

## Indicators of the NCD challenge ....Time to Act



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## Points to ponder



- Burden
- State of play
- Reflections: Where did we go wrong
- A few challenges
- NCD as a developmental agenda
- Ingredients for leapfrogging
- Reflections:
  - Are we ready?
  - Are we committed
  - Are we serious

# Putting NCD in economic perspective

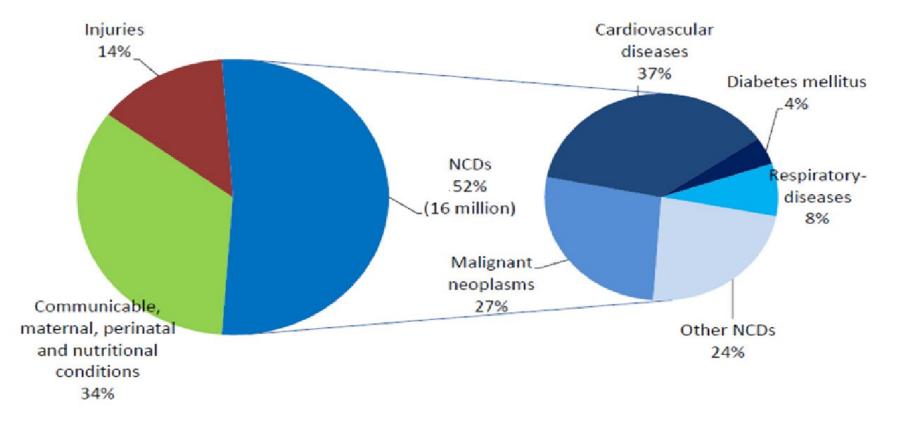
"If unchecked, NCDs have the potential of crippling Growing economies; success will only come by focusing resources on people, not their illnesses; on health, not their disease"..... Ban Ki Moon

"NCDs are a disaster in slow motion" ....."These are the diseases that break the bank". Dr. Margaret Chan, Director-General of WHO

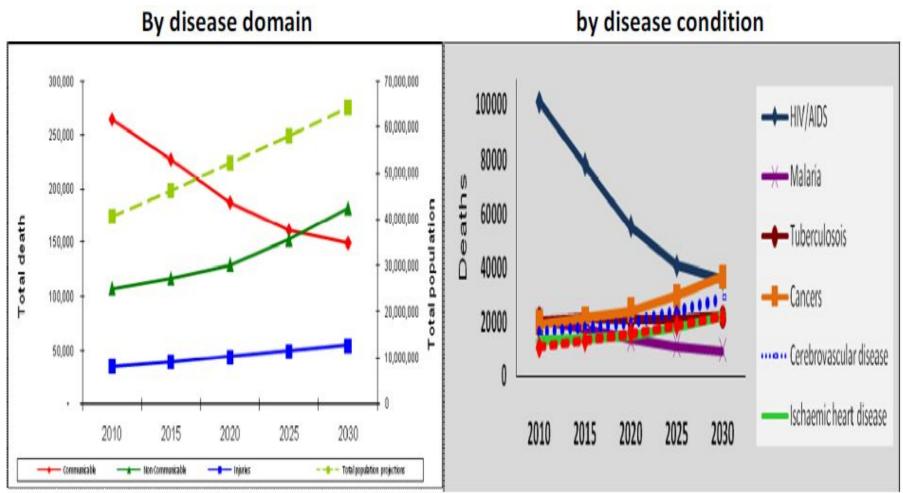
"The World Economic Forum ranks NCDs above climate change and alongside the global financial crisis in terms of the global threat they pose. Cost of inaction > cost of action

## **Global Pandemic**

#### Premature mortality Proportion of global NCD deaths under the age of 70



## Health projections 2011-2030

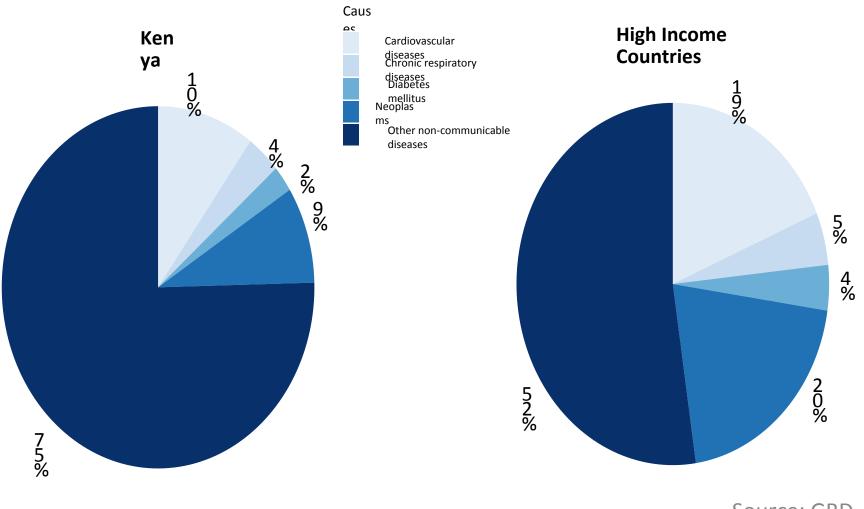


Dr. kibachio joseph DNCD

## Writing on the wall

"The poorest groups not only bear higher risks for NCDs but, once they develop an NCD, they also face higher health and economic impacts. The poor have less access to medical care, allowing NCDs to progress to advanced states resulting in higher levels of mortality and disability. Given their complexity and chronic character, medical expenditures for treatment of NCDs are a major cause for tipping households into poverty." AMARTYA SEN-Nobel Laureate in Economics

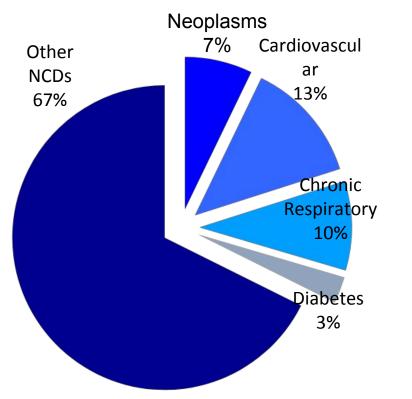
## Burden of NCDIs is very diverse



Source: GBD 2015

## models for Kenya, the four main NCDs explains roughly 1/3 of the NCD burden

Kenya NCD Burden (DALYs) - GBD 2010



The other 2/3<sup>rd</sup> of DALYs (in %) was due to among others

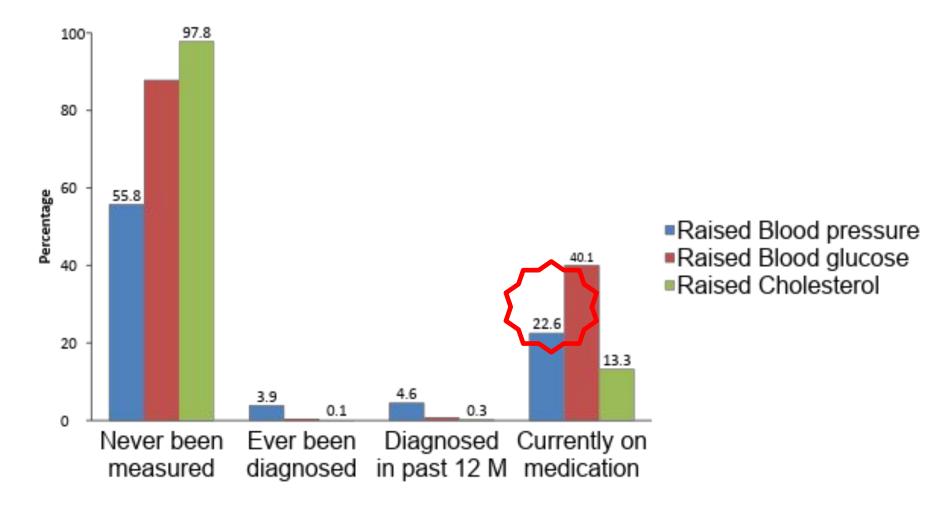
- Mental and behavioral disorders: 19.1
- Neurological disorders: 7.2
- Musculoskeletal disorders: 13.7
- Urogenital, blood disorders, other endocrine disorders 7.6
- Congenital anomalies: 5.5
- Various other: 14

# The local State of Play.....

- High levels of unawareness
- Poor data and surveillance platforms
- Treatment capacity wanting
- Poor MSA
- Apathy for upstream interventions
- Challenges in Access
- "Treatment Vs Control"
- Poor financing/utilization
- Community/ primary care component weak



## A ticking time Bomb....



## **Control cascades-hypertension**

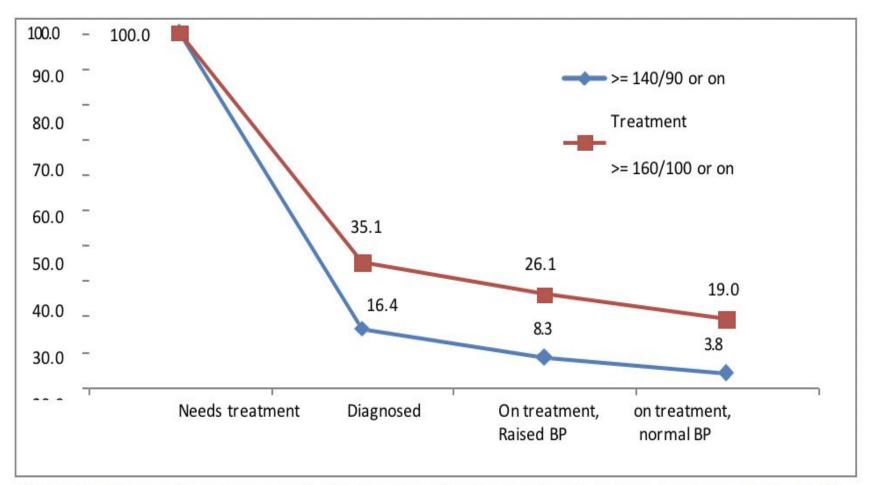


Figure 2; Diagnostic coverage and effective hypertension treatment coverage among adults 18-69 years, both sexes, by level of raised blood pressure, STEPS 2015

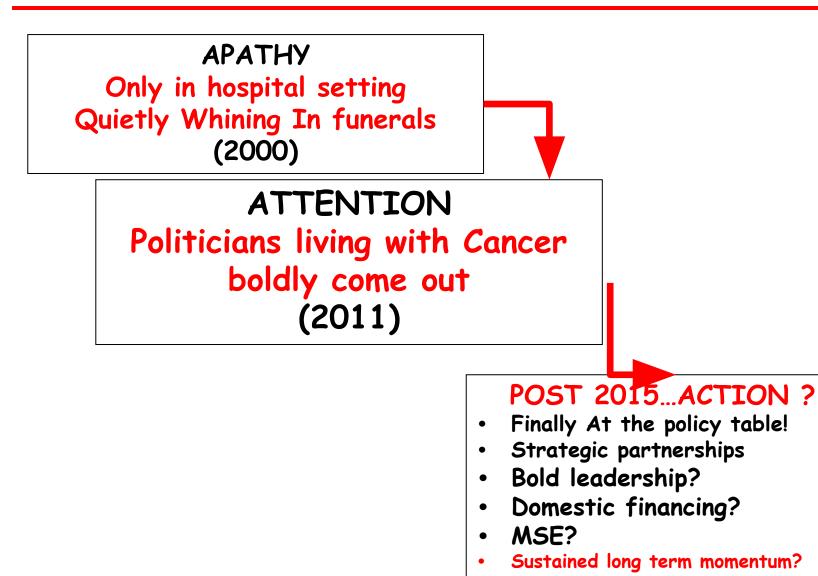
#### Multi-morbidity in SSA 32.7 3034 % MM Prevalence % Co-morbid Disease Pattern % 88.1 Number of patients 2316 75% 97% among patients with a Patient numbers given disease 19.3 1065 % HIV DM HPT 77% TΒ 27% 81.1 315 80% 24% 8% 17% 37% 4% 2% 12% DM HIV TB TΒ HIV HPT DM HPT HIV HPT TB DM HPT HIV T2DM TΒ

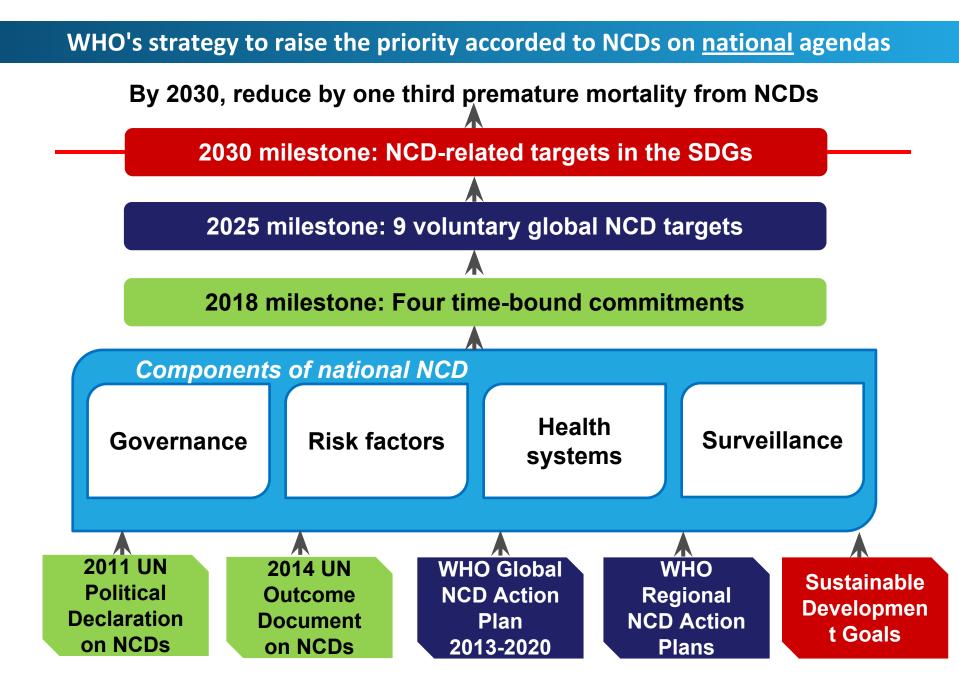
Oni T et al. BMC Infect Dis. 2015:17;15:20.

### Tortuous Road taken....

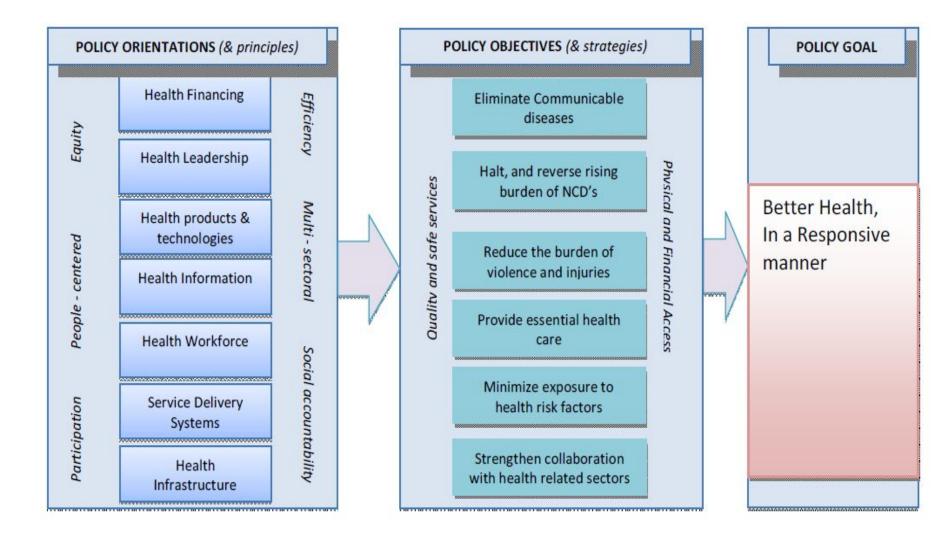


### Global Challenges of NCDs ....and the evolution of the Kenyan Response





## Framework for Kenya health Policy directions 2012-2030



# '25 by 2025 25% reduction in premature mortality from NCDs by 2025

.....Ambitious yet attainable













GLOBAL 2025 TARGET









## Taking stock

## Leadership and governance

- Expansion of the division with strong units
  - NCD control unit, cancer control, VIP, tobacco and substance abuse, Health and ageing.
- Increase on number of staff
- Establishment of NCD focal points at county level

#### policies, legislation and strategic direction

- Cancer prevention and control act 2012,
- cancer prevention and control strategy 2017-2022
- NCD prevention and control strategic plan 2015- 2020
- Violence and Injury prevention action plan 2018-2022
- Tobacco control regulations
- National diabetes control strategy

Treatment guidelines and capacity building

- Cancer treatment guidelines,
- Cardiovascular guidelines,
- Tobacco cessation guidelines.
- Diabetes management guidelines
- palliative guidelines
- Epilepsy treatment guidelines
- Sickle cell Anemia treatment guidelines

## Taking stock

Coordination and partnerships	<ul> <li>Access programs (CDIC,HHA,BOP,NA</li> <li>ICC</li> <li>Projects and pilots</li> <li>Capacity building exchanges</li> <li>Integration programs</li> <li>Champions</li> </ul>
Research and surveillance	<ul> <li>STEPS 2015</li> <li>SARAM</li> <li>KDHS</li> <li>KAIS</li> <li>Stand alone research</li> </ul>
Health promotion and Advocacy	<ul> <li>Media campaigns</li> <li>Church/community platforms</li> <li>Social media</li> <li>School health program</li> <li>Patients support groups and champions</li> <li>NCD Champions</li> </ul>

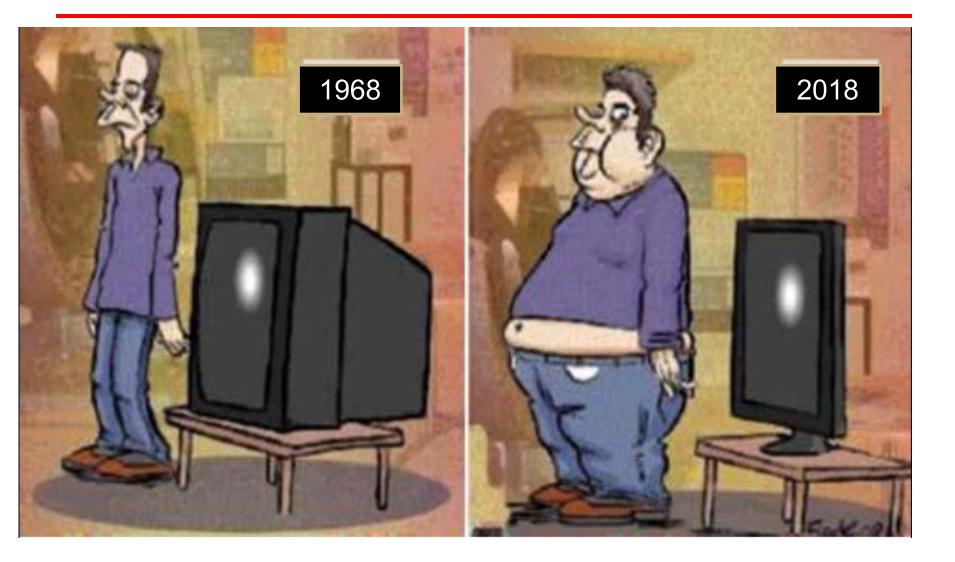
## A country in transition... From Uhuru (1963) to Uhuru (2018)



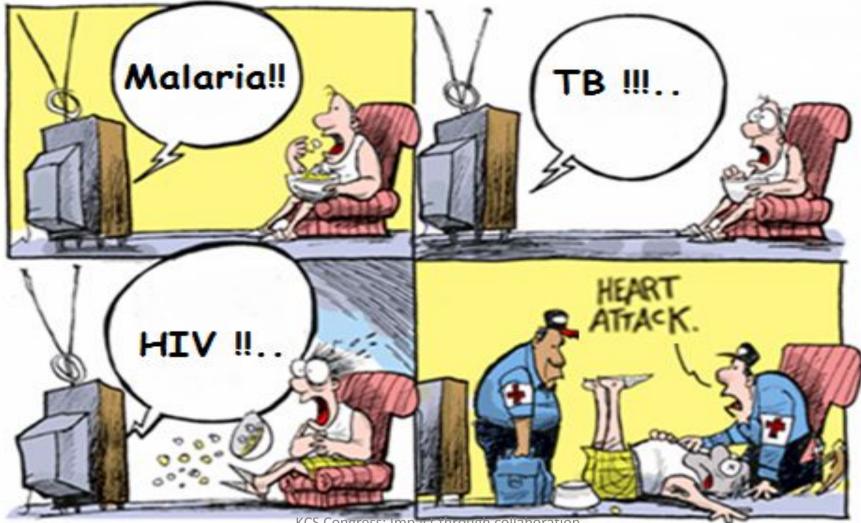
Disease,
 Ignorance The big 4
 Poverty +

Poverty, floods, Matatu strike, Tobacco control, BABA, Terrorism, HIV, Cholera, Form 34 B, Sosion, Migingo, RTAs, Hand shake ...... NCDs

## Changing times indeed....

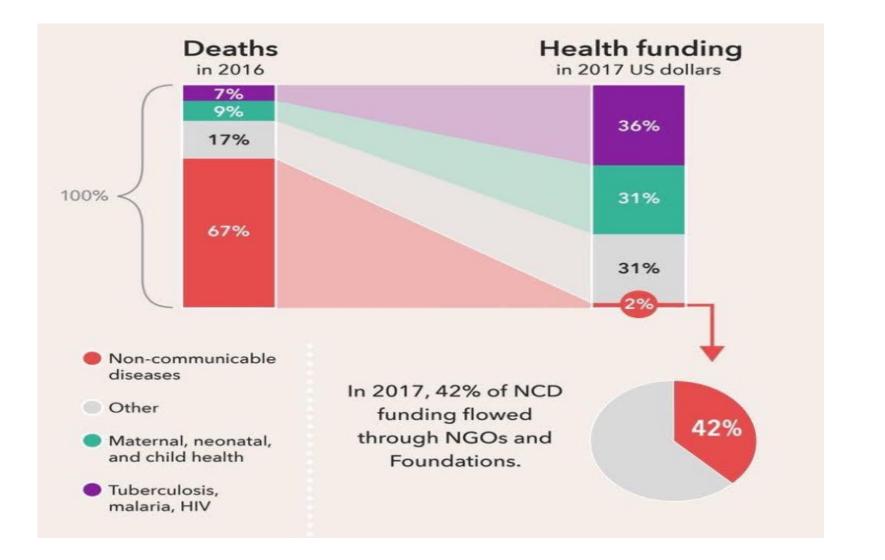


## The news and agenda paradox....



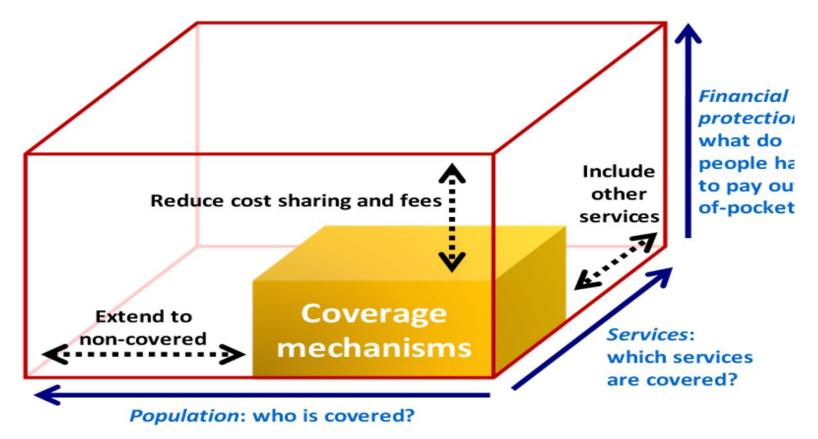
KCS Congress: Impact through collaboration

## Funding indicates attention...



#### Back to the drawing board .....Taking advantage of the UHC debate

### Towards universal coverage

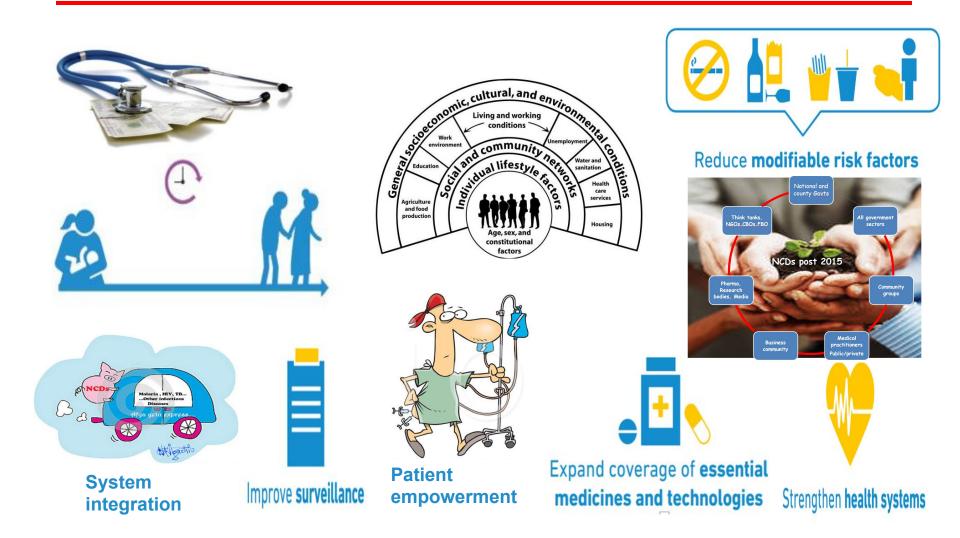


But where are public health interventions?

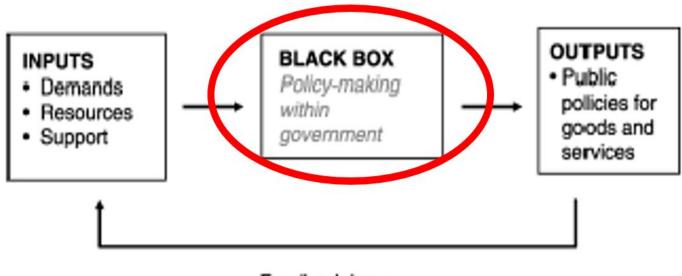
## Indicators of the NCD challenge

- Data issue
- Long term thinking at population level
- Empowerment of communities
- Addressing access
- Domestic financing and integrated care
- MSA
- Cascading care
- Leapfrogging the NCD capacity
- Joint national and county frameworks
- Indicators of success

## Strategic Priorities



# How do you affect what happens in the "the black box"



Feedback loop

Easton's political systems model

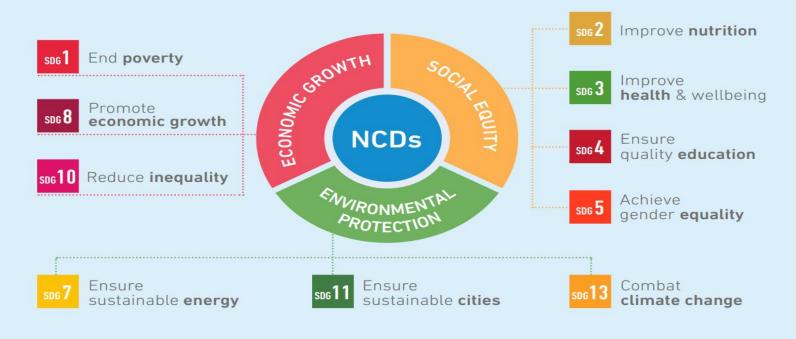
Source: Adapted from Easton (1965)

"You are either at the table or in the MENU"

## Broadening our reach

#### Working across sectors to improve health and NCDs

NCDs are now a universal priority. All governments must urgently take action if they are to meet these 2030 targets. Investing in efforts to reduce the global NCD burden will not only improve health outcomes, it will also accelerate progress on many other SDGs.



## Patient empowerment-....Informed decision making



# 62% of diabetes undiagnosed...sitting on a time bomb



27% 36% 49% 62%

54%

Proportion of cases of diabetes (20-79 years) that are undiagnosed, 2013

Number of people with diabetes (20-79 years), 2013

## Primordial thinking

"The poorest groups not only bear higher risks for NCDs but, once they develop an NCD, they also face higher health and economic impacts. The poor have less access to medical care, allowing NCDs to progress to advanced states resulting in higher levels of mortality and disability. Given their complexity and chronic character, medical expenditures for treatment of NCDs are a major cause for tipping households into poverty." AMARTYA SEN-Nobel Laureate in Economics

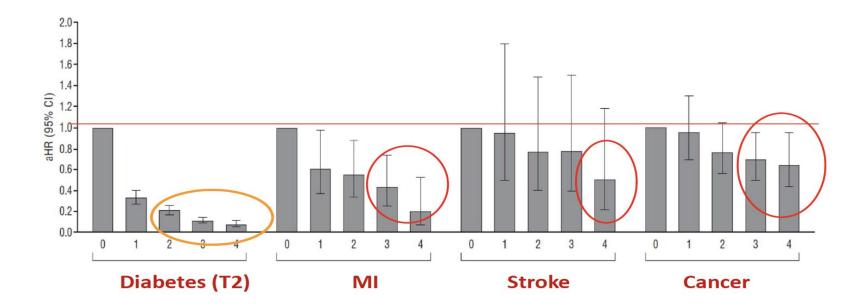
## Cardiopulmonary arrest!!!

1	7. MARITAL STATUS: (a) Married (b) Divorced (a)Single
27	(c)single (d) Widowed
~	8 BLACE OF DE UNIX
	Health Institution/Sub-location or estate and town. District
1000	9. USUAL RESIDENCE CHAMARA Sub-location or estate and town District Sub-location or estate and town
	10. LEVEL OF EDUCATION CLASS 7 11. OCCUPATION FARmen
	12. CAUSE OF DEATH (PRINT IN BLOCK LETTERS, DO NOT ABBREVIATE)
7	IMMEDIATE CAUSE: disease or condition directly leading to death (a)
Z.	Due to
TV	ANTECEDENT CAUSES: Morbid conditions, if any, which press size to imperiate the second
PIC	(b)
MEDICAL	Due to stating the underlying condition last
0	(c)
	OTHER SIGNIFICANT CONDITIONS: Contributing to death but not related to (a)
	13. CERTIFICATE: 1 certify that:
the second	(b) I examined the body after death or
1	(c) I conducted a post-mortem examination of the body and the day
	14. NAME the best of my knowledge.
×.	16. DATE 25 02 13
INV	17. SIGNATURE
STR	Des Maria and Abalation Abalatiant FOR: 30 Clonus
REGISTRATION ASSISTANT	North Year (Name of health institution)
RAR	21. DISTRICT 22. REGISTRATION No. 311300333
TRAR	21. DISTRICT

## **Behavior change**

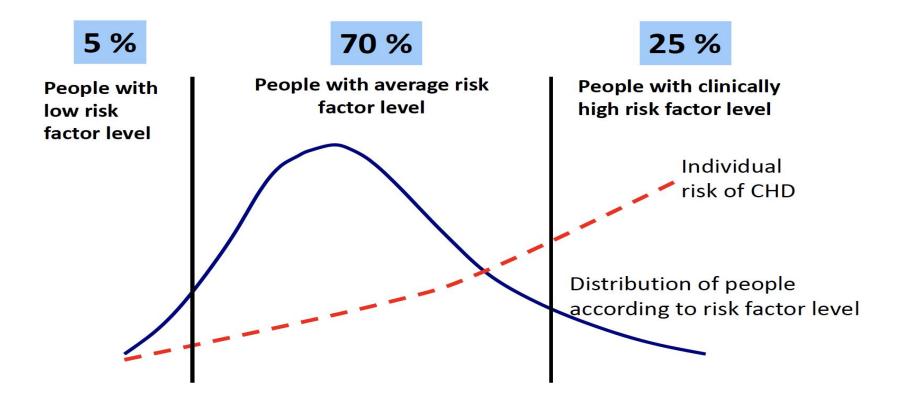
#### NCDs can be largely prevented by 4 healthy behaviors

No smoking, regular PA, healthy diet and lean weight; 23'153 participants 35-65 yr, EPIC-Potsdam

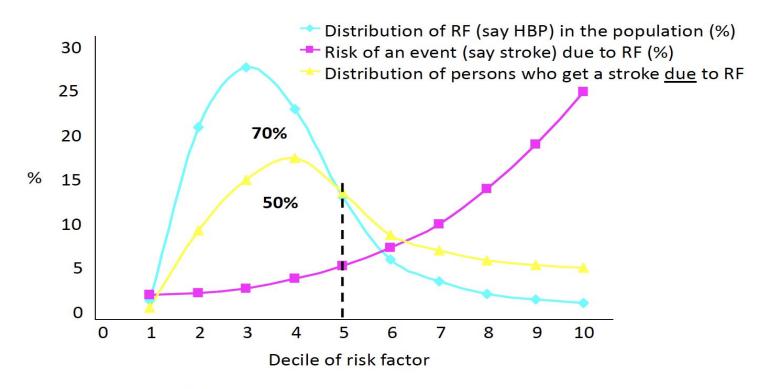


Ford ES et al. Healthy living is the best revenge. Findings from the European Prospective Investigation Into Cancer and Nutrition–Potsdam Study. Arch Intern Med 2009;169:1355-62.

#### The "prevention paradox": theoretical presentation of the difference between individual risk and the proportional attributable risk



### The majority of CVD events in a population arise from the majority of persons with low/intermediate RF levels: "the prevention paradox"



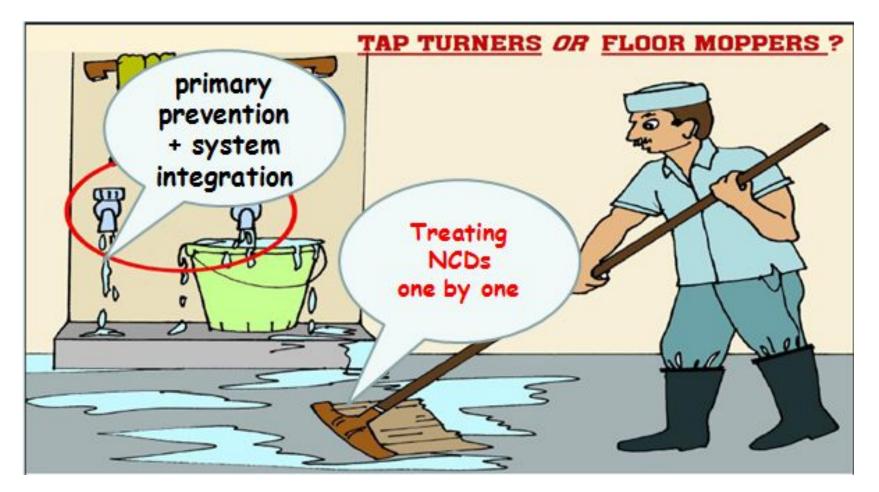
Wilhelmsen et al. Clin Sci 1979;57:455S

#### Strategies to prevent NCDs in the population "Primary prevention: avoid occurrence of new cases"

Reduce RF levels in all individuals: population strategy

- Create conducive environment enabling adoption of healthy lifestyle
- e.g. legislation, tax, financial incentives by government
- Small effect in individuals but large impact at entire population level
- Does not require behavior change, can be rapidly effective
- Often very cost effective (can even generate revenue: tobacco tax)
- "Good for all"
- Detect and treat high-risk individuals : high-risk strategy
  - Screening (e.g. HBP, diabetes) and treat before complications occur
  - Large effect in few people but small impact at population level
  - Requires behavior change at individual level (compliance to

### Thinking upstream....Primordial prevention



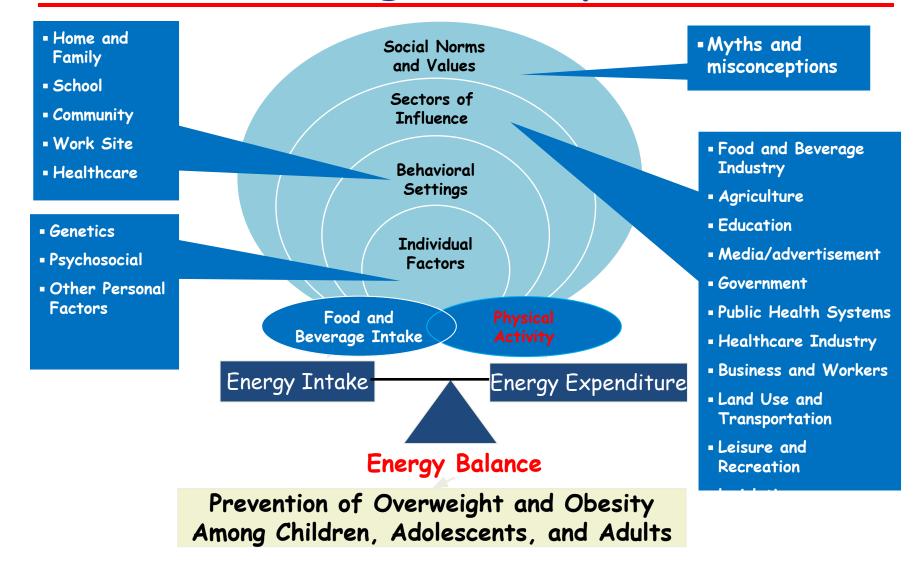
Tap turners or floor moppers? .....looking at the big picture....

dr. kibachio Joseph 2014 - NCD training modules

## ingredients

- Behavior change for health
- Comprehensive tobacco control policies
- Taxation to reduce the intake of foods that are high in fat, sugar and salt
- Building walking and cycle paths to increase physical activity
- Upstream Strategies to reduce harmful use of alcohol
- Providing healthy school and home meals to children.
- Pollution and carcinogenesis
- Community/primary care platform
- Capacity building for care

## Multi-sectoral approach-...eg...obesity



## Bottlenecks to MSA

## lack of high-level political commitment\*\*\*

- Divergent and occasionally conflicting mandates of stakeholder ministries
- Insufficient involvement of civil society
- Ignorance/denial
- Industry interference

# Do we need a multisectoral coordination mechanisms?

- Provide political leadership and guidance to relevant sectors for the prevention and control of NCDs.
- Enhance the integration of NCD prevention and control in the policies and programs of relevant ministries and government agencies.
- Provide a dynamic platform for dialogue, stocktaking and agenda-setting, and development of public policies for NCD prevention and control.
- Facilitate development and resourcing of the multisectoral action plan on NCDs.
- Coordinate technical assistance for mainstreaming NCDs in the work of relevant sectors at the national and subnational levels.
- Monitor implementation of the action plan and review progress at the national and subnational levels.
- Report on intergovernmental commitments pertaining to NCDs.

### **Economics of NCDs**



37 % of the Daly's is NCDI



6.5% of the Total Health Expenditure

