

REPUBLIC OF KENYA



MINISTRY OF HEALTH



NATIONAL STRATEGIC PLAN

FOR TUBERCULOSIS, LEPROSY AND LUNG HEALTH

2019 – 2023



EXECUTIVE SUMMARY



**NATIONAL TUBERCULOSIS, LEPROSY
AND LUNG DISEASE PROGRAM**



PACIENT PACK
ANTI - TB DRUGS

Each pack contains:
 Isoniazid (H) 150mg, Rifampin (R) 150mg, Pyrazinamide (Z) 400mg,
 Ethambutol Hydrochloride (E) 275mg Tablets USP

RiHide - E AND **RiHide**

INTENSIVE PHASE (3 MONTHS) CONTINUATION PHASE (9 MONTHS)

Go! - Must NOT FOR SALE

Batch No. 150217
 Mfg. Date: FEB. 15, 15
 Exp. Date: APR. 15, 15

Batch No. 150217
 Mfg. Date: FEB. 15, 15
 Exp. Date: APR. 15, 15

38/18

PACIENT PACK
ANTI - TB DRUGS

Each pack contains:
 Isoniazid (H) 150mg, Rifampin (R) 150mg, Pyrazinamide (Z) 400mg,
 Ethambutol Hydrochloride (E) 275mg Tablets USP

RiHide - E

100 Tablets (1 x 287 Blister Packs)

RiHide

100 Tablets (1 x 287 Blister Packs)

28/18

PACIENT PACK
ANTI - TB DRUGS

29/18

PACIENT PACK
ANTI - TB DRUGS

30/18

PACIENT PACK
ANTI - TB DRUGS

6161102971996

MP-11748

PACIENT PACK
ANTI - TB DRUGS

RiHide - E

PACIENT PACK
ANTI - TB DRUGS

PACIENT PACK
ANTI - TB DRUGS

PACIENT PACK
ANTI - TB DRUGS

6161102971996

RiHide

RiHide

Management

to the person in which patient's health condition is not stable and

is provided in such cases as well. Patients should be advised to

to effect to obtain feedback on the effectiveness. The Physician will monitor

the effectiveness of the medication.

Stack of yellow papers

OVERVIEW

The National Strategic Plan (NSP) for Tuberculosis, Leprosy and Lung Diseases 2019 - 2023 represents an evolution in the Government of Kenya's response to these scourges. New data acquired over the past four years will drive a targeted and prioritised approach. This NSP reflects a patient-centred approach to planning and evidence-based prioritisation of resource allocation to close the gaps along the patient pathway to quality care. The NSP is operationalised through a partnership framework aligned to each stakeholder's comparative advantage. The activities embodied under this NSP will address systemic and root causes of the gaps along the patient pathway, suggesting the complementary roles of county and central governments, departments across the Ministry of Health, partners and other sectors.

This NSP lays out the strategic and technical direction for the elimination of TB and leprosy nationally. It presents the full aspiration of the country, including outcome and impact targets that align with international goals, and the full portfolio of activities needed to reach these goals. It assumes a fully funded NSP. In acknowledgement of likely funding gaps, an evidence-based optimisation of resource allocation is presented alongside alternative impact targets given reduced funding scenarios; i.e. a) 2018 - 2019 funding levels from domestic and international sources; and b) 2018 - 2019 funding plus 25 percent. An upcoming supplement to the NSP will document the full operational plan behind this NSP and articulate the county-specific commitments that will contribute to the attainment of national goals.

THE PROBLEM

Tuberculosis is the leading infectious disease killer in Kenya. A 2015/2016 prevalence survey revealed that the burden of tuberculosis (TB) in Kenya was 426 cases per 100,000 population – suggesting there was more than twice as much TB as previously estimated. This was a wake-up call for the country. After five years of declining case notifications, the results of the prevalence survey prompted intensified efforts to understand where people with TB were being missed by the system and to mount innovative responses. In both 2017 and 2018, TB case notifications increased by more than ten percent, respectively, over the previous year. Still, nearly half of all estimated TB cases were not diagnosed, notified and or treated in 2018. Among children with TB, nearly two-thirds were not diagnosed; and nearly 80 percent of people with drug-resistant TB were missed.

Kenya is a low endemic country for leprosy and has achieved and sustained national elimination status for several years. However, there are still six high burden counties that accounted for 73 percent of notified cases from 2014-2016. The majority of these cases were multi-bacillary, some had grade 2 disabilities, and included children under 15 years of age, signifying continuing recent community-based transmission of infection. The NSP reflects a focus on earlier identification of people with leprosy and quality care.

Respiratory illness is the leading reason for healthcare seeking in Kenya. It accounts for a considerable burden of morbidity and mortality in all age groups with ten percent of self – reported reasons among patients seeking outpatient services complain of respiratory symptoms, this is the most frequent complaint. This translates to an annual eight million outpatient visits from respiratory symptoms among health facilities that report on the routine health management information system, DHIS2. Among the respiratory diseases, the most frequently occurring that result in significant morbidity and mortality are lower respiratory infections, drug susceptible TB, drug susceptible HIV/AIDS – TB and chronic obstructive pulmonary disease.



TWO-THIRDS

Approximate number of people with symptoms for TB and had not yet sought treatment. Of these, the majority (82 percent) did not seek care because they felt the symptoms were not serious.



THIRTY FIVE PERCENT

Percentage of people on treatment who were non-adherent.



ONE-THIRD

Approximate proportion of those seeking care in the formal private sector.



TWENTY SEVEN PERCENT

Percentage proportion of TB-affected households facing catastrophic total costs (that were more than 20 percent of their annual household expenditure).



TWENTY PERCENT

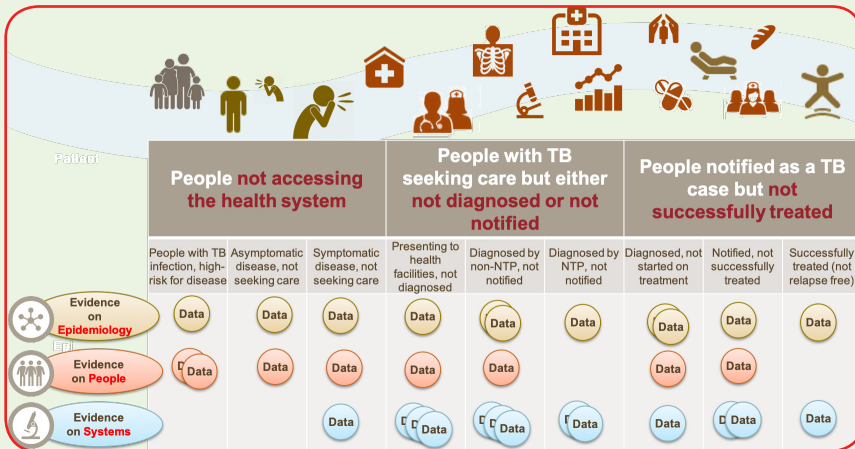
Percentage of people with TB who were diagnosed, and not notified into TIBU – an electronic TB patient-management and recording system.



FOURTY THREE PERCENT

Percentage of people who accessed a facility with TB diagnostic services or specimen transport.

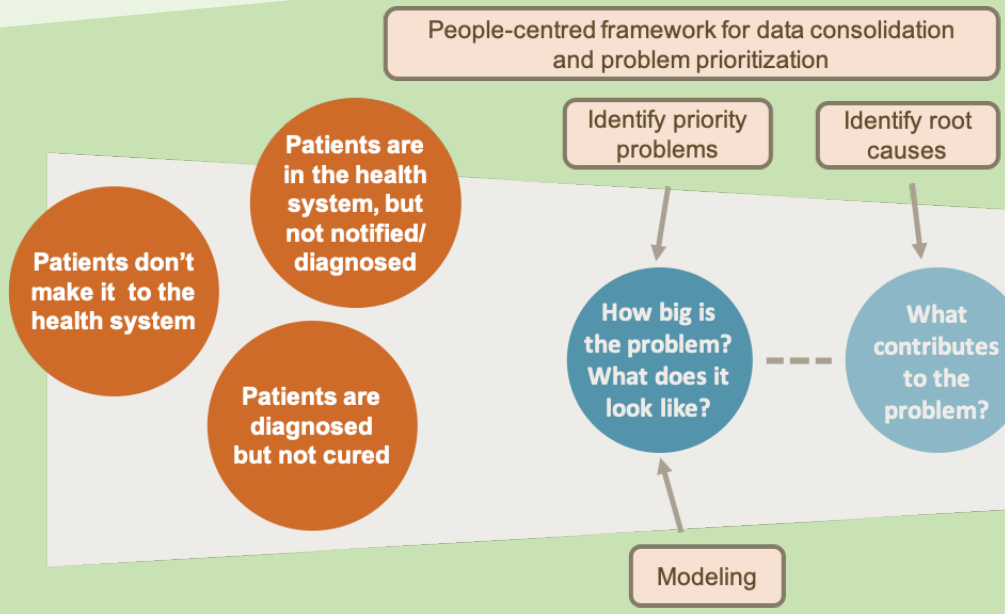
STEP 1



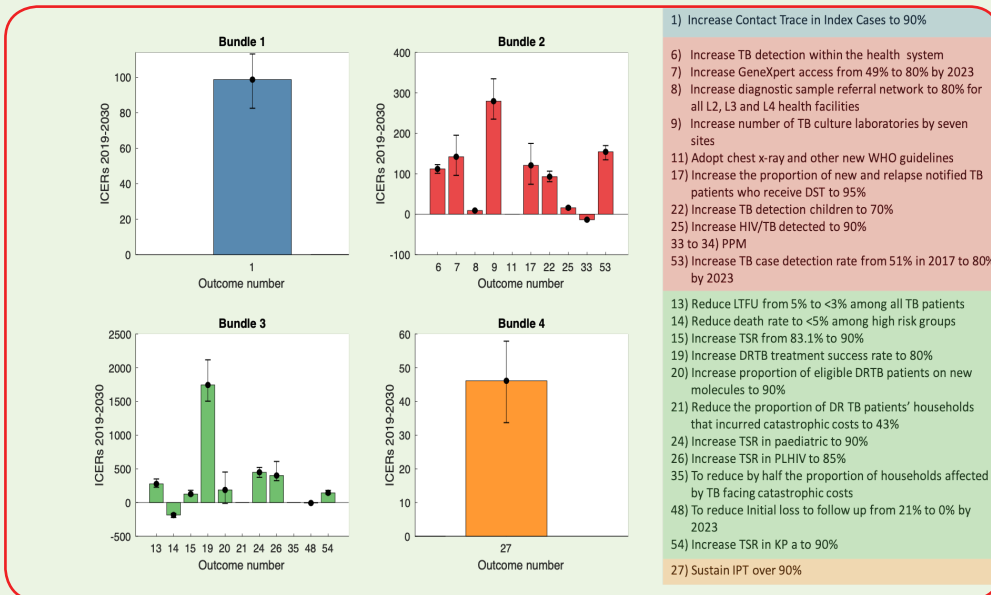
Pathway Category	Pathway Sub-Category	Population	Priority
1. Epidemiology	Drug Sensitive	Pulmonary	High
		EPTB	High
		Pediatric	High
		Special Populations	High
	Drug Resistant	-	Medium
	TB HIV	-	Medium
2. People who are not in the health system	High-risk for TB infection or breakdown to disease	-	High
	Asymptomatic disease, not seeking care	-	High
	Symptomatic disease, not seeking care	-	High
3. People with TB in the health system, but not notified/diagnosed	Presenting to health facilities; not diagnosed	-	High
	Diagnosed by private sector, not notified	-	High
	Diagnosed by public sector, not notified	-	High
4. People with TB are notified, but not cured	People diagnosed with TB but not started on treatment	-	High
	On treatment without treatment success	-	High
	Complete Rx, w/out durable, relapse-free cure	-	High

Priority (Green: Low Priority, Red: High Priority)

Existing data from 15 studies and reports were consolidated along the patient pathway and reviewed by stakeholders with a view to understanding where service delivery is well- or mis-aligned with the needs of people with TB, leprosy and lung diseases. Successes to be sustained were quantified. Gaps in the programmatic response were identified and prioritised.

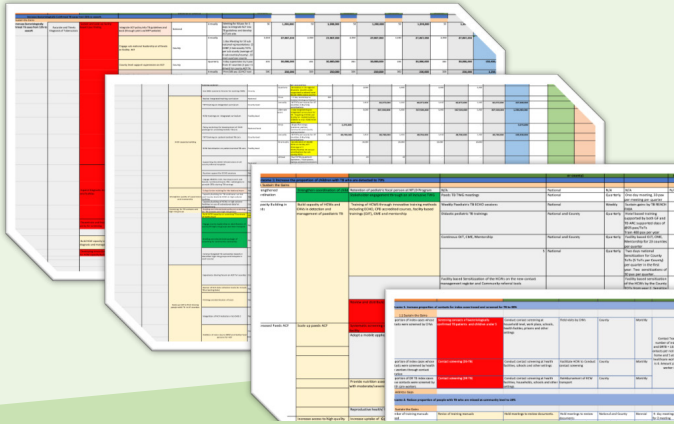


STEP 5



Modeling was completed of the epidemiological impact of reaching each of the outcome targets. For each of the outcome target, estimates of impact were considered alongside the combined costs of the activities articulated in the operational plan and designed to enable the targets to be met. The resulting incremental cost-effectiveness ratios (ICERs) helped the programme to review the cost-effectiveness of pursuing each outcome target. The programme defined the most impactful set of activities, given available resources.

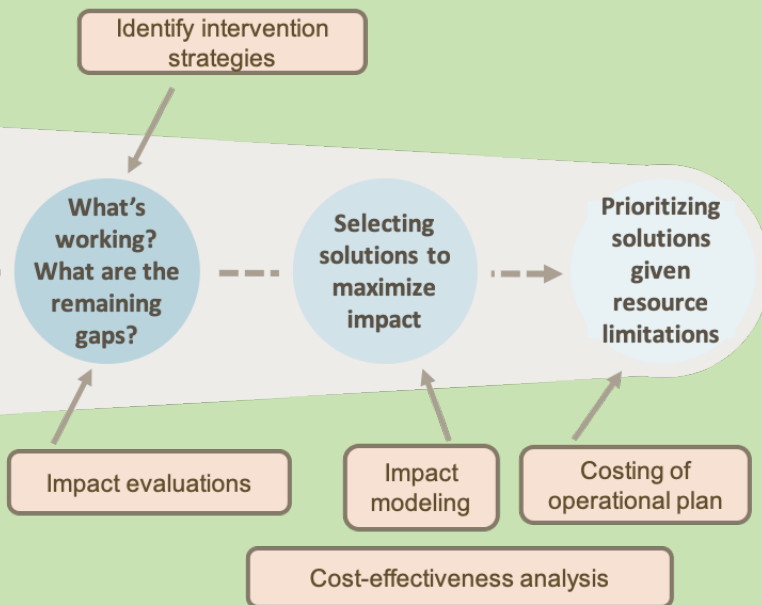
STEPS 2, 3 & 4



Step 2. Based on the prioritisation from step 1, outcome targets were set to sustain the gains and address gaps experienced by people with TB, leprosy and lung diseases.

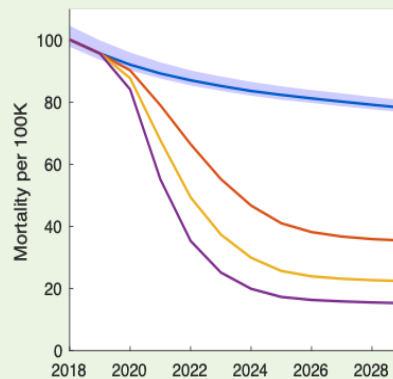
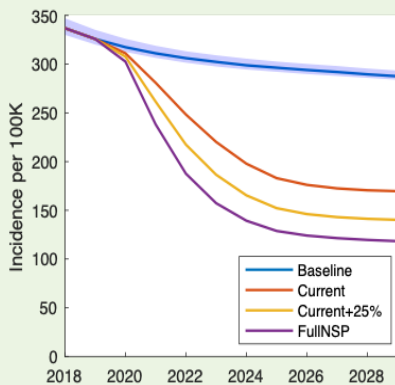
Step 3. A task force of stakeholders defined packages of activities that would be needed to attain the outcome targets. Root cause analysis informed the determination of needs and exploration of interventions.

Step 4. The full operational plan was costed



THE APPROACH

STEP 6



Using the results of the cost-effectiveness analysis as well as priorities defined in step 1, the activities of the operational plan were prioritized to optimise the impact of the programmatic response. Activities and their associated costs were allocated into one of three funding tiers: fully funded NSP (i.e. all activities); resource availability consistent with 2018 levels, and 2018 levels + 25%.

THE RESPONSE

The National Strategic Plan for Tuberculosis, Leprosy and Lung Health 2019 – 2023 (NSP) provides the framework for a multi – sector partnership for Kenya to overcome tuberculosis (TB) and leprosy as public health and social challenges. This NSP outlines the goals, objectives, strategic interventions and activities over a five-year period, considered within the Kenyan Health Sector vision and mission for the period 2014 – 2030. National and county governments, civil society actors, private sector, development partners and other stakeholders collaborated in its development.



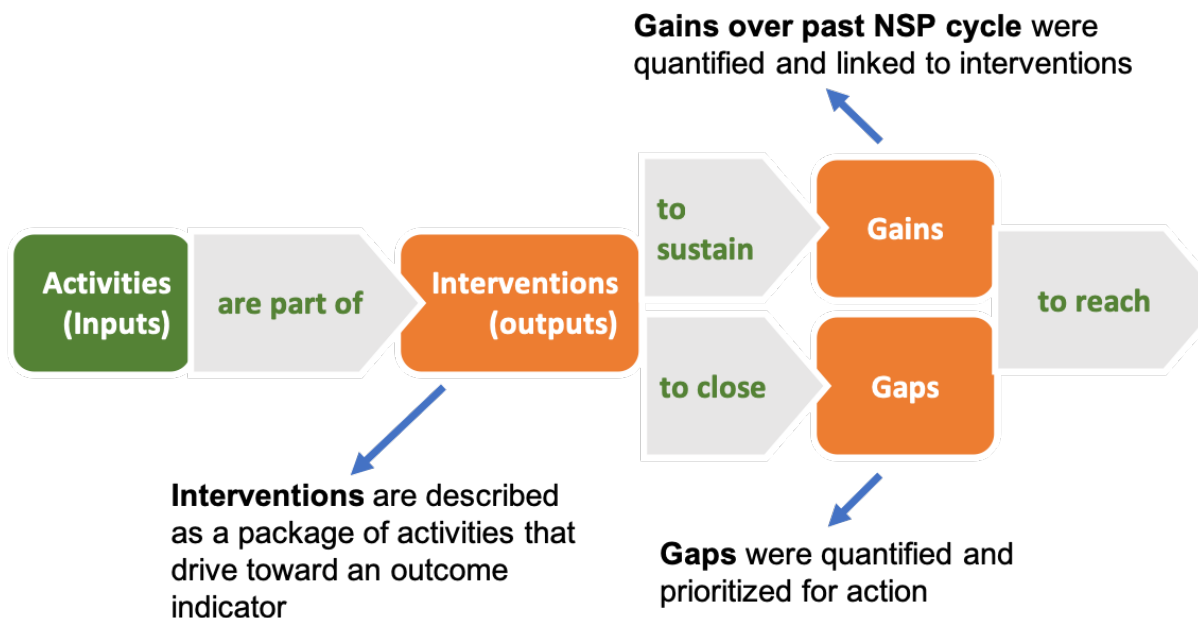
VISION

A Kenya free of TB and leprosy, and reduced burden of lung disease.



MISSION

To ensure provision of quality care and prevention services for all people in Kenya with TB, leprosy and lung diseases.



STRATEGIC FOCUS



Close the gaps along the care continuum to find and cure ALL people with TB



Differentiated response by counties to address TB in local contexts



Optimise the implementation of TB, leprosy and lung health services within UHC

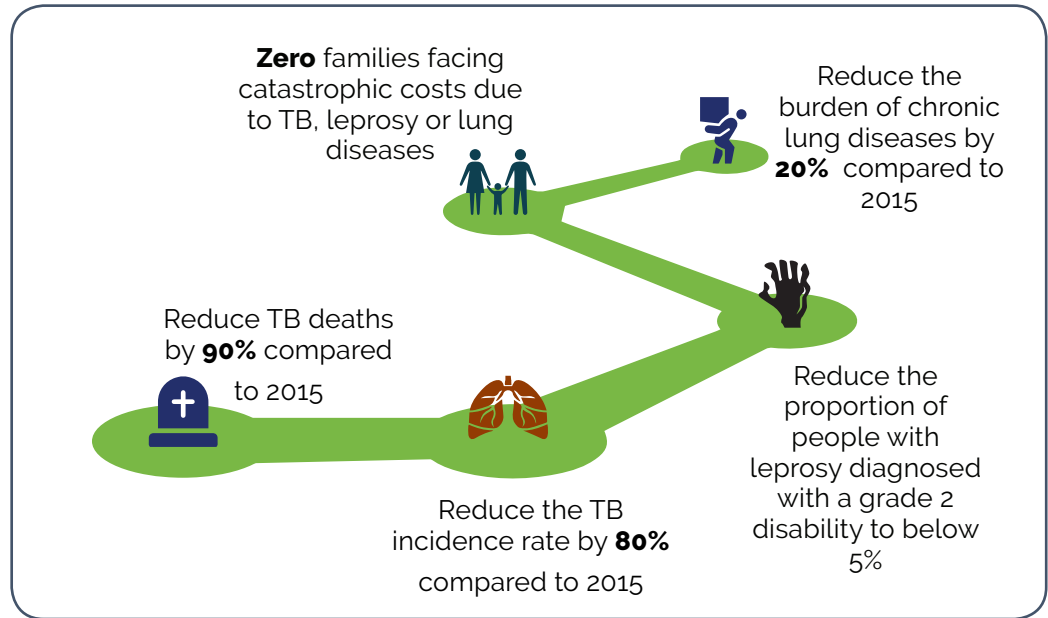


Prevent infection, active disease, morbidity and mortality due to TB, leprosy and lung diseases



Patient-centred approach that promotes quality of care

IMPACT TARGETS BY 2030



Impact targets related to declines in:

- 1) Incidence
- 2) Mortality
- 3) Catastrophic costs

were defined via modeling for three funding scenarios

Outcomes

that combined, will achieve

Impact

Outcome targets were defined and prioritized based on a review of data via the patient-centred framework

PRIORITY OUTCOME TARGETS BY 2023



597,000
people
diagnosed and
treated for TB



55,000
children
diagnosed and
treated for TB



542,000
adults
diagnosed and
treated for TB



4,500
people
diagnosed
and treated for
MDR-TB



900,000
people at risk
of TB received
TB Preventive
Therapy

PRIORITIES FOR ACTION

1st

PRIORITY

Meet people who are seeking care anywhere in the health system with quality TB, leprosy and lung health services.

Differentiate the package of priority activities according to local patient care-seeking patterns and infrastructure

This NSP represents the first time county-specific operational plans were developed as an input to the national plan. Each county considered the local surveillance and programmatic performance data, patient pathway analysis, and MATCH (population and facility mapping) analysis as they determined local priorities and approaches.

Close the diagnostic gap

This NSP represents the operationalization of three new national policies in support of appropriate and timely diagnosis, namely: 1) expanded use of x-ray screening for TB; 2) Xpert as the preferred confirmatory test; and 3) all confirmed TB patients to receive drug-sensitivity testing. These policies will put pressure on the existing infrastructure. The NSP calls for an optimisation of the diagnostic network, in line with the modeling analysis completed in 2018, to ensure each person who accesses care can immediately be screened and tested for TB. The optimisation has informed the repositioning of existing technology and suggested specimen transport networks. It will also guide plans for efficient expansion of Xpert and x-ray technology. The NSP anticipates the efficiencies that may be gained by the rapid introduction of new diagnostic tools when they become commercially available, especially LAM for screening and stool-based preparations for Xpert to diagnose paediatric TB. In the meantime, the NSP plans for all healthcare facilities to have either Xpert capacity on-site (where efficient) or a specimen transport arrangement to a qualified laboratory. Successful implementation of these policy shifts will require enhanced collaboration between communities, care facilities and laboratories. Such collaboration will require enhanced capacity among health staff and laboratories, as well as connected patient management data systems to follow patient progress.

Close the private sector gap

This NSP represents a bold strategy to network all care providers into a cohesive web of support for people with TB, leprosy and lung diseases. Recognizing the variability of private providers across the country, the NSP defines six distinct models of private sector engagement. The establishment of supporting systems will be prioritised, namely strategic purchasing of private sector services, contracting for linkages to public sector capacities (such as diagnostic technology) and commodities (such as drugs), and enhanced functionality of the data system to link patient care with notifications and payments. The activities capitalize on the concurrent expansion of Universal Health Coverage and the potential for national health insurance to incentivize private providers to deliver quality care.

Close the public sector gap, especially for special populations

This NSP reinforces efforts to identify TB among key populations that may be accessing care in specialized facilities and are missed for TB care. In particular, the NSP prioritises reaching children being seen by paediatricians and in MNCH services, people living with TB being seen for ART care, and those with DS-TB and DR-TB who may be seeking care for concomitant disease such as diabetes. This NSP sustains the gains made with routine HIV-testing of TB patients and anticipates early adoption of LAM for screening HIV-positive people for TB. The NLTD-P acknowledges that a paucity of data about the magnitude and characteristics of the TB burden among special populations, as well as impact data regarding what works to best serve them, must be overcome during this NSP period to enable more evidence-based approaches in future.

Close the treatment adherence gap

This NSP represents the first time that treatment adherence has been categorically prioritised within a national response to TB and leprosy. This NSP addresses some of the known root causes of poor adherence, including the indirect cost of care, side-effects, and lack of information. A multi-sectoral approach has been adopted to enable patient support to occur through national social protection programmes, such a nutrition and financial subsidies. Concurrently, the NSP calls for elimination of the fees associated with diagnostic testing for TB, including chest radiography. An evolution of the data management system, TIBU, into a patient care management system is anticipated to enable early detection and differentiated care responses for those people facing barriers to continued treatment.

2nd PRIORITY

For people at risk for TB disease; screen for TB and treat TB infection

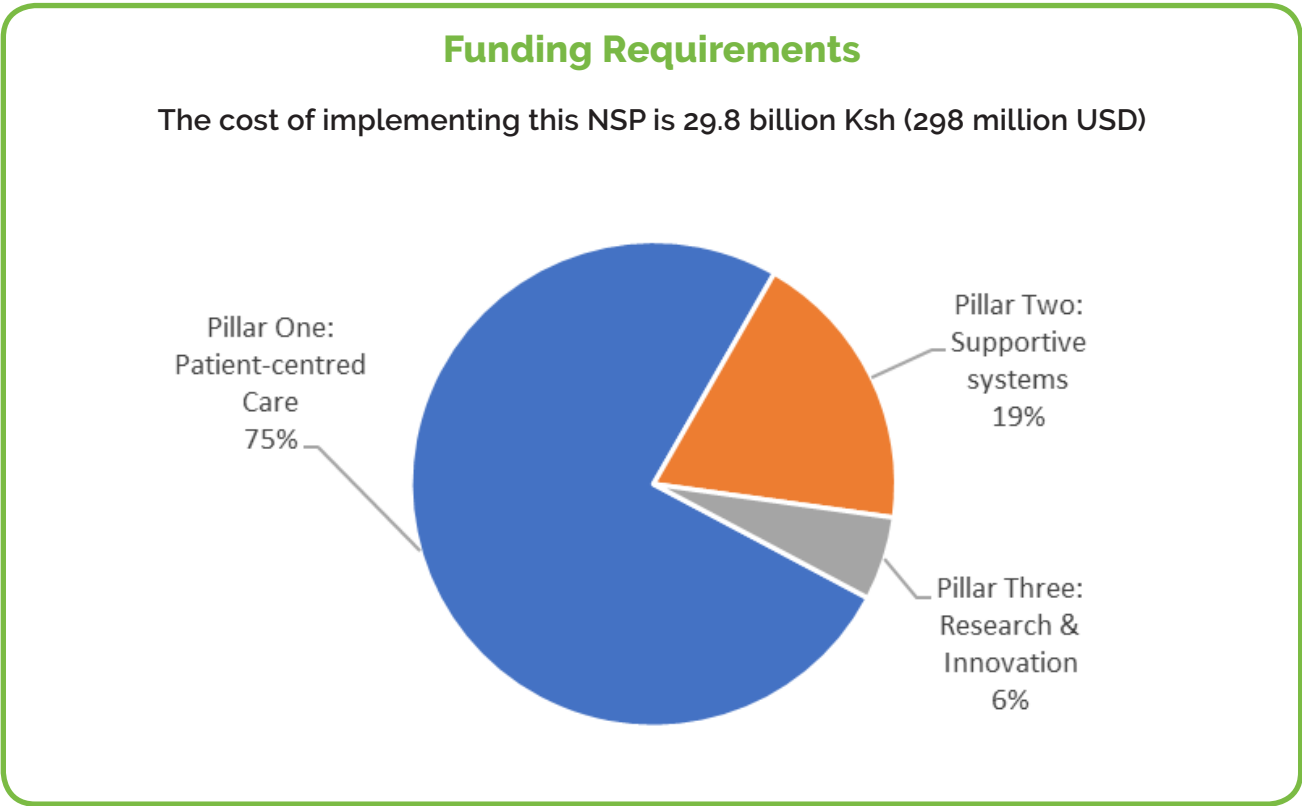
Close the gap of pre-care seeking

This NSP represents a paradigm shift in the strategies used to reduce TB prevalence in the country. While maintaining a focus on the provision of quality treatment for all those ill with TB disease, this NSP also aims to identify people with TB even before they seek care. This NSP represents an ambitious scale-up of contact tracing for TB screening and the use of preventive treatment of TB infection among contacts, health workers and people with HIV. This NSP embraces the adoption of the new, shorter regimen (Rifapentine and Isoniazid for three months) for the treatment of TB infection and presents an ambitious partnership with community health volunteers, large employers, and the Ministry of Education to enable contact tracing for workplace, school-based and household contacts of TB patients, as well as among people with HIV. The move away from monotherapy is expected to overcome provider hesitation to treat TB infection. The NSP also anticipates the early adoption of new TB screening tests as they become globally endorsed and commercially available.

3rd PRIORITY

Mainstream TB, leprosy and lung diseases within UHC and national health insurance.

As Kenya takes strides towards attaining UHC, cost efficiencies can be gained where there is full inclusion of TB, leprosy and lung disease prevention, diagnosis and treatment services in the UHC Essential Benefit Package (EBP). This will enable the full engagement of health workers across the health system in screening and caring for people with TB as a core component of primary health care. This will provide financing of health promotion, prevention and community health services which are platforms needed to find missing TB cases. Similarly, inclusion of TB, leprosy and lung disease in the benefits package under the National Health Insurance Fund (NHIF) could facilitate seamless access to appropriate diagnosis and quality treatment. Insurance reimbursements, if well structured, may motivate reporting from and compliance with national care standards by private providers.



PRIORITISED RESOURCE ALLOCATION

Funding Gap

At 2018-2019 funding levels, it is estimated that KES 14.6 billion will be available. This is made up of domestic (KES 5.6 billion) and donor (KES 9 billion) sources during 2019-2023. Given the **50% funding gap** for implementation of the full NSP, an evidence-based process for prioritisation of resource allocation was completed.

Funding Source	Total (KES, millions)
GOK MOH Printed Estimates	2,765
GOK Co-Financing through Treasury	2,000
GOK HR and Admin	834
Donors (Global Fund and USG)	8,994
Total Available Funding	14,593
Funding Gap	15,207
Full cost of NSP	29,800

Scenario 1: Funding at 2018 Levels

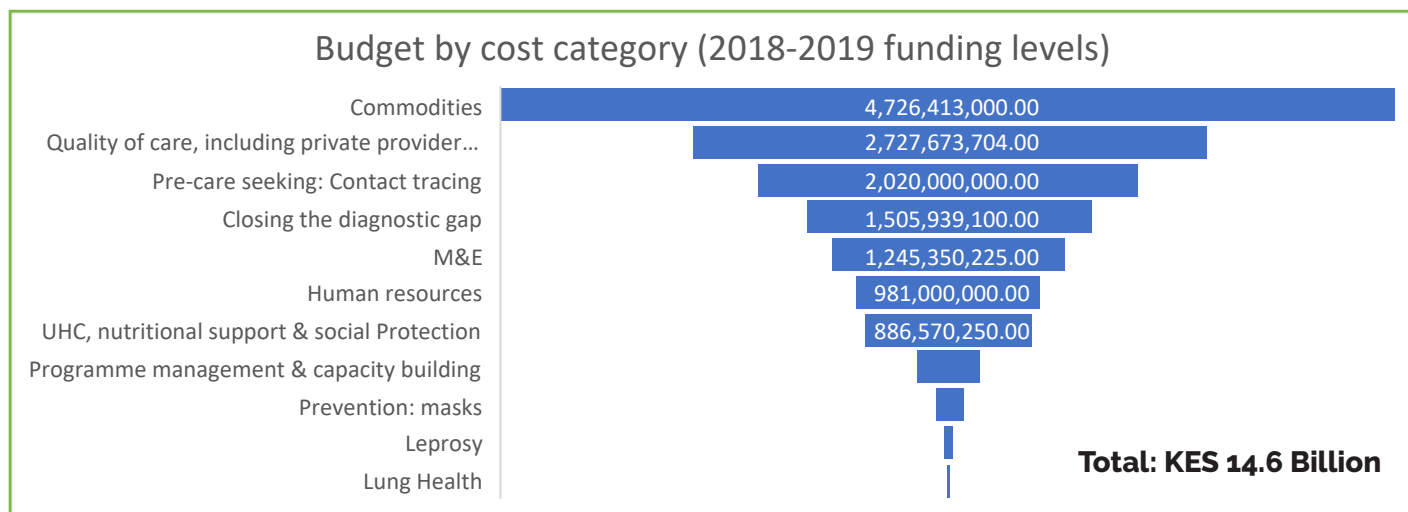
Under a scenario where the programme must operate with 2018 - 2019 funding levels, the most **essential components of care** were prioritised. These included **diagnostic commodities, medicines, salaries, and core surveillance functions**. If funded as planned, these core investments would require 70% of the available 14.6 billion Ksh. Without sufficient funding to enable implementation of all activities aimed at generating demand for services, linking people with presumptive TB to care, or improving the quality of service delivery, it is unlikely that target numbers of people will be screened, tested or treated. As such, commodities were budgeted at 75% of targeted quantities under this scenario, while nutritional support for patients was budgeted at 50% of need.

The programme next prioritised investments aimed at **sustaining the gains** made across all target populations. Based on the prioritised gaps and ICER results, the programme wanted to make fiscal space for intensified action in a few key areas. Careful review of the intervention impact data and cost drivers led to a decision to minimally fund some activities; such as capacity building activities

and programmatic monitoring meetings, while other activities were left out completely and are captured in the higher funding scenarios.

In addition, the program aims to enhance the use of data for improving patient care, specifically by linking and scaling existing TB-related data systems and introducing **digital monitoring** of people with TB across the care cascade. The programme recognizes the importance of maintaining **up-to-date policy norms** and normative guidance materials. The work to update and disseminate new standards of practice, the diagnostic algorithm, and improve care strategies are included in this scenario.

Only a **limited number of new areas of work** will be possible under this funding scenario. The programme prioritised 3 new / intensified workstreams: **closing the diagnostic gap, operationalizing routine contact tracing, and engaging the private sector** through full implementation of the 2018 PPM Action Plan. To close the diagnostic gap, the main areas of work include systematizing specimen transport networks, expanding the use of x-ray and Xpert in line with global recommendations, and rolling-out facility-based screening for TB.

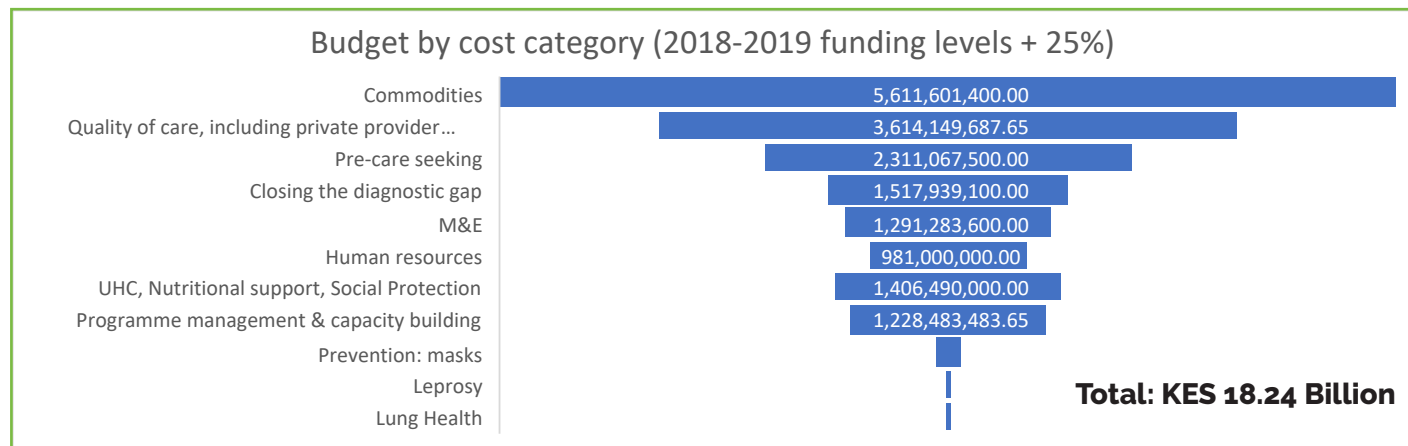


Scenario 2: 2018 - 2019 funding levels + 25% additional investment

With 25% more investment, the NTLD-Program would have KES 18.24 billion to allocate toward its operational plan. Under this scenario, commodities were budgeted at 85% of targeted quantities, while nutritional support for patients was budgeted at 70% of need.

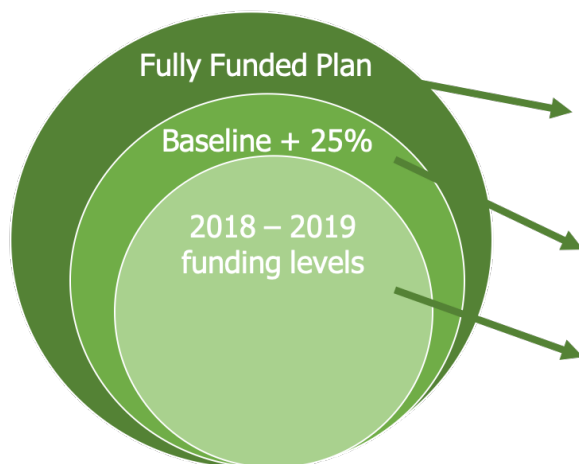
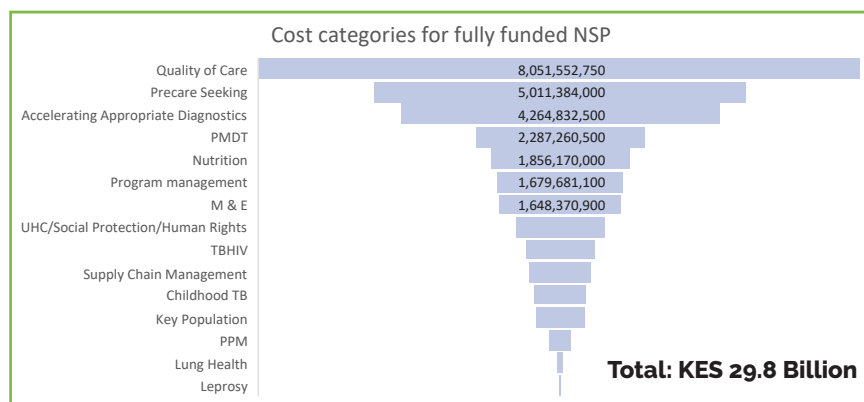
In addition to the interventions prioritised under Scenario 1, the ICERs suggested the value of intensifying diagnosis and treatment of TB among children, and increasing treatment success rates for children, PLHIV, people with drug-sensitive and drug-resistant disease; and reducing the loss-to-follow-up post-diagnosis and during treatment.

As such, the full package of interventions targeting improved diagnosis and care for children is included in this scenario. Activities to strengthen the **capacity** of health care workers and **empower patients**, engage **community health volunteers** and civil society for contact tracing and awareness raising, optimise the inclusion of TB in emerging **UHC** platforms, **increase social protections** for patients, and evaluate **differentiated care models** are among the interventions added, aiming to directly improve patient-centred care.



Scenario 3: Full Funding

Under this scenario, the programme and partners would implement the entirety of the NSP as described in the national and county-level operational plans. This will require KES 29.8 billion.



Scenario	Cost	Impact Targets
Fully funded	29.8 bn	<ol style="list-style-type: none"> 90% reduction in TB deaths 80% reduction in TB incidence Zero TB-affected families face catastrophic costs 20% reduction in chronic lung disease <5% leprosy disability, grade 2
2018 - 2019 funding levels + 25%	18.241 bn	<ol style="list-style-type: none"> 74% reduction in TB deaths 54% reduction in TB incidence 10% TB-affected families face catastrophic costs 15% reduction in chronic lung disease <7% leprosy disability, grade 2
2018 - 2019 funding levels	14.593 bn	<ol style="list-style-type: none"> 58% reduction in TB deaths 44% reduction in TB incidence 20% TB-affected families face catastrophic costs 10% reduction in chronic lung disease <10% leprosy disability, grade 2



NATIONAL TUBERCULOSIS, LEPROSY AND LUNG DISEASE PROGRAM

EXECUTIVE SUMMARY

Visit www.nltp.co.ke for the full National Strategic Plan 2019 - 2023

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