Role of modeling in supporting UHC using Kenya as a case study Evaline Kibuchi Stop TB Partnership-Kenya

Modeling the interplay of TB with primary/UHC

UHC: WHO Definition

- All individuals and communities receive the health services they need without suffering financial hardship.
- Includes the full spectrum of essential, quality health services, from health promotion to prevention, treatment, rehabilitation, and palliative care.
- Enables everyone to access the services that address the most significant causes of disease and death and ensures that the quality of those services is good enough to improve the health of the people who receive them.
- Protects people from the financial consequences of paying for health services out of their own pockets reduces the risk that people will be pushed into poverty because unexpected illness requires them to use up their life savings, sell assets, or borrow – destroying their futures and often those of their children



Health in Kenya

Kenya has adopted UHC as one of the big four priority agenda by the President. The others are: housing, food security and manufacturing.

The human right to health has been enshrined in Kenya's Constitution 2010 and development agenda outlined in Vision 2030.

An overview of the Universal Health Coverage



The UHC benefit package

- Increased access to preventive, curative, rehabilitative and palliative health services at minimum financial burden, thereby eliminating inequalities in access to health care.
- Free consultation, diagnosis services for normal ailments and get drugs for free.
- Expected to boost access to medical and minor surgical services, maternal and child healthcare services through the support of elaborate public health education.
- Enhance HIV, tuberculosis and malaria treatment in the country.





TB In Kenya

- Among the 30 high burden countries for TB (WHO, 2017)
- It has a triple burden of TB, DRTB and TBHIV
- The epidemic mainly affects the young (15-34yrs) – the most economically productive age groups
- Has 40% missed people with TB

TB related costs



TB patients incur large costs related to illness and disability including medical, transport and costs related to loss of income



These costs create barriers to access and adherence to medication thereby increasing the risk of disease transmission



• The 2014 KDHS indicated that financial barrier to care was a primary cause of delayed health care seeking among TB patients



Implications of high TB related costs: Death

- Joyce Wangeci, died: April 2018
- Age: 12 years
- Cause of death: Long story
- DRTB related costs: A bill of 12000 USD at her death
- Home of origin: Nyeri, a UHC pilot county
- Question: would joyce be alive today if she lived in the UHC era?

Implications of TB on productivity, quality of life

This is Chichi, An MDRTB survivor

- Career: Deep sea diver, currently survives on an Oxygen concentrator
- Beneficiary of social protection: Yes(with conditions)
- If he lived in the era of, and in a UHC pilot county, would his life be different?



TB related catastrophic costs



Composition of costs incurred over the course of treatment by TB patients (median values)



Median costs incurred by TB patients per TB episode



Spent by Drug Sensitive TB patients

Spent by Drug resistant TB patients

Households affected by TB incurred severe socio-economic consequences

- Between 27.1% and 53.7% of TB affected households experienced food insecurity due to TB
- Proportion of TB patients living below poverty line increased from **13.9%** to
 - 31.1%





Households affected by TB incurred severe socio-economic consequences

2.5% of Drug Resistant TB and 39.1% of Drug Sensitive TB patients lost jobs due to TB



Children in 9.3%

of households' affected by TB had their education disrupted

Policy recommendations from the survey:

- Enhance TB specific social protection measures
- Link TB affected households to food security programs
- Include all TB patients in the UHC package
- NHIF benefit package to include all elements of tuberculosis care
- Develop and implement policies and laws to eliminate discrimination and ensure job security for TB patients

UHC piloting in Kenya: The 4 pilot counties

• Kisumu County leads in the high number of infectious diseases like HIV/AIDS and tuberculosis.

Nyeri: leading in NCDs especially diabetes

Isiolo county is meant to demonstrate how the package will work among the nomadic population.

Machakos county High number of accidents and injuries.(a major highway cuts across the county)

One year into the pilot: Challenges to UHC

- Most public health facilities across the country lack the capacity to treat certain ailments and often have to refer patients to other facilities after diagnosis.
- Lack of equipment and basic amenities such as water and electricity.
- Occasional strikes by Health care workers

- An influx of hospital registrations(with infrastructure remaining constant)
- Constant stock out of commodities
- Inadequate referrals
- Engagement with enabling sectors were not optimal (e.g. Water, Energy, ICT, infrasctructure, Education, Social Protection)

Acknowledgements

- National TB program
- USAID through the TBARC 11 project

