Sustainable Transition from Aid-towards value for money for equitable outcomes and moving beyond "disease silos": the case of NCDIs in Ethiopia

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#### Background

Estimated population > 107 million in 2018

(UNPD)

- Life expectancy at birth in Ethiopia is 65 years
  - Male: 63 years
  - Female: 67 years

(WHO, 2015)

 In the last decade, Ethiopia's GDP is expanding at around 10% per year and had a GDP per capita of \$US 707 in 2016

(World Bank)

 With the current trend, Ethiopia is expected to become LMIC by 2025 and MIC by 2035.

#### Disease burden in Ethiopia

- The population of Ethiopia suffers from triple burden of disease:
  - Communicable, maternal, neonatal and nutritional (CMNN)
  - Noncommunicable diseases (NCDs)
  - Injuries

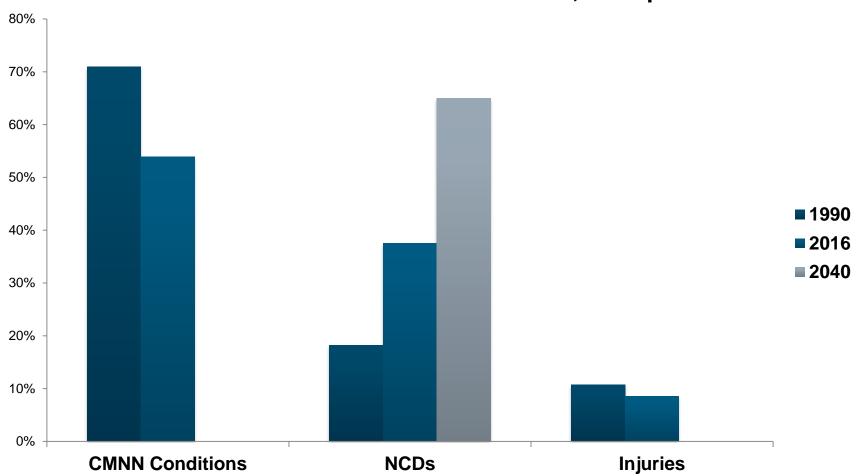
(IHME, 2016)

 The burden of NCDs is on the rise, accounting for 38% of the total DALYs lost in 2016 (18% in 1990) and projected to rise to 65% by 2040.

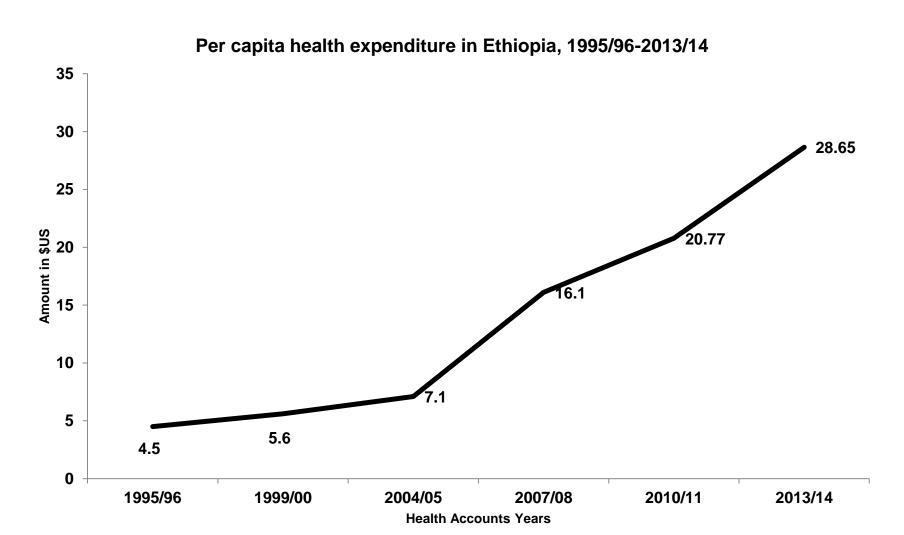
(IHME and Bollyky et al, 2017)

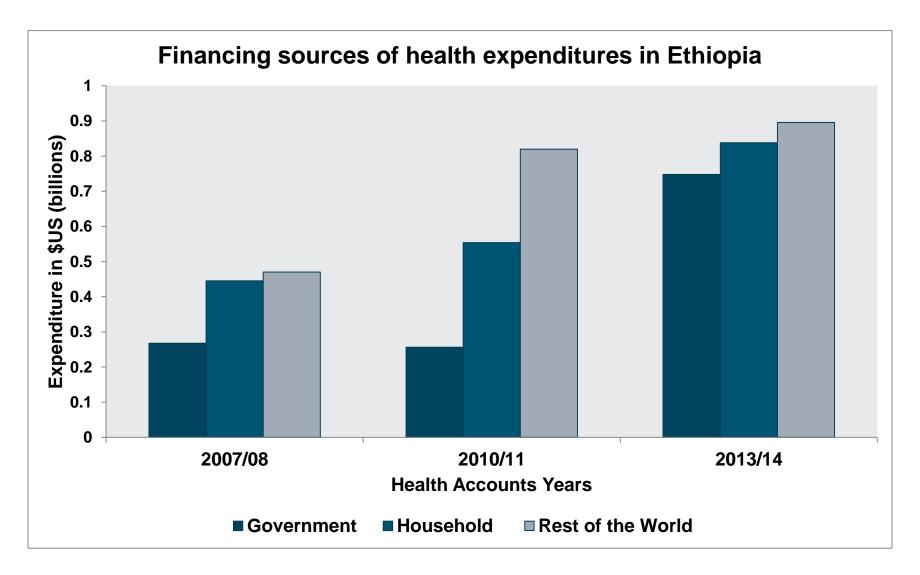
#### Disease burden in Ethiopia

#### Trend of Disease burden in DALYs, Ethiopia



- Ethiopia has endorsed "one plan", "one budget" and "one report" approach since 2007.
- All actors in the health sector are expected to harmonize and align their actions with the country's priorities.
- The government and most development partners in Ethiopia are signatories of IHP+ and have a Joint Financing Arrangement (JFA) for pooling of health funds.





- Total health expenditure (THE) in 2013/14 in Ethiopia was US\$ 2.52 billion.
- This was 4.73 percent of the country's GDP and 6.7 percent of the total government expenditure (TGE).

- HIV/AIDS and other STDs, Tuberculosis and Malaria receive 21% of the THE but account only to 10% of the total disease burden (DALYs) in 2016 in Ethiopia.
- NCDs and Injuries account to 46% of the total disease burden in 2016 in Ethiopia but receive only 15% of the THE.
- 70% of NCD services in Ethiopia are financed by OOP expenditures

#### NCD services in Ethiopia

- Access to quality NCDs services is very low in Ethiopia:
  - 60% of patients with high blood pressure in Ethiopia were never diagnosed.
  - Among identified cases with hypertension, only 28% were taking medications and most (74%) had poor control.
  - 84% of individuals (particularly in rural areas) with high fasting blood sugar were undiagnosed.
  - Among identified cases as having DM and received treatment, only 24% achieved blood sugar control

#### NCD services in Ethiopia...

- Ethiopia is among countries experiencing the most rapid shift on NCD burden
- Low priority for NCDs and least prepared to tackle the fast expanding burden.
- Recognizing these facts and to address the problem, FMoH-Ethiopia in 2016 established a National NCDIs commission to assess the magnitude of the problem and to come up with recommendations. The commission has produced a report.
- The FMoH has also decided to revise the 2005 Essential health services package commensurate with recent developments

#### NCD services in Ethiopia...

- The inclusion of NCDI services in the essential health services package (EHSP) is a step forward on the path to UHC
- Primary health care will be the main delivery platform for EHSP in Ethiopia
- Quality, equity, financial risk protection and efficiency are core issues

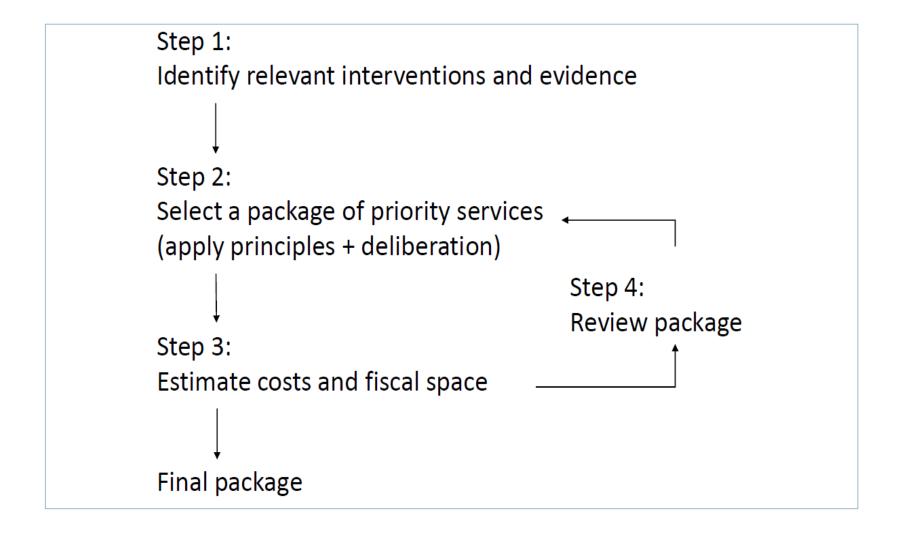
# Priority setting of essential NCDI interventions in Ethiopia

- NCDIs encompass many different conditions, and a large number of effective interventions could be considered for scale up.
- Among the available interventions, many are expensive and resource demanding, such as haemodialysis for CKD or advanced cancer treatment, therefore priority setting is key.
- Selection of a package of essential interventions were based on WHO recommendations and more recent evidence from the Disease Control Priorities (DCP) project.

#### Priority setting-principles

- Three general principles were used:
  - CEA: helps maximize total population health by selecting highly CE interventions for scale-up
  - 2. Priority to the worse off: extra weight to the needs of those who are disadvantaged in regards to health outcomes, access to care, etc
  - 3. Financial risk protection

### Priority setting process



### Priority setting

- Three categories of interventions were identified:
  - Highest priority NCDI interventions: interventions with CE ratio of <0.5 x GDP per capita</li>
  - High priority NCDI interventions: interventions with CE ratio of <0.5-1 x GDP per capita</li>
  - NCDI interventions to be implemented at a later stage: interventions with CE ratio of >1 x GDP per capita

### Priority setting-Result

- An initial list of 235 relevant interventions were identified
- 90 interventions were identified as highest priority NCDI interventions on conditions including cancer, diabetes, cardiovascular diseases, chronic respiratory diseases, mental, neurologic and substance use disorders, essential surgery and multi-sectoral interventions.
- Around 70 interventions were classified as high priority interventions
- The rest were classified as interventions to be implemented at an even later stage
- The highest priority NCDI interventions were then selected for costing using OneHealth tool assuming 30% coverage level over the next five years

### Priority setting-Result

 When the scale up is completed, the annual additional cost of the package is estimated at 550 million USD, corresponding to 4.7 USD per capita.

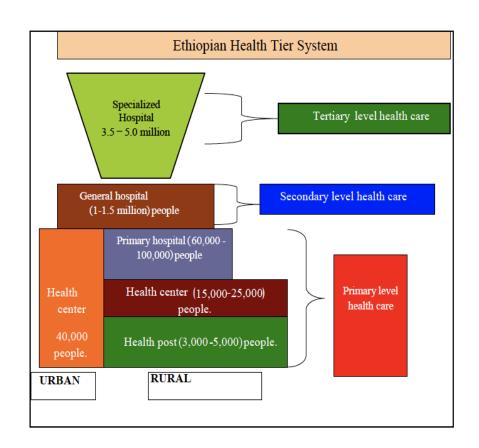
### Priority setting-Result

Incremental costs by major category. Costs are reported in 1000 USD.

Interventions	Implementation year					
	2019	2020	2021	2022	2023	
Cancer	7 494	15 406	23 748	32 496	41 649	
Cardiovascular diseases and diabetes	46 438	95 429	147 017	201 292	258 307	
Mental, neurological and substance use disorders	12 231	25 773	40 708	57 106	75 025	
Surgery	22 377	45 865	70 526	96 424	123 622	
Other interventions: Provision of glasses for severe refractive disorders	127	258	392	529	668	
Total intervention cost	88 667	182 731	282 392	387 846	499 271	
Programme cost	8 867	18 273	28 239	38 785	49 927	
TOTAL COSTS	97 533	201 004	310 631	426 631	549 198	
Cost per capita (USD per capita)	0,9	1,8	2,8	3,7	4,7	

## Integration of NCDI services into existing Health Care System (HCS)

- Delivery of the NCDI services is primarily at primary care level (80%), but some are delivered at higher levels.
- Services will be delivered integrated with existing ones



## Integration of NCDI services into existing Health Care System (HCS)...

- HCS, especially PHC in Ethiopia is designed to address emergencies and health conditions that require acute care
- HCS strengthening is key for ensuring UHC for NCDIs
- The concept of chronic care was introduced to PHC through HIV services:
  - Decentralized care
  - Multidisciplinary approach through task shifting and task sharing
  - Simplification of protocols and guidelines
  - Availing essential drugs and diagnostic packages
  - Laboratory networking
  - Harmonized recording and reporting systems
  - Facilitated referral

## Integration of NCDI services into existing Health Care System (HCS)...

 Opportunities and challenges across each of the six key health-systems components during NCDI services integration and scale-up in Ethiopia

Health systems component	Opportunities	Challenges
Leadership and governance	NCD prevention and control unit established at FMoH	<ul><li>Not replicated at regional level</li><li>Multi-sectoral coordination</li></ul>
Health workforce	<ul> <li>Much to be gained by improving efficiency</li> <li>Some NCDs guidelines are available</li> <li>Some PHC are providing the NCD services</li> </ul>	<ul> <li>Inadequate number and staff mix</li> <li>Knowledge and skill gap</li> <li>Staff attrition</li> <li>CRC</li> </ul>
Medical products, vaccines and technologies		<ul> <li>Essential drugs and technologies list</li> <li>Weak supply chain and high wastage</li> <li>Weak/non-functional DTC</li> </ul>
Health information management, surveillance and research	<ul><li>HMIS is in place</li><li>Some NCD indicators already included</li></ul>	Weak HMIS

# Integration of NCDI services into existing Health Care System (HCS)...

Health systems component	Opportunities	Challenges
Finance		
Service delivery	Rapid expansion of PHC	Quality and safety

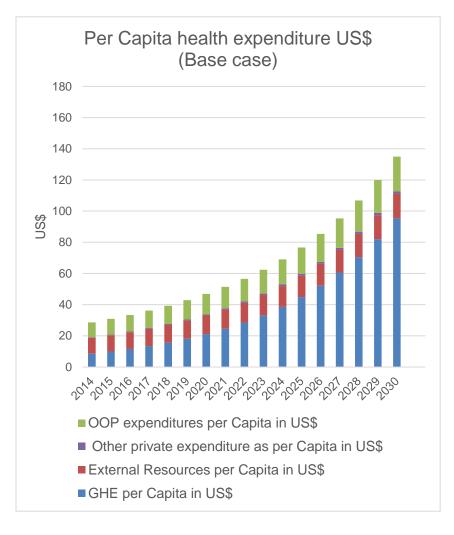
#### Fiscal space and budget expansion

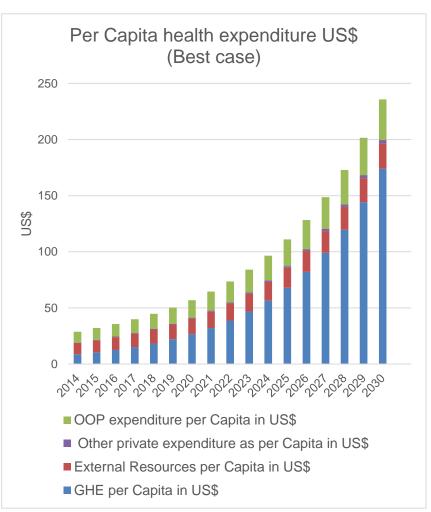
- GoE recognizes the obligation to devote the maximum available resources to health from domestic sources, and not simply rely on international assistance, in order to achieve the progressive realization of UHC.
- The budgetary room is largely determined by two factors: the level of TGE and the percentage of TGE devoted to health.
- By defining reasonable assumptions and targets, projections for fiscal space were made.

### Fiscal space and budget expansion...

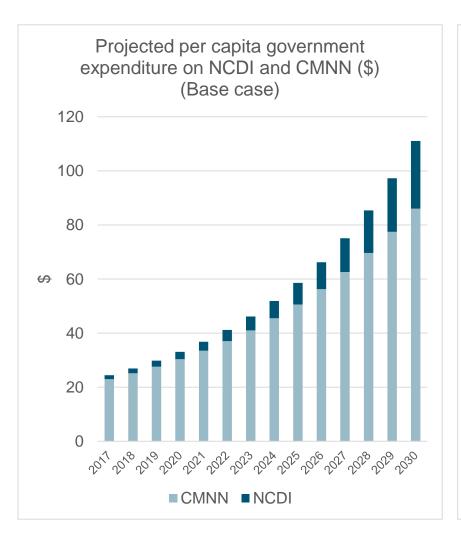
Assumptions and targets	Base case	Best case
GDP growth	5%	7%
Increase in actual government total health expenditure to x % of GDP	5%	6%
Change in external funding for health to % of total government expenditure	13%	15%
Out-of-pocket expenditure to % of total health expenditure	20%	20%
Other private health expenditures as % of total health expenditure	1.5%	1.5%
Increase in government allocation to NCDI interventions from the current to x%	25%	25%

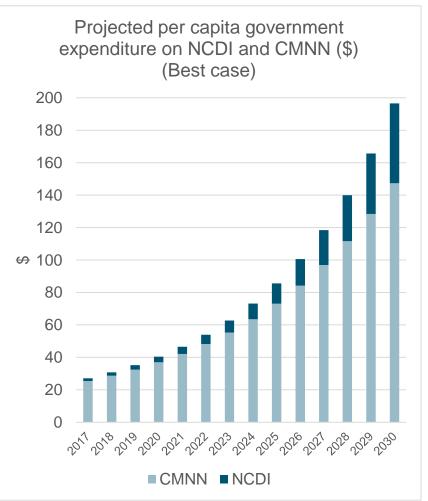
#### Fiscal space and budget expansion...





#### Fiscal space and budget expansion...





#### Conclusions

- NCDIs comprise a large burden of disease in Ethiopia.
- Low NCDI services access and utilization.
- OOP expenditures for NCDIs is very high.
- Current investment for NCDI is low.
- There are proven cost-effective NCDI interventions that can be scale-up in LIC.
- These interventions could be delivered integrated into the existing health system, particularly using PHC
- Government resources could play a critical role in financing NCDI interventions.

#### Conclusions...

- External resources will have a vital role as countries transit to MIC
- The work also demonstrates that it is possible to approach priority setting in a systematic way even in resource constrained settings.

#### Acknowledgement

- The FMoH for the leadership and commitment in the preparation of the report.
- I would like to acknowledge all the commission members involved in producing the NCDI report.
- Special thanks to Prof. Ole F. Norheim for his critical role in the realization of the report

Center for Medical Ethics and Priority Setting, AAU

### Thank you