 million YLD

Neurological

8.8% of total YLD

>1.7 million YLD

Mental disorder

14.4% of total YLD

>2.9 million YLD

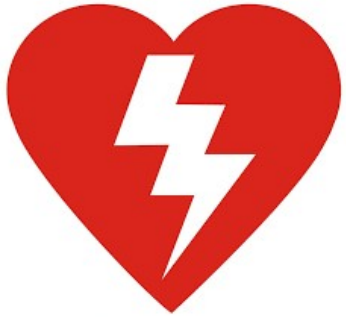
Musculoskeletal: 12.7%
Other NCD: 6.2%
Sense organ: 6.1%
Skin: 5.6%
Substance use: 3.3%

IHME 2018; BOD data for Pakistan 2017

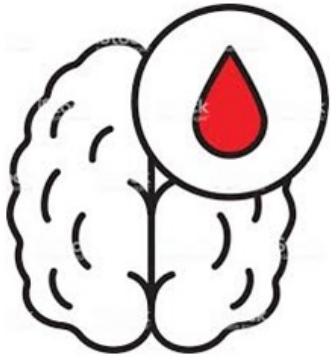
NCD Challenge

51 million adults with high BP

10.7 - 29 million diabetic cases



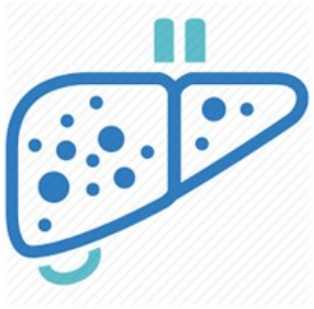
2.3 million IHD cases



1.3 million Stroke cases

CANCER

840,000 Cancer cases



33 million Cirrhosis & Ch. liver cases

23 million cases of Mental disorders

NCDs ACROSS THE SDGs

A CALL FOR AN INTEGRATED APPROACH

The inclusion of NCDs in the 2030 Agenda reaffirms that NCDs are a priority for sustainable development. It is now imperative that governments act on their commitments on NCDs and health more broadly.

NCDs
– including cardiovascular disease, cancer, diabetes, chronic respiratory disease, and mental and neurological disorders –

account for

68%

of **GLOBAL MORTALITY,** and are the leading **cause of death** and **disability worldwide.**

More than **40%** of these deaths were **PREMATURE DEATHS** UNDER AGE 70

and **82%** of these occurred in **LMICs.**

Mortality among people in their most productive years has significant **IMPACT ON ECONOMIC** development and can undermine progress.

The projected cumulative lost output due to NCDs in LMICs for 2011-2025 is

7 trillion USD

This far outweighs the estimated

11.2 billion USD

cost of implementing a set of high-impact, **cost-effective interventions to reduce the burden of NCDs.**

SDG Indicators for NCD

Indicators	Baseline		Data sources	Target 2030	
	2000	2015		Pakistan	Global
3.4.1 Probability of dying from cardiovascular disease, cancer, diabetes, chronic respiratory disease between age 30 and 70 (%)	24.8	24.7	Global Health Estimates	20	17
3.4.2 Suicide mortality rate (per 100,000 population)	2.6	2.1	PDHS, WHO, PDS	1.6	≤1
3.5.1 Coverage of Prevention/ treatment of substance abuse	-	10	UNODC, WHO	35	>80
3.5.2 Total alcohol per capita (≥ 15 years) consumption (litres of pure alcohol)	-	0.2	WHO GISAH	≤0.2	-
3.6.1 Road traffic mortality rate (per 100 000 population)	15	14.2	Global Health Estimates	<13	8
3.8.1 Universal Health Coverage index (%)	-	40	WHO, WB	65	>80
3.9.1 Mortality rate attributed to household and ambient air pollution (per 100,000 population)	-	88.8	Global Health Observatory	-	-
3.a Age-standardized prevalence of tobacco smoking among persons 15 years and older (% in males)	-	36.7	WHO	10	-

SDGs

Impact

Universal Health Coverage

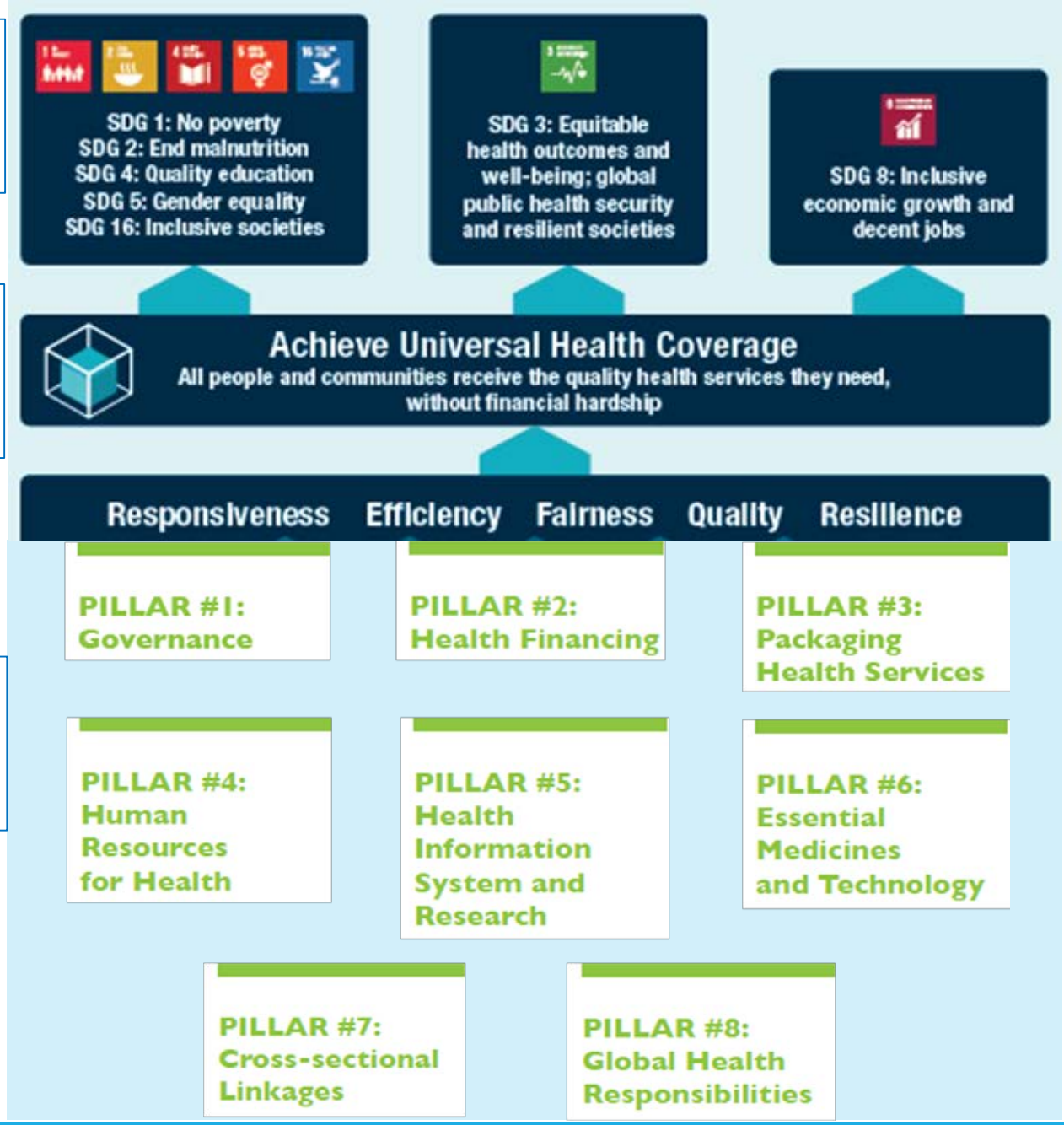
Outcome

Eight Thematic Pillars

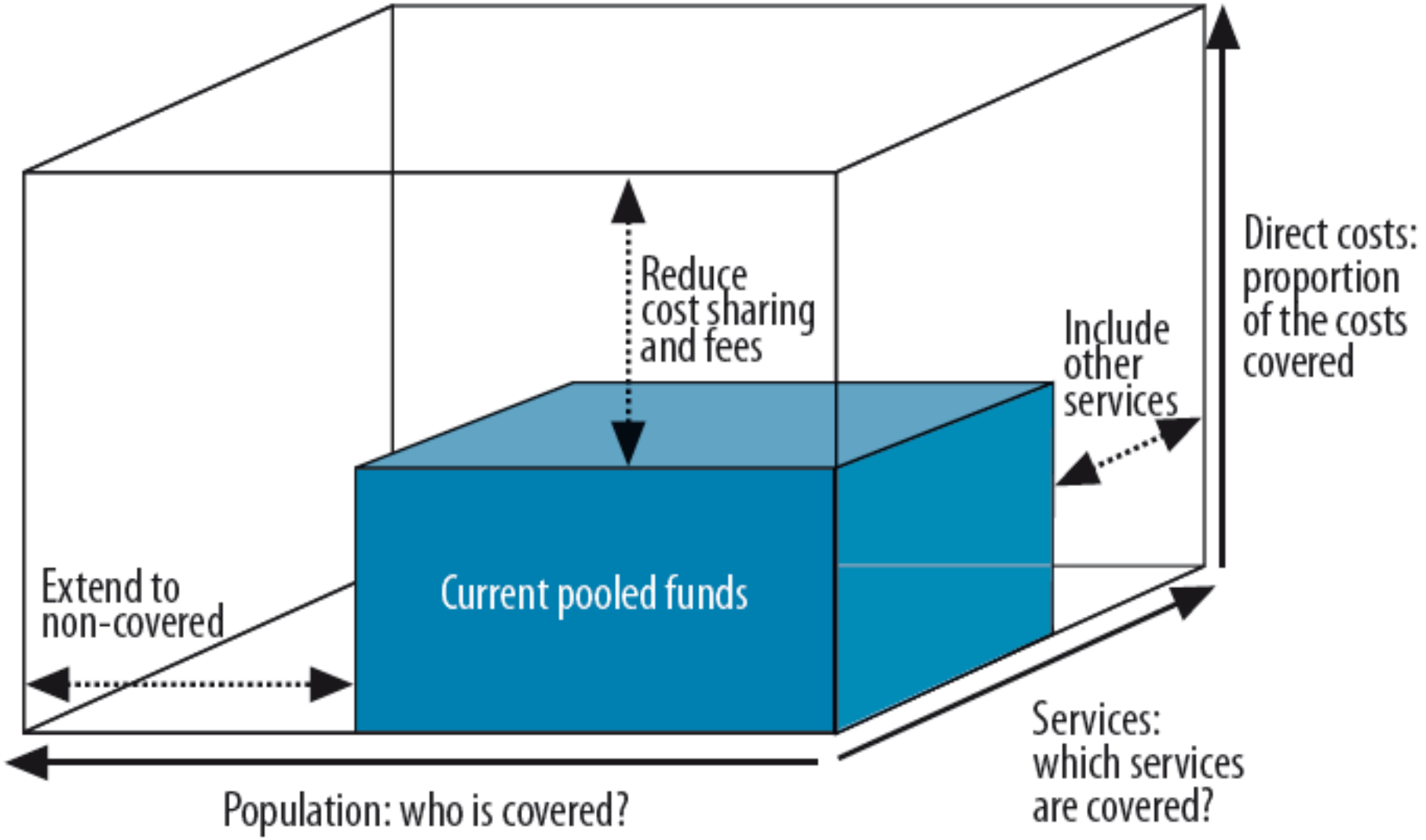
Inputs/ Outputs

National Health Vision

2016-25



Universal Health Coverage Framework



Measuring UHC

4 Tracer Areas and 16 Tracer Indicators

a: RMNCH

- Family Planning;
- Antenatal + 4 visits;
- Full Child Immunization;
- Health Seeking behaviours for child Illness (Pneumonia)

b: Communicable diseases

- Tuberculosis Effective Treatment;
- HIV Retroviral Treatment;
- Insecticide Treated Nets Coverage for Malaria;
- Adequate Safe Sanitation

c: Non-communicable diseases

- Blood Pressure;
- Diabetes Mellitus;
- Cervical cancer screening;
- Tobacco Control

d: Service Capacity and Access

- Hospital beds;
- Health Workers' density;
- Access to essential Medicines, Vaccines and Commodities;
- Compliance with IHR

From SDGs to Package of Services

SDGs – 17 Goals; 169 Targets; 230 Indicators

SDG3

13 Targets +
27 Indicators

Other SDGs
(1,2,4,5,6+)

UHC: Index – 4 Proxy Areas and 16 Indicators

Coverage of Essential Services

Financial Risk Protection

DCP3 recommended **EPHS**

5 platforms for services:
219 EUHC (21 Packages)
99 HPP

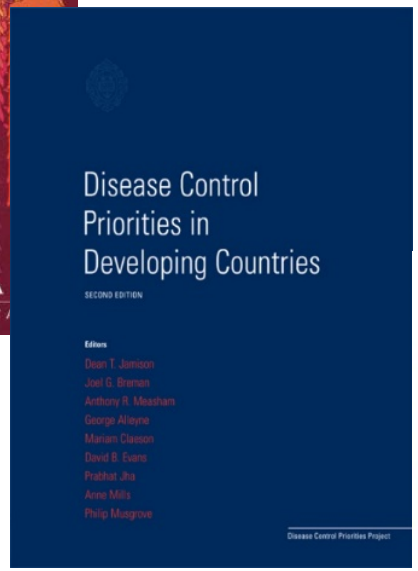
Inter-sectoral Policies:
71 IP
29 EIP

Package to prevent
Catastrophic Health Expenditure
(Health Insurance)

Background of DCP3

- 1993 World Development Report

- Disease Control Priorities in Developing Countries, Second Edition 2006 (DCP2)



- Disease Control Priorities, 3rd Edition 2015-2018 (DCP3)

DCP-III Interventions

219 EUHC Services (99 HHP) provided at 5 platforms

- **62** at the community level
- **66** at health centers
- **56** at first-level hospitals
- **20** at referral and specialized hospitals
- **15** interventions at the population level

A package of 71 Inter-sectoral Policies (29 EIP)

DCP-III Interventions

Age-related cluster (packages 1–5)

1 Maternal and newborn health
2 Child health
3 School-age health and development
4 Adolescent health and development
5 Reproductive health and contraception

Infectious diseases cluster (packages 6–10)

6 HIV and sexually transmitted infections
7 Tuberculosis
8 Malaria and adult febrile illness
9 Neglected tropical diseases
10 Pandemic and emergency preparedness

IHR

Non-communicable disease and injury cluster (packages 11–17)

11 Cardiovascular, respiratory, and related disorders
12 Cancer
13 Mental, neurological, and substance use disorders
14 Musculoskeletal disorders
15 Congenital and genetic disorders
16 Injury prevention
17 Environmental improvements

Health services cluster (packages 18–21)

18 Surgery
19 Rehabilitation
20 Palliative care and pain control
21 Pathology

Developments in Pakistan

STRENGTHS:

✓ Lessons learning

✓ Objective was efficiency & effectiveness in PHC services

WEAKNESSES:

x Not comprehensive to cover five platforms

x NCD, Health services cluster and Inter-sectoral Policies not prioritized

x Limited to public sector

- All five platforms present in Pakistan
- EPHS priority in provincial health strategic plans/ NHV
- EPHS for PHC services developed in 2012-13 (Punjab, KP and recently in Sindh) + service delivery standards, staffing, medicines, equipment and costing.
- Different modalities explored to deliver EPHS through:
  - Public sector
  - District government
  - Private sector/ NGOs
- Package for Secondary healthcare developed in Punjab; not finalized in KP
- Establishment of Healthcare Commissions and Authority for implementation of standards in the health services (both in public & private health sector)

Recent Developments

- An international meeting on DCP3 held in Pakistan in August 2018 - attended by Morocco, Lebanon, Iran, Jordan, Pakistan, WHO EMRO, University of Washington and other stakeholders including provinces
- DCP3 secretariat agreed to the proposal - Pakistan to be the first country in the World to adopt DCP3 recommendations
- M/o NHSR&C to develop generic EPHS for Pakistan through a consultative process with provincial / area DOHs and other stakeholders
- To be adopted by provinces / areas later on; to be fully implemented in Islamabad Capital Territory
- Consultations held to revise Health Insurance Package of services + Surgery

Actions for developing EPHS based on DCP3

- Criteria for selection of DCP3 recommended interventions
  - Relevance to Burden of Disease for Pakistan (2017)
  - Cost effectiveness (Cost/ DALY)
  - Feasibility in the context of Pakistan
  - Additional services to be included in the context of Pakistan

- Consultations to review of current services based on DCP3 recommendations and to prioritize interventions under 5 platforms and Inter-sectoral policies – both for public and private health sector

Actions for developing EPHS based on DCP3

- For provision of generic EPHS, define:
  - Minimum HRH requirement and skill set required (In-service and pre-service training plans)
  - Essential drug, equipment and supplies list
  - Adjustment required in Health information system, and supervision mechanism & protocols
  - System support: including referral system, drug supply management, communication interventions, WASH services in health facilities, infection control and patient safety measures, infrastructure/ repair & maintenance etc.
  - Coordination mechanism and protocols
- Define quality standards for services and system (healthcare commission)
- Costing
- Approach and plan to roll out EPHS – Family Practice Approach in 12 districts

Cost for Delivering UHC

The requirement for achieving Universal Health Coverage (UHC) is of US$271 per person per year (range 74–984) across country contexts.

13th General Programme of Work WHA; Jan 2018:
1 Billion more people benefitting from UHC

Per Capita Total Health Expenditure in Pakistan: **US$ 45**

Per Capita Public Sector: **US$15.3**

US$74 ???

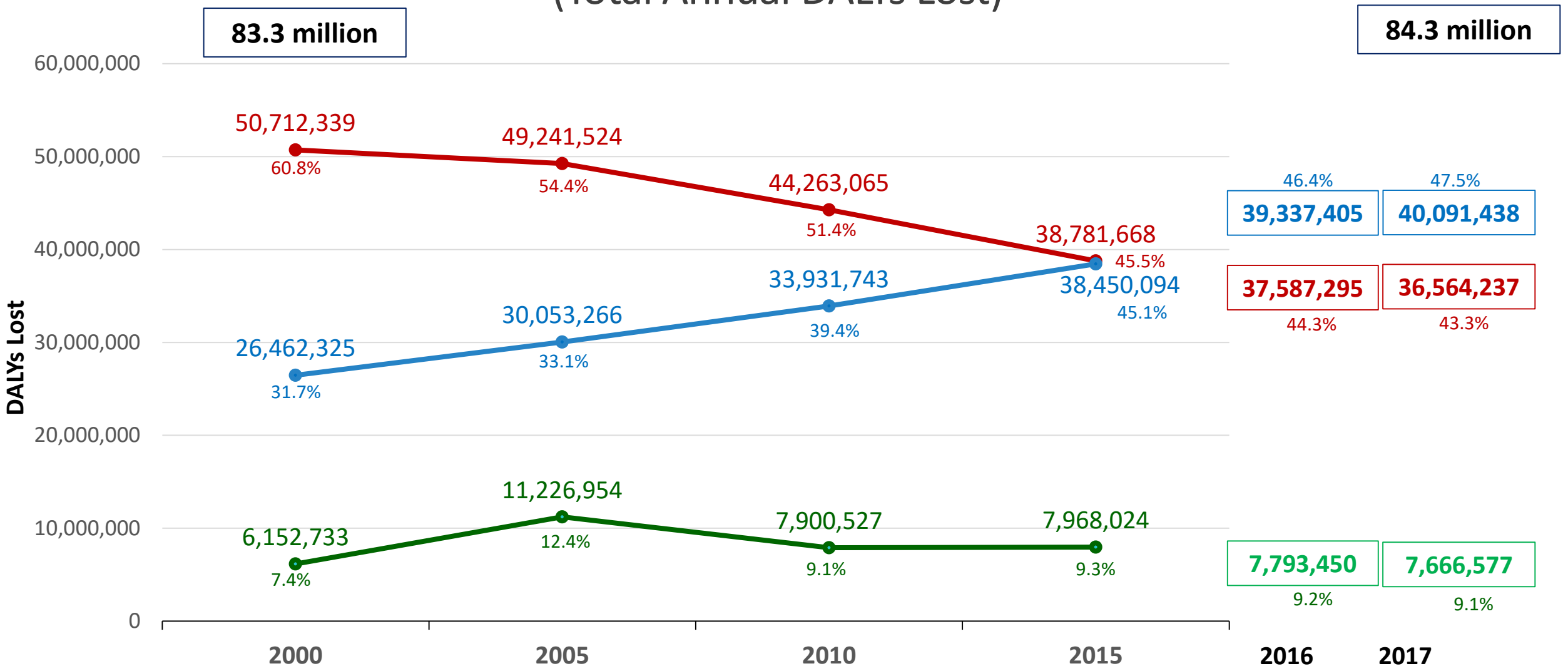
HEALTH FINANCING STARTEGY

SOURCE: Lancet; Karin Stenberg, Odd Hanssen, Tessa Tan-Torres Edejer et el, Lancet Global Health 2017; Financing transformative health systems towards achievement of the health Sustainable Development Goals: a model for projected resource needs in 67 low-income and middle-income countries AND National Health Accounts 2015-16

GROUP WORK ‘NCD EPHS’…

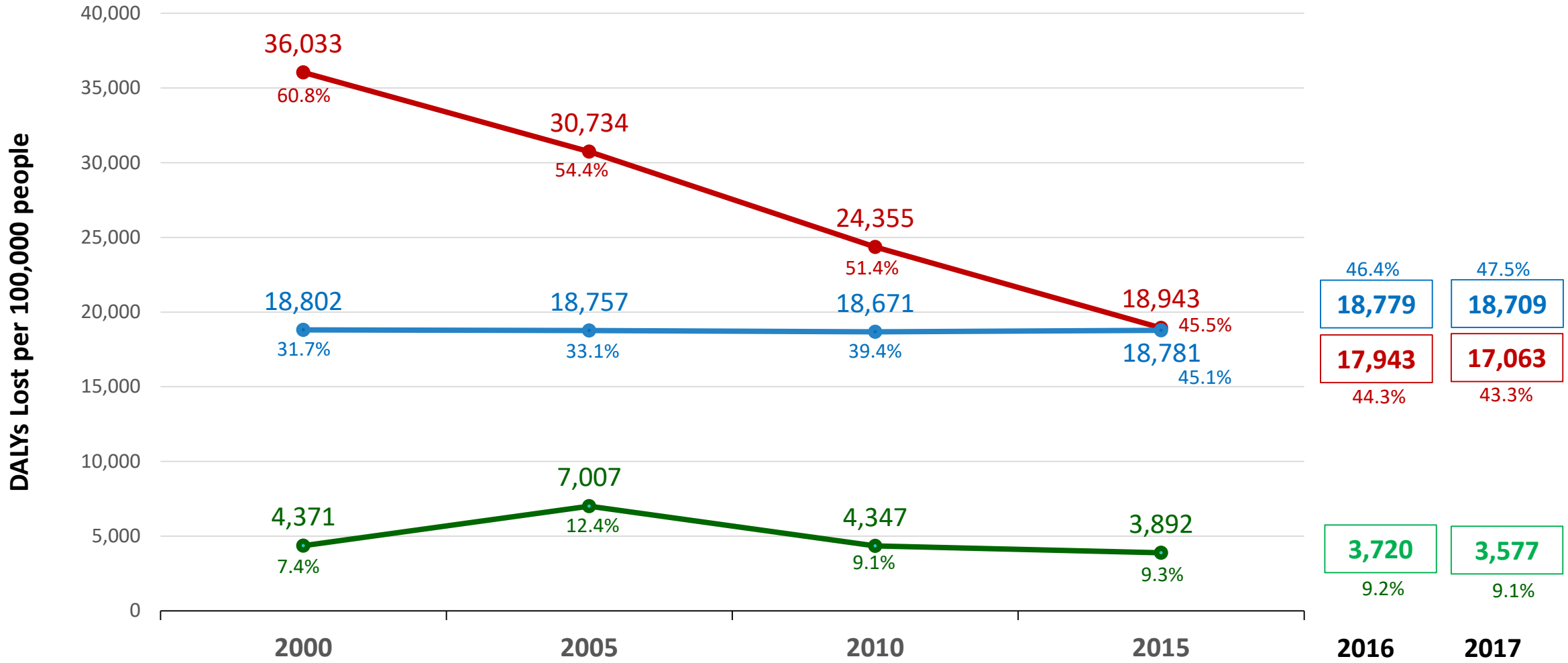
The growing burden of diseases

(Total Annual DALYs Lost)



The shifting of burden of disease

(DALYs lost per 100,000 population)



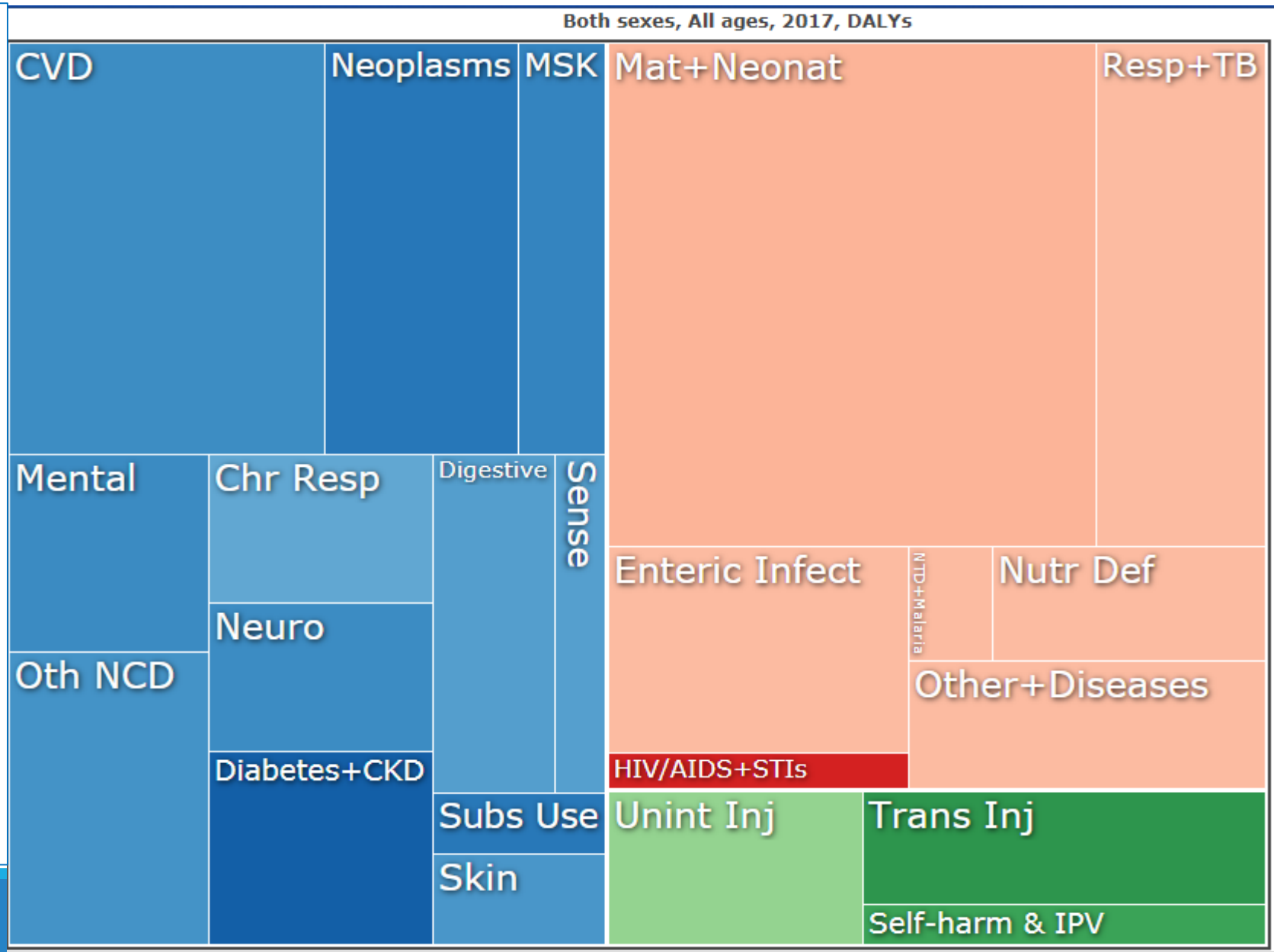
Burden of Disease in Pakistan

TOTAL BOD in 2017:
84.3 million DALYs Lost

Communicable, maternal & nutrition: 36.5 million DALYs Lost (**43.3 %**) - 17,063/100,000 pop

Non-communicable diseases: 40.1 million DALYs Lost (**47.5 %**) - 18,709/100,000 people

Injuries: 7.66 million DALYs Lost (**9.1%**) - 3,577/100,000 people



IHME 2018; BOD data for Pakistan 2017

Comparison of NCD BOD in 2017

COUNTRY	NCD BOD Rate DALYs Lost / 100,000 pop	Total NCD BOD Total DALYs Lost (million)	% of Total DALYs
Pakistan	18,709	40.1	47.5%
India	19,497	269.1	55.9%
Iran	18,873	15.5	76.1%
Bangladesh	18,287	28.7	62.4%
Egypt	20,511	19.7	73.0%
China	21,734	307	82.6%
Germany	27,285	22.7	88.5%

IHME 2018; BOD data for Pakistan and other countries 2017