TB REACH Wave 8

Important Definitions

The list below includes definitions for some common terms used in TB control as well as some terms that are specifically used for TB REACH's monitoring and evaluation framework.

Active TB

Active TB refers to disease that occurs in someone infected with *Mycobacterium tuberculosis* bacteria. Active TB can either be pulmonary (affects the lungs) or extrapulmonary (affects places other than the lungs, for example the brain, bones, kidney). People with active TB may have signs and symptom. Active TB may be bacteriologically confirmed when a biological specimen is positive by smear microscopy, culture or molecular assays. It may also be clinically diagnosed based on empirical evidence of disease.

Active TB Case Finding (ACF)

Active TB case finding refers to any number of activities that move screening and diagnostic services outside a healthcare facility to bring care to people who might otherwise not be seeking it. ACF should be used for populations who are at increased risk of having TB (*target population*) so that they can be diagnosed early, and through correct treatment, be rendered non-infectious and cured. Among those with *suspected TB*, a diagnosis must be made by a *diagnostic test* and clinical evaluation, which together have high accuracy.

Active Provider

A private provider who refers at least one person with TB symptoms in the reporting period. Drop-out: not active for two consecutive reporting periods.

Additional Notifications (Additionality)

Additional notifications (absolute number and percent change) measure the capacity of a TB REACH project to identify people with TB who would otherwise remain undiagnosed, untreated and/or unreported in the absence of additional efforts. Changes in *TB case notifications* in the e*valuation area* during the *intervention period* are compared against what was recorded in a defined *baseline/historical period*. These changes are then compared to any changes in *TB case notifications* in the c*ontrol area* between the *historical/baseline and intervention periods*.

Additional Treatment Success

The measurement of additional treatment successes follows the same logic as *additional notifications*, however treatment outcome data is used in place of *TB case notification* data.

Algorithms for TB Screening / Diagnosis

Algorithms for TB screening and/or diagnosis define how TB *screening and diagnostic tests* are implemented to optimize costs, *yields*, sensitivity and specificity. There is often a national TB screening / diagnostic algorithm recommended by the National TB Program (NTP), but different and improved algorithms can be implemented during *active TB case finding (ACF)* projects. The WHO's Systematic screening for active tuberculosis guideline presents strengths and weaknesses of several different algorithms which can be used for *ACF* projects.

Baseline / Historical Period

The time period immediately before the *intervention period*, corresponding to the same calendar months. TB REACH collects *TB case notification* data for three full years before the intervention period, and this larger time period is also sometimes referred to as the baseline/historical period. This longer view allows for an analysis of trends in *TB case notifications*.

Control Area

The geographic area against which changes in *TB case notifications* in the *evaluation area* are compared, in order to determine whether and to what degree gains or decreases can be attributed to TB REACH projects, as opposed to a larger change occurring in both the evaluation and control areas.

Diagnostic Test

A test or examination which is used to confirm *active TB*. Diagnostic tests must be highly specific in order to avoid false positive results (resulting in incorrect treatment of people without *active TB*). Examples of diagnostic tests for *active TB* include smear microscopy, molecular assays (e.g. Xpert MTB/RIF) and culture.

Direct Yield

TB REACH uses the term direct yield (or sometimes simply yield) to refer to case notifications that are attributable to project activities. All projects-report output of screening, testing and treatment services which are measured via *process indicators*. Example: A project detected and treated 267 people with smear-positive TB through contact investigation.

Engaged Provider

A private provider with the intention to participate in the project and/or a formal memorandum of understanding between the project and the PP. Activity could be but is not limited to a training, a visit of the project team to a PP and a subsequent agreement to participate or an initiative taken by the PP to participate.

Evaluation Area

An evaluation area is the geographic area in which a project's *target group* lives. *TB case notification* data from all the health facilities inside the evaluation area are used to measure the impact of TB REACH projects.

Intervention Period

The time period in which project activities are conducted. TB REACH projects usually have a minimum of 12 months of service delivery activities.

Key Population

People who are vulnerable, underserved, or at-risk of developing TB are referred to as key populations. These populations, may vary by country or region, but include people who have increased exposure to TB due to where they live or work, people who have limited access to quality TB services, and people at risk due to biological or behavioural factors. The Stop TB Partnership has a series of briefs on key populations which can be accessed here.

Non-Additional Yield

Non-additional yield occurs when people with TB identified during an *ACF* project (*direct yield*) would access care, start treatment, and be reported to the NTP even in the absence of the increased case finding efforts. In almost all circumstances, some portion of a project's *yield* will be non-additional.

Number Needed to Screen (NNS)

NNS is the number of individuals who were screened to identify one person with TB. NNS will vary across *key populations* based on their background TB prevalence. This metric cannot be used to describe an increase in access to care or population-level increases in *TB case notifications*.

Number Needed to Test (NNT)

NNT is the number of individuals that were tested to identify one person with TB. NNT is the inverse of test positivity.

Passive Case Finding

Passive case finding is a patient-initiated pathway to TB diagnosis and treatment which involves:
- A person with *active TB* experiencing symptoms that he or she recognizes as serious;
- That person having access to and spontaneously seeking care at an appropriate health facility;
- A health worker correctly assessing whether the person fulfils the criteria for *suspected TB*; and
- That person being successfully diagnosed and started on TB treatment.

Presumptive TB

Someone with suspected TB is positive on *screening test* and is in need of further *diagnostic testing*. In many settings, presumptive TB is viewed the same as having symptoms of TB, but there is strong evidence that many people with *active TB* do not report symptoms of TB and thus the definition of presumptive TB is broader than just symptomatic.

Process Indicator

Process indicators measure the output of project activities and are used to chart progress of a TB REACH intervention. TB REACH grantees always link their process indicators to relevant steps in the TB care pathway since the focus of the initiative is service delivery (e.g. number of people screened for TB, number of people tested by GeneXpert, etc).

Screening / Triage Test

A test, examination, or other procedure which separates people into a group with higher likelihood of having *active TB* (positive screen) or unlikely to have *active TB* (negative screen). A screening / triage test is not meant to diagnose *active TB*. People who screen positive should always receive a *diagnostic test*. TB-specific examples of a screening test include questionnaires for TB-related symptoms and chest x-ray.

Target Group / Population

In a TB REACH intervention, a target group or population is the collection of people who will receive screening, diagnostic, and treatment services. A target population may be limited to a single *key population*, but could include several *key populations* who benefit from a package of complementary ACF interventions.

TB Case Notification

All people with a TB diagnosis should be notified to NTPs. In practice, most high TB burden countries use this term to represent people started on TB treatment and reported to the National TB Program (NTP). In the context of TB REACH, TB case notifications will always refer to treatment initiation and reporting. The NTP TB case notification data can be disaggregated – by new or retreatment; by smear-positive, smear-negative or extrapulmonary TB; by age; by gender; by health facility; etc.

TB Infection

Refers to the condition when a person is infected with *M. tuberculosis* but does not have active TB disease. A person with TB infection can take TB Preventive Treatment (TPT) to prevent the development of active TB.