TB REACH Wave 10
Logic Model Framework for Interventions
Innovations in Integrated Service Delivery and Tuberculosis Preventive Treatment Expansion to Strengthen Health Systems

The *Wave 10 Logic Mode Framework for Interventions* (Figure 1) combines components from the *Health Systems Strengthening (HSS) building blocks, Implementation Research Frameworks*, and the existing *TB REACH M&E Framework*.

The Wave 10 Logic Model Framework is intended to help applicants map out how their proposed intervention activities contribute to HSS and can lead to improved health outcomes while identifying implementation barriers and facilitators. The logic model can be revised over time and adapted as necessary; it is provided to help guide applicants with answering questions in the application and subsequently help guide the monitoring and evaluation (M&E) process for awarded projects. Awarded projects will work with independent M&E reviewers who can help refine the logic model and provide more details as necessary for implementation and evaluation purposes.

The logical model is divided into five components of the intervention from design to evaluation. While the model can be adapted, the components include intervention goals and objectives; activities (inputs); intervention outputs; implementation outcomes (M&E and implementation research); and HSS impact (long-term).

For the Stage 1 application:

Applicants will be asked to describe intervention goals and objective, known barriers and facilitators by the HSS building blocks, and their proposed activities. (*see Table 2: Logic Model Template Example)*

For the Stage 2 application:

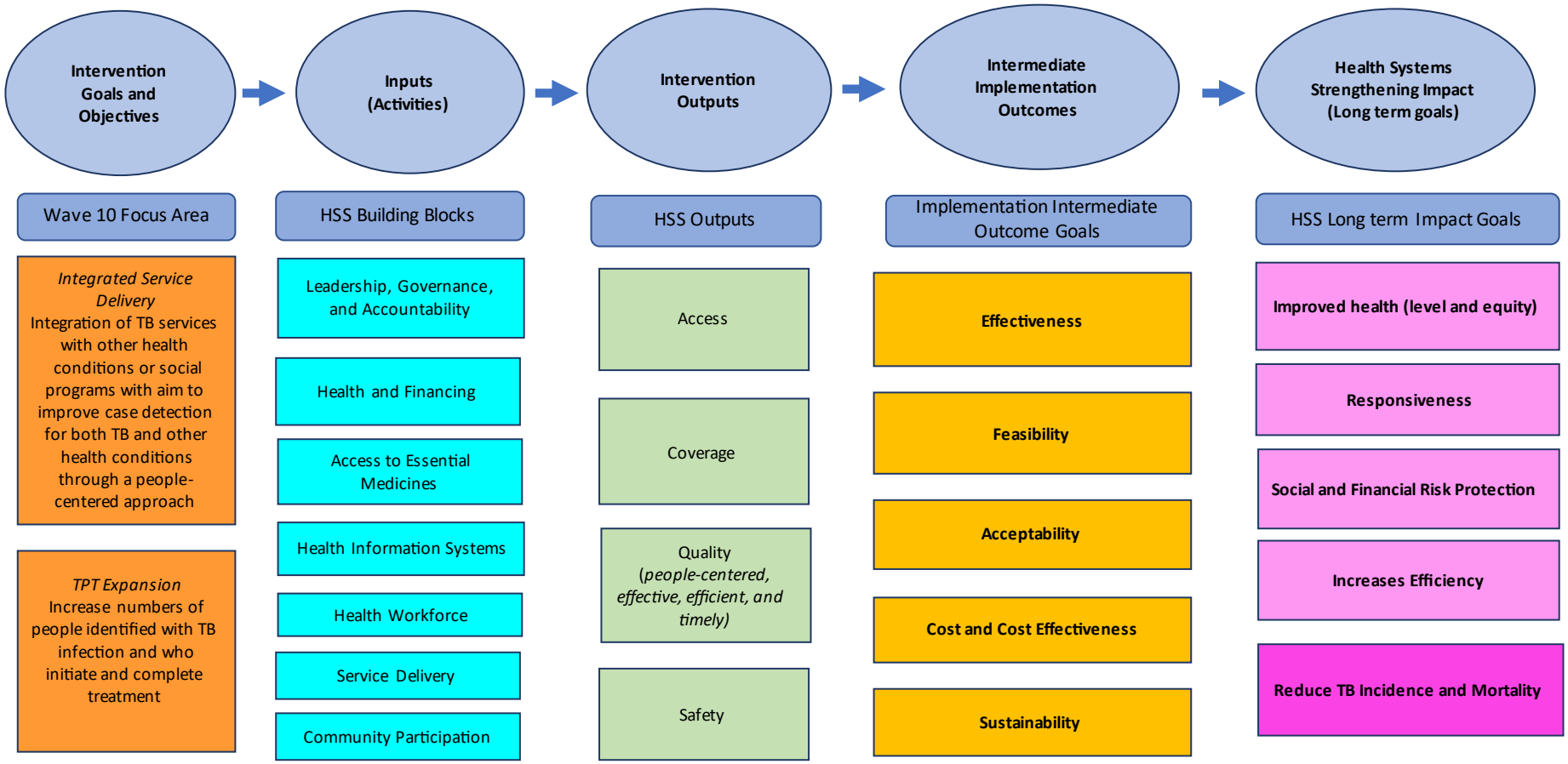
Applicants will be asked to submit a more complete logic model that will include more detailed information on outputs and outcomes measurements.

Stop TB Partnership TB REACH hosted by UNOPS

END TB

Figure 1

Wave 10 Logic Model Framework for Interventions



Intervention Goals and Objectives:

As part of the application, applicants will need to describe their intervention goals and objectives.

Inputs (Activities):

Following the HSS building blocks, applicants should describe potential barriers and facilitators associated with each of the building blocks for achieving their intervention goals and objectives. Applicants are required to describe how their proposed activities could address the building blocks. **It is not expected that TB REACH projects will be able to address and impact all HSS building blocks and barriers, however applicants should be aware of and consider existing barriers and facilitators for each of the building blocks while designing their interventions.**

For the Stage 1 application, applicants will be asked to develop this part of the logic model for planning purposes. Overtime additional barriers and facilitators may be identified, and activities may be modified as necessary.

Intervention Outputs

The intervention outputs *access, coverage, quality, and safety* are part of the HSS building blocks framework. Intervention activities should aim to improve these outputs. *Access* refers to the ability of a person to make use of health services. *Coverage* of interventions is defined as the proportion of people who receive a specific intervention or service among those who need it. *Quality care* refers to health services that are *person-centered*, high quality, effective, and delivered in a timely, *efficient,* and responsive manner. *Safety* refers to the provision of services that aim to prevent and reduce error and harm that may occur to people seeking care.

Intermediate Implementation Outcomes (TB REACH M&E and Implementation Research)

The implementation outcomes component of the TB REACH Wave 10 Logic Model Framework is derived from several different *Implementation Research* frameworks.(1–3) For awarded projects, a major focus of the independent TB REACH M&E will be to assess the performance or "effectiveness" of projects. Depending on the goals of the intervention, this generally includes measuring and analysis of increases in TB (and other integrated disease) case notifications or improvements in TPT initiation and completion rates compared to historical and control populations. However, for Wave 10, in addition to the standard TB REACH M&E, projects will be asked to assess other implementation factors that can help determine whether or not projects are "successful" and reasons why. Successful implementation of innovations is reliant on multiple factors. Assessing these factors can also help provide valuable information on how to improve projects for sustainability.

Following is a list of potential *Implementation Outcomes* that can be assessed for TB REACH projects. With the exception of *Effectiveness,* not all implementation outcomes may be necessary for projects to assess. *Effectiveness* will be assessed with the assistance of an independent *TB REACH M&E Reviewer.* Applicants submitting a Stage 2 application will be asked to provide information on which additional implementation outcome components they plan on assessing for their interventions. For projects that are similar in nature, the TB REACH Secretariat may develop standardized tools that can be tailored for use by individual grantees. This will allow for the compilation of learnings across projects. To conduct these additional assessments, applicants should budget up to 10% of their funding for *implementation research* and seek any necessary local ethical approvals prior to collecting and analyzing data.

Table 1: ***Implementation Outcomes Definitions***

Implementation Outcomes Components	*Definitions*
Effectiveness	the determination of whether or not the intervention achieved its desired goal or objectives (e.g., improvement in TB detection, earlier diagnosis of co-morbidities, increase in TPT uptake and completion etc.)
Acceptability	the acceptance of and perceptions about the agreeability of the intervention by stakeholders (e.g., persons seeking care or health care providers)
Adoption	the uptake of the intervention
Feasibility	the extent that the intervention can be operationally implemented in a setting
Cost	analyses of costs associated with the intervention; can be looked at from the perspective of the program/health system as well as the person seeking care; cost effectiveness of interventions
Sustainability	the extent to which an intervention receives continued support to be operationally maintained

Long Term Impact

The long-term impact of the interventions is based on *HSS goals* and to help achieve global TB targets for reducing TB incidence and mortality. While this impact may not be able to be measurable during the lifecycle of the grant, it is important for applicants to propose interventions with these final goals in mind.

Table 2: ***Example Template for Stage 1 Application Logical Model Components: Intervention Goals and Objectives and HSS Building Blocks and Activities***

Intervention Goals and Objectives
Goal: Increase TB case notifications and diagnosis of lung ailments by integrating screening using artificial intelligence (*AI)*

HSS Building Blocks (inputs and processes) Definitions	***Potential Barriers***	***Potential Facilitators***	***Describe proposed activities to address building block and intended output***
Leadership, Governance, and Accountability. Cross-cutting; coalition building, oversight of policy and regulation, and of all other health system blocks and structures	Lack of coordination among other govt or disease program to help facilitate integrated services	Existence of supported successful integration programs to use as a model Govt commitment to implementing innovative medical technologies	Engage NTP and other relevant MOH programs to receive support for this project
Health Financing: Collection, mobilization, and allocation of money to cover the health needs of the people, Includes financing of service delivery and protection from catastrophic costs.	Financial barriers and burden for persons seeking care Initial cost of x-ray and *AI* equipment may be cost prohibitive Lack of additional funds for providers conducting additional services for ISD projects	Presence of other donor funding for ISD programs Ability to combine resources from different heath program to address different health conditions	Offer integrated screening of multiple lung conditions during one patient visit; may reduce costs for persons seeking care (e.g., reduce transport costs and time to access health services) and reduce cost for health service programs and improve efficiencies. Coordinating components of service delivery with other partners who may have alternative funding e.g. treatment may supplement the funds available for the project/ intervention

Access to Essential Medicines and Diagnostic tools: Procurement and supply chain management system. Ensure availability and distribution of health products and medicines that are quality assured, safe and effective, and accessible.	Lack of coordination from different govt health programs on distribution and availability of medical supplies In-country regulations may be barrier for importation and use of new medical technologies	AI software can be used in areas where access to radiology services is limited	Use AI to improve efficiencies and access to radiological readings to diagnosis lung ailments
Health Information Systems: Collection, analysis, and dissemination of reliable and timely data for disease surveillance, health determinants, and health system performance and health status	Separate disease information systems for different health conditions	Availability of mobile data collection and case management tools and apps that can be modified for ISD projects	Develop a data system that incorporates information about both TB and other lung condition being integrated and managed
Health Workforce- all people engaged in actions whose primary intent is to enhance health; HR include public and private clinical, managerial, and support staff.	Limited human resources for screening, testing, and treatment Lack of expertise Insufficient coordination of human resource development across different parts of the health system and between different public health programmes Concerns from radiology doctors on use of *AI* for detecting lung ailments	*AI* can help address lack of availability of radiologists or other human readers, particularly in rural, low -resource settings.	Training of HCWs to use *AI* as part of TB case detection and other lung ailments

Health Service Delivery- Delivery of effective, safe, high-quality, and accessible health interventions to people who need them	Lack of integration of service delivery between different levels of the system and between different public health programmes (NCDs and TB) Barriers to access care by key and vulnerable populations affected by TB and other health conditions Limited capacity to plan and manage health care provision Lack of systems for referral and information exchange between providers.		Implement TB and other lung ailments screening as part of an active case finding intervention to reach vulnerable populations Establish referral system for appropriate treatment and care all lung diseases identified through the project
Community Participation Community systems strengthening develops the roles of key affected populations and communities in the design, delivery, monitoring and evaluation of services and activities aimed at improving health.		Existence of community health workers who can assist with case finding, specimen collection, treatment support, and referrals.	Plan for community mobilization to create awareness for the lung screening campaigns Employ community health care workers to assist with specimen collection and referrals

References

1. Peters D, Tran N, Adam T. Implementation research in health: a practical guide. 2013.
2. Proctor E, Silmere H, Raghavan R, Hovmand P, Aarons G, Bunger A, et al. Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. Adm Policy Ment Heal Ment Heal Serv Res. 2011 Mar;38(2):65–76.
3. Gaglio B, Shoup JA, Glasgow RE. The RE-AIM framework: A systematic review of use over time. Am J Public Health. 2013;103(6).