

Overview:

Getting to Know the Training Evaluation Framework and Tools

Introduction

The Training Evaluation Framework and Tools (TEFT) is a set of resources designed to help evaluators, implementers, and program managers at all levels plan successful evaluations of in-service training program outcomes. This document will introduce you to the concepts behind the TEFT and walk you step-by-step through each of the TEFT tools.

All program evaluations begin with focused planning. As an evaluator, you probably already know that you need to develop a clear picture of which outcomes your training or trainings may achieve, and how you will go about evaluating those outcomes. The TEFT tools were designed to guide you through this planning process.

This document introduces the TEFT tools as a series of six steps. Steps 1 through 3 can help you plan *which* outcomes you will evaluate. Steps 4 through 6 can help you plan *how* you will conduct your evaluation. At first, it may be useful to work step-by-step through each of the tools, in the same way they are presented here. However, you can also use just one or two tools—although they complement one another, any tool may be used on its own.

We hope you'll enjoy getting to know the TEFT and that it will assist you as you plan your outcome evaluations. With limited resources, and facing great needs in many parts of the world, it is important to ensure that health care worker trainings have the broadest possible impacts, improve the capacity of health care systems, and support better patient health outcomes. The TEFT was designed to support that goal.

Why the TEFT was created

The US President's Emergency Plan for AIDS Relief, and other global training program implementers, have increasingly expressed a desire to move away from solely documenting training program *outputs* (for example, the number of individuals trained), toward documenting the *outcomes* and *impacts* of training activities (for example, the improvement in health service delivery and specific improvements in population health). However, clearly demonstrating these links can be challenging. The TEFT was designed to help evaluators meet this challenge.

To view a video outlining the concepts in this document, learn more about the TEFT project, and download the tools and case study introduced here, visit TEFT's online resources:

<http://www.go2itech.org/resources/TEFT>

Step 1 – Identify Anticipated Outcomes

- **Resource:** Training Evaluation Framework
- **Tool:** Training Evaluation Framework Template

The **Training Evaluation Framework** is the central focus of the TEFT. It outlines a conceptual link between in-service trainings for health care workers and meaningful outcomes at the individual, facility, and population levels. It also illustrates the **situational factors** that might affect an evaluation.

The **Training Evaluation Framework Template** is a "blank" copy of the Framework that you can fill out to help you think about which outcomes you'd like to evaluate and at what level you would like to evaluate them.

The Framework outlines causal relationships between trainings and their anticipated outcomes. The graphic on the next page visually illustrates these relationships (figure 1).

Situational Factors

In-service training for health care workers rarely takes place in isolation. There will always be factors in addition to the training that you will need to take into account, factors that will influence outcomes at the individual, organizational, systems, and population levels. In the TEFT, we refer to these as "situational factors," and they can function as either facilitators or barriers to the outcome and impact of trainings.

Note that the causal chain follows the colored arrows, proceeding from left to right. It begins with individual outcomes and moves outward to organization and health system/population level outcomes.

You may notice that parts of this framework look like the elements of a basic logic model—and in fact, the Training Evaluation Framework does follow the same kind of "if-then" flow. In this framework, we are zeroing in on and expanding the "outcome" and "impact" aspects of a typical logic model. This framework also reflects aspects of the training evaluation model developed by Dr. Donald Kirkpatrick in the 1950s. That model identified four levels at which trainings could be evaluated: Reaction, Learning, Behavior, and Results.

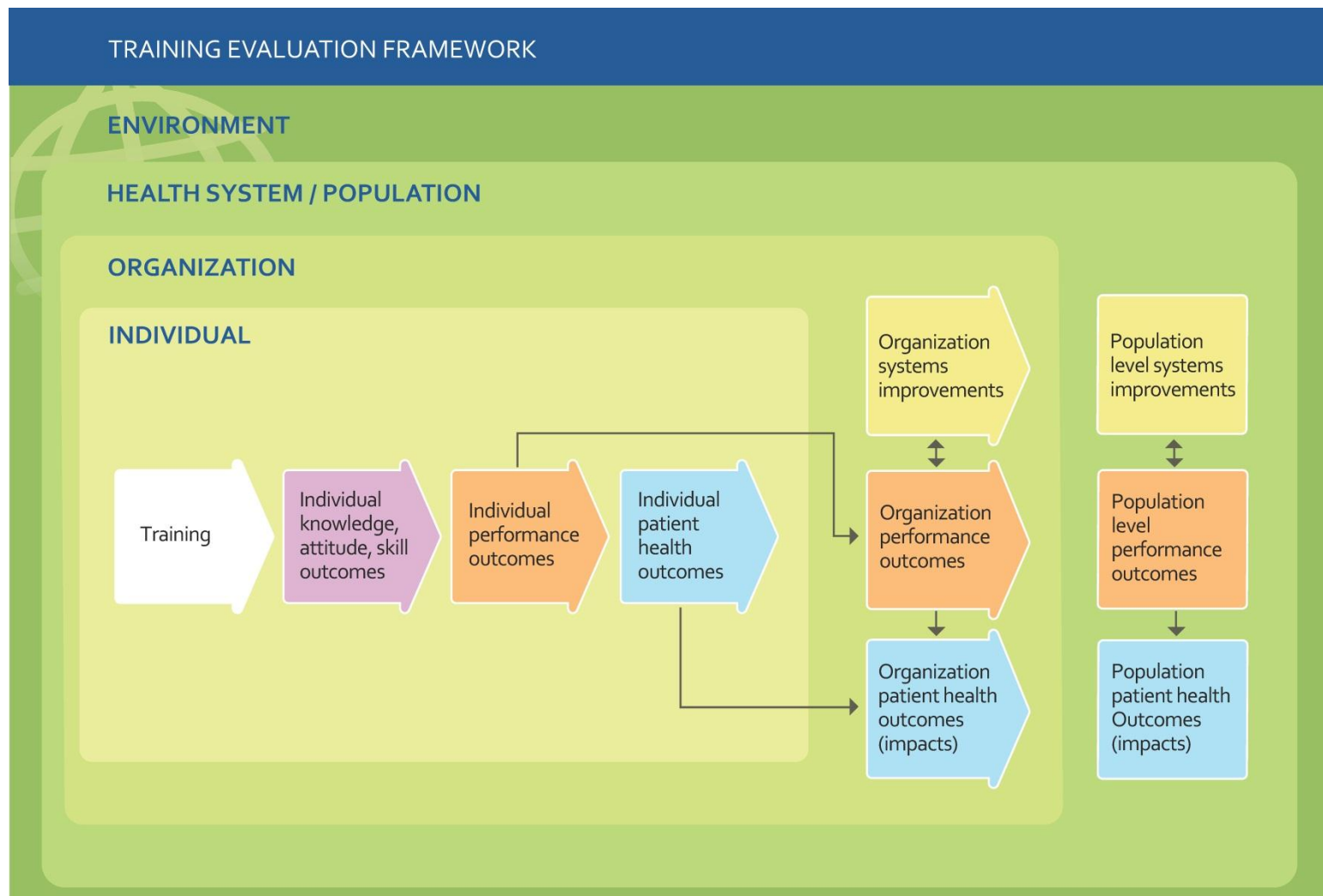


Figure 1. Training Evaluation Framework

Now, let's look closely at each level of the Framework.

Outcome Levels

The first white arrow on the Framework graphic (figure 2A) shows the training intervention (the activity you are going to be assessing), followed by the outcomes that are possible at the individual level.

- The purple arrow shows that providing training to a health care worker leads to improvements in their content knowledge, skills, and attitudes.
- The next outcome would be that the trainee applies their new learning on the job; these are individual performance outcomes. In this framework, performance outcomes are shown in orange.
- Finally, the blue arrow shows improvements in patient health resulting from the better care provided by the newly-trained health care worker. In this framework, patient health outcomes are blue.

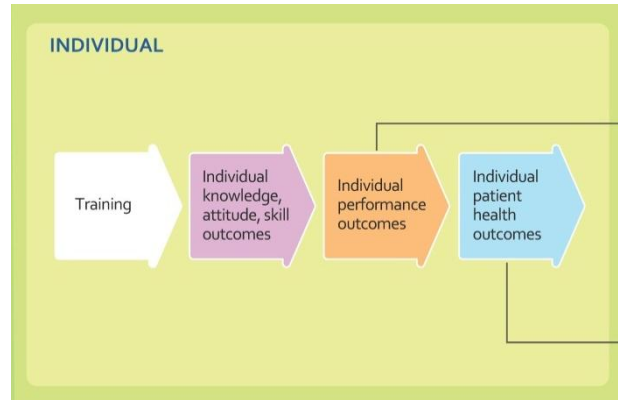


Figure 2A. Individual level, TEFT

From this starting point, the framework expands to include the other arenas in which you might anticipate outcomes and impacts of training (figure 2B).

- The next level is the organization or facility level. At this level, the changed performance of the trainees may lead to overall performance changes at their facility or organization and even to improvements in the systems the organization uses. The systems improvements are shown in yellow, the organization-level performance outcomes are orange, and aggregated patient health outcomes or impacts are in blue.
- The boxes farthest to the right show the outcomes and impacts that can be seen at the health systems/population level.

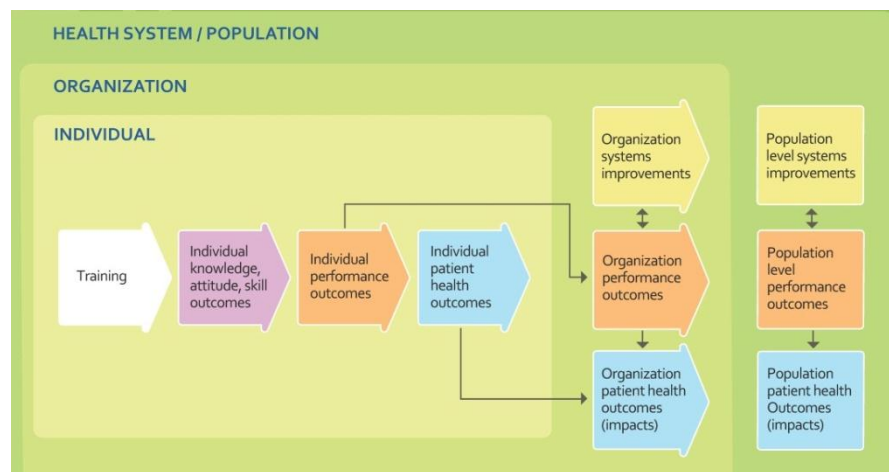


Figure 2B. Individual, organization, and health system levels

These nested capacity-building levels may already be familiar to you; they have been described in literature on international development.

Situational Factors

All of these outcome levels also exist within the broader environmental context: social, cultural, political, environmental, and other factors that may be influencing, reinforcing, or confounding intended outcomes. To address these factors, the Framework also urges users to think about these situational factors for each of the outcome levels. It also illustrates this concept by placing some examples below the nested green levels (figure 3).

Thus, at the individual level, even if many other factors are favorable, a health care worker training may not be successful unless, for example:

- the trainees who can most benefit from the training attend,
- the trainees have the right background, and
- the trainees are personally motivated to use their new skills on the job.

Similarly, at the organizational level, a health care worker might not be able to use the new skills she gained in the training because:

- she does not have the medications or equipment she needs,
- she is overburdened with a high patient load, or
- the patients she sees require different care or expertise.

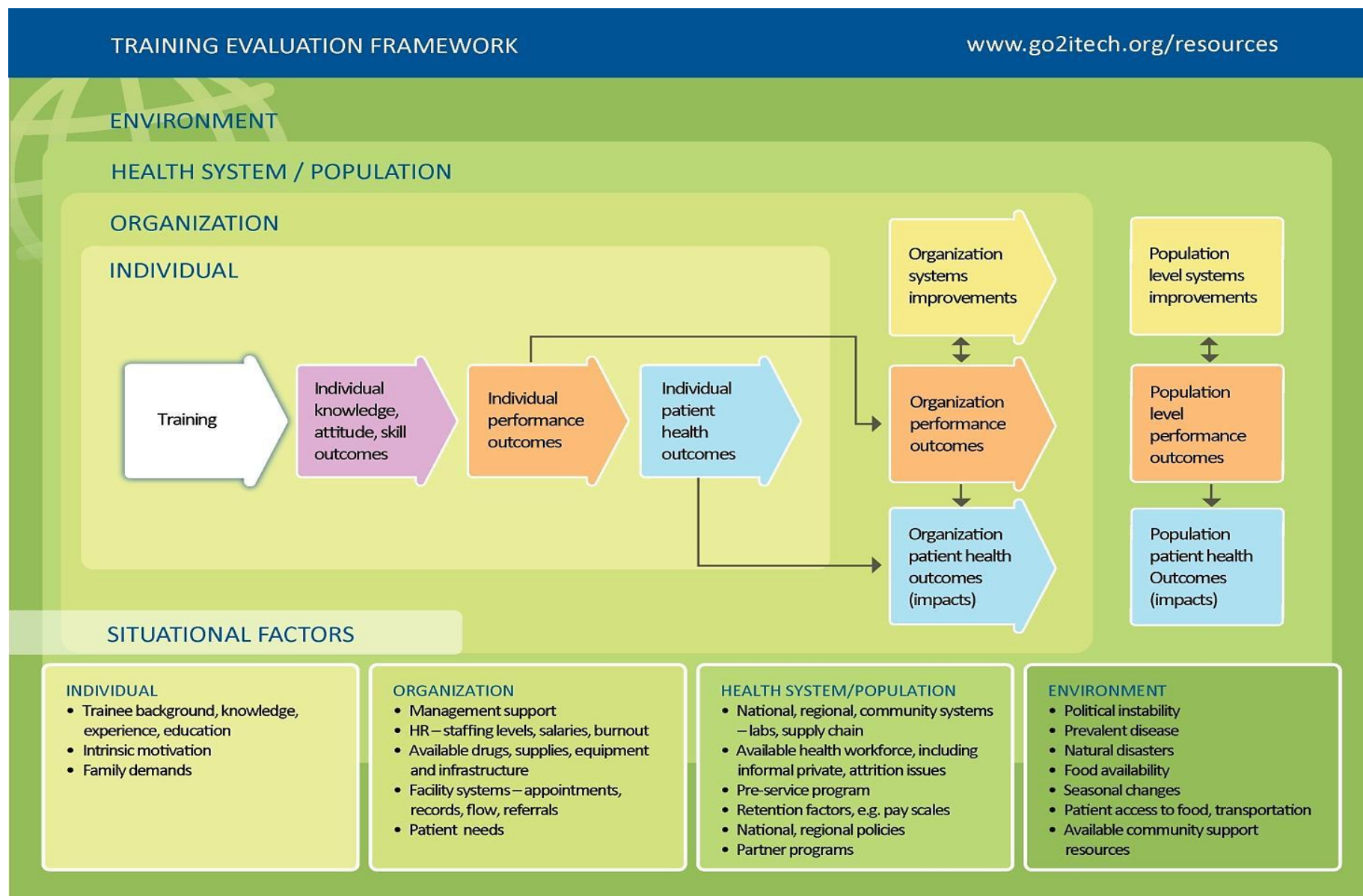


Figure 3. Training Evaluation Framework including Situational Factors

Case Study: Amanga

The “Amanga” case study provides an example that we can use to illustrate these concepts (figure 4, below). To read the case study in full, you may download the PDF from the TEFT online resources:

<http://www.go2itech.org/resources/TEFT/case-studies/case-study-amanga>

The case study presents a training for multiple cadres of health care workers. The training was designed to teach new antiretroviral treatment guidelines to participants, with a focus on a new regimen of first-line antiretroviral medications.

Using the Training Evaluation Framework Template, we can fill in the first type of outcome, the trainees’ content knowledge, skills, and attitudes, in the purple arrow. In this example, a written knowledge assessment given before, and again after the training, shows that the trainees can now correctly describe the new first-line regimen that should be used. The outcome is that their knowledge has improved.

Next, individual performance outcomes are shown in the orange arrow. The trainees are observed in their workplaces by an expert clinician, and their treatment plan for new HIV patients matches that of the expert clinician to a certain standard of competency. The trainees also initiate antiretroviral treatment for eligible patients more often than they did before the training. So, their on-the-job performance has also improved.

The third, blue arrow shows patient health outcomes. Facility medical records show that patients who are treated by the trained health care workers have higher CD4 counts than the patients of health care workers who have not attended the training. Thus, the health of the patients treated by the trained health care workers has improved.

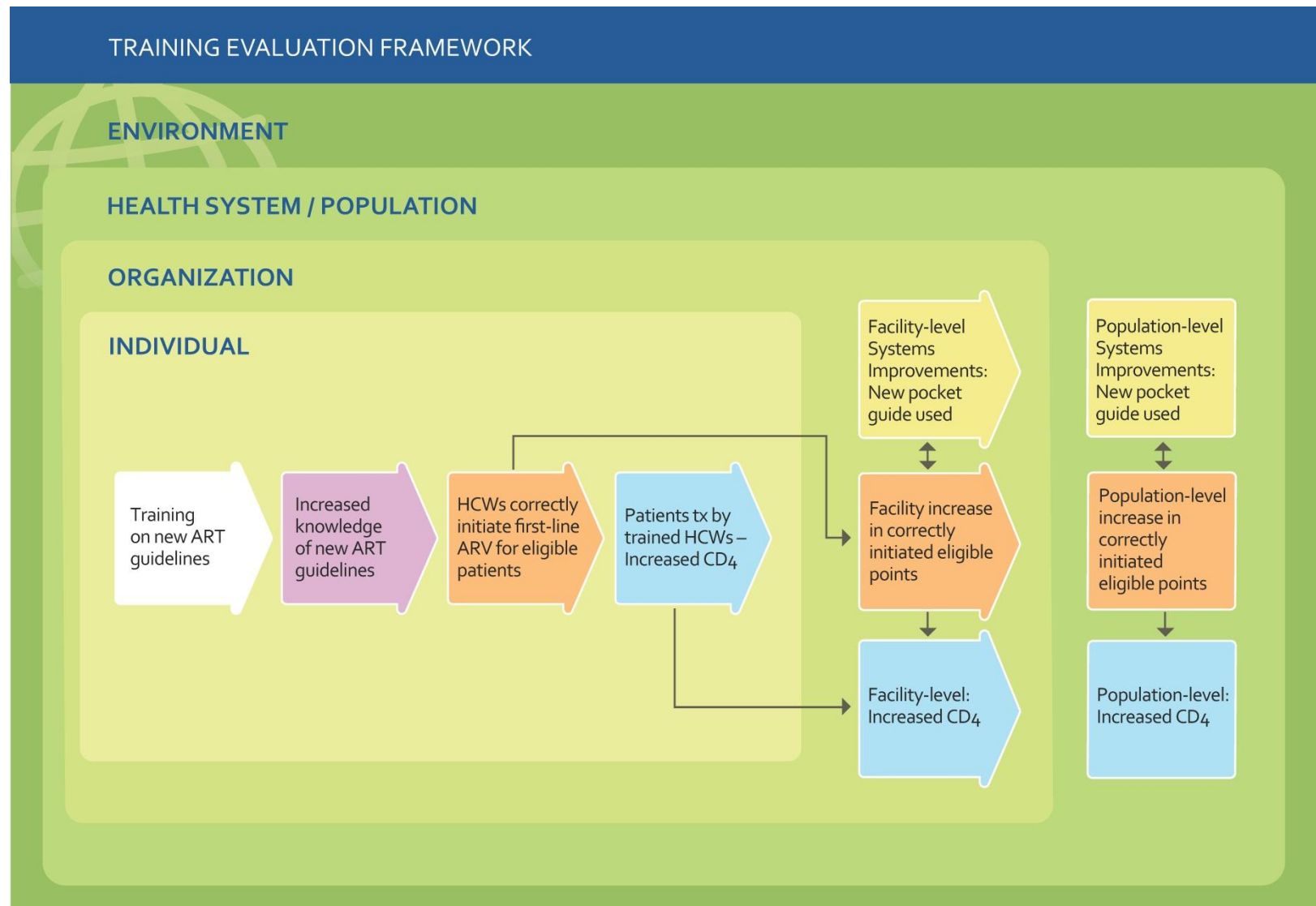


Figure 4. Sample Training Evaluation Framework Template: “Amanga”

To fill out the outcomes at the organizational level, we might note that the facility distributes pocket guides for ART, and instructs clinicians to keep the guides handy and to use them. The combined improvement in correct initiation of ART is shown in facility-level increases in newly initiated patients, which is an organizational performance outcome. In addition, the facility's patients have an increase in their CD4 cell counts, which is an organization-level patient health outcome.

Similarly, it is possible to describe these outcomes at the population level, where we also see improvements in the systems, performance, and overall health outcomes.

Using the Framework Template in this way, it's possible to get a sense of the outcomes of a given training. However, as we've seen, a good plan also requires us to think about situational factors: issues that could influence both the training outcomes and the evaluation. To help you address these factors in depth, TEFT includes the Situational Factors Worksheet.

Step 2 – Address Situational Factors

■ Tool: The Situational Factors Worksheet

The **Situational Factors Worksheet** can help you identify the situational factors that may influence the effectiveness of a training intervention. Although you won't be able to control for all the factors, thinking about how relevant they are to the training is important. That information can help you consider the challenges you may need to address in your evaluation plan, including your evaluation level (individual, organization, health systems/population), the type of outcome you will evaluate (for example, knowledge, performance, and/or health outcomes), your evaluation design, and methods. It can also help you interpret the results of your evaluation. Both the Framework, which you have already seen (figure 5), and the Situational Factors Worksheet provide some specific categories into which these situational factors may fall. Like your outcomes, these may appear at the individual, organizational, health systems/population, and environmental levels.

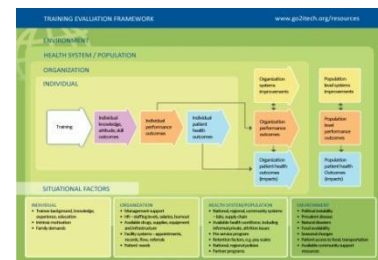


Figure 5. Examples of situational factors included in the Framework

The Situational Factors Worksheet is structured so that you can anticipate some of these factors and include possible approaches for addressing them in your evaluation plan. In the Worksheet, the categories are listed in the left hand column, with blank space in the right hand column to describe each specific factor as it relates to your context, and to indicate possible approaches to addressing each factor. There is also space to add situational factors that do not fit into any of the categories listed. A portion of a completed sample Situational Factors Worksheet is shown below (figure 6).

TEFT Situational Factors Worksheet: <i>Amanga ART Training</i>	
Factors that might affect the evaluation (with examples)	What is the issue and what can you do about it in your evaluation?
Individual Level	
Trainee background: Knowledge, experience, education	<p>Issue: <i>Concerns that multiple training cadres taught from one curriculum might result in some trainees not having adequate background knowledge to absorb and use the new content.</i></p> <p>What to do: <i>When analyzing results of pre- and post-content knowledge assessments, compare across cadres to determine if there is a cadre-related difference.</i></p>
Trainee life circumstances: Family demands, health status, attitude, motivation	<p>Issue: <i>Some stakeholders have noted that participation in training is motivated more by “sitting fee” than by desire for new skills.</i></p> <p>What to do: <i>Include questions in pre- and post-training survey related to motivation to use new knowledge on the job.</i></p>

Figure 6. Sample Situational Factors Worksheet: “Amanga”

Step 3 – Refine the Scope of the Evaluation

■ Tool: Evaluation Considerations Tool

The next step in deciding which outcomes to evaluate involves thinking through several critical considerations, including the scope of the training intervention, the intended use of the evaluation findings, the evaluation time frame, the evaluation team's access to data, and the financial and human resources available for the evaluation.

The **Evaluation Considerations Tool** is designed to help you think about how each of these considerations applies to your evaluation. The tool provides a continuum, represented visually as a “sliding scale.” To use the tool, look at each consideration. Place a check mark on the scale

in the spot that shows the rating for each consideration. For example, will you have a lot of time, or just a little bit of time to conduct the evaluation? Are there a lot of resources for you to work with, or will you be working with a small team on a limited budget?

While there is no single formula to guide your decisions, the Evaluation Considerations Tool can help you think through these considerations and how they might relate to the levels and types of outcomes that your training intervention is intending to achieve. A completed sample of this tool is shown below (Figure 7). The right hand column provides space for notes or ideas you may have regarding how to handle each factor.

Once you've completed the Considerations Tool, you may find it useful to return to your completed Training Evaluation Framework Template. Often, reviewing these tools together will help you decide which type and level of outcome is most appropriate for your evaluation.

Evaluation Considerations Tool		
Considerations	Ratings	Notes
Intervention Scope	Small Scope	National-level training with multiple cadres
	Large Scope	
Use of Evaluation Findings	Routine Reporting	Findings will be used for decision-making on next steps for rollout of new guidelines
	Program, Funding Decisions	
Evaluation Time Frame	Very Short Time Frame	4 months after training
	Long Time Frame	
Access to Data	No Access to Relevant Data	MOH assures access to health care workers post-training as well as access to facility data
	Good Access to Quality Data	
Evaluation Resources	Minimal Resources	Evaluation resources are limited; 1.5 full time employment for staffing, plus a modest additional budget
	Significant Resources	

Figure 7. Sample Evaluation Considerations Tool: "Amanga"

Steps 4 through 6 — Decide *How* to Evaluate Your Training Outcomes

Steps 4 through 6 will help you think about how to evaluate outcomes. They will help you develop evaluation questions and indicators and select an evaluation design and methods. They may also help you describe specific details for conducting the evaluation: For example, *who will observe a certain behavior to see if the trainees put their training into practice? If an evaluator finds that no sinks are available for washing, how will she indicate this information?* And so on.

Step 4 — Define Evaluation Questions, Objectives, and Indicators

■ Tool: Questions and Indicators Template

The **Questions and Indicators Template** provides a way to visualize the connections between your evaluation questions (both very broad questions and those that are more specific), your evaluation objectives, and the evaluation's indicators. Your evaluation activities can then be geared towards collecting data related to these indicators.

The template is a simple blank table that you can use to structure and organize your ideas. A portion of a completed sample is shown below (figure 8).

Questions and Indicators Template (sample portion)				
General Evaluation Questions	More Specific Evaluation Questions	Very Specific Evaluation Questions	Anticipated Outcomes	Outcome Indicators
Did Amanga's training on new national guidelines result in improvements in health care workers' knowledge and on-the-job performance in correctly prescribing antiretroviral treatment (ART)?	Did the trained health care workers ("trainees") show increases in knowledge of the new guidelines on first-line ART regimens?	Did the trainees show improved scores between pre- and post-test knowledge tests on the new guidelines on first-line ART regimens?	Improved scores on questions related to new guidelines on first-line ART regimens.	% increase in trainees' post-training test scores compared with pre-training scores.

Figure 8. Sample portion of the Questions and Indicators Template

Step 5 — Choose Evaluation Design and Methods

■ Resource: Evaluation Design and Methods Tables

In Step 5, the TEFT provides resources to help you choose an evaluation design and methods, which is an important part of evaluation planning. Implementing a strong design and methods well will allow you to collect high quality and relevant data to determine the effectiveness of your training program. Without this good data, it's impossible to infer a link between training and outcomes.

The TEFT tools may be used in any combination.

At this point, you may have observed that although the TEFT is presented as a series of steps, real-world evaluation isn't always so linear!

The process of thinking about evaluation design and methods often doesn't follow a straight line. It may be an iterative process, in which you come up with an idea and need to revisit previous steps, to see if it makes sense.

Because of this, the TEFT tools can be used in any combination. You are encouraged to select and combine whichever tools serve your needs.

Your choice of design and methods will be influenced by the situational factors and considerations you addressed in Steps 2 and 3, and may help to mitigate the problems or potential confounders that you identified.

Rather than providing a tool, TEFT materials for this step provide a description of basic processes and concepts related to design and methods for training outcome evaluation. The materials also include examples of designs and methods that have been used by other evaluators, which were drawn from published literature that reported in-service training outcomes. Samples of these materials are shown below (figures 9a and 9b).

Methods, Tools	Data Sources	Type of data collected
Written/oral responses: <ul style="list-style-type: none"> ■ Surveys ■ Questionnaires ■ Interviews ■ Journals 	Training participants ("trainees")	<ul style="list-style-type: none"> -Content knowledge -Attitudes, feelings -Self-reports of trainees' behavior -Reports of Perceived outcomes
	Patients	<ul style="list-style-type: none"> -Reports of provider behavior -Self-report of patient understanding -Self-report of patient feelings/behavior -Self-report of patient health status
Group Feedback: <ul style="list-style-type: none"> ■ Focus groups ■ Notes, checklists 	Trainees' co-workers, supervisors, and other contacts	<ul style="list-style-type: none"> -Reports of trainees' behavior -Reports of perceived outcomes
	Trained observers	<ul style="list-style-type: none"> -Observations of trainee behavior in the classroom or a simulated work setting -Observations of trainee performance on the job
Document review, data extraction <ul style="list-style-type: none"> ■ Institutional/clinical records 	Records, documents	<ul style="list-style-type: none"> -Patient health data -Provider, organization, or population-level performance data

Figure 9a. Data sources and methods resource (available online)

Evaluation Designs and Methods for Measuring Changes at the Individual Level (sample portion)

Randomized Controlled Trial: An experimental design in which the individuals being studied (e.g., training participants) are randomly assigned to either an intervention condition or a control condition.

Examples	Design and Methods
<p>Armstrong et al (2012)¹:</p> <p>An evaluation of the outcomes of a 15-hour training intervention aimed at providing social workers with cognitive behavioral strategies for work in the primary mental health care setting.</p>	<p>Outcomes evaluated: Skills and attitudes</p> <p>How the evaluation was designed:</p> <p>Randomized Controlled Trial: Forty social workers were randomly assigned to either an intervention condition (20 received the training), or a control condition (20 did not receive the training).</p> <p>How the data were collected:</p> <p>Observation using expert observers “blind” to whether the trainees received or did not receive the training intervention.</p> <ul style="list-style-type: none"> • Observers scored videotaped sessions of simulated counseling sessions conducted pre-training and 1 week post-training. • Scoring was based on a validated measure of competencies related to the training. <p>Self-report of confidence was measured using a questionnaire.</p> <ul style="list-style-type: none"> • Participants rated their confidence in applying the trained methods on 5-point scales.

Figure 9b. Sample of evaluation designs and methods resource

Step 6 — Plan the Evaluation

■ Tool: Training Outcome Evaluation Planning Template

The final TEFT step provides an opportunity to pull together components from each of the previous steps, including your anticipated outcomes, the situational factors influencing the outcomes and their evaluation, the critical considerations for deciding which type and level at which to evaluate, the evaluation questions and indicators, and the evaluation design and methods that you’ll use.

The **Training Outcome Evaluation Planning Template** is divided into several sections. (Because of its length, it is not shown here.) Together, the sections bring together the different components of the TEFT in one place, so that you can use your insights to plan the details of

your outcome evaluation. When you've completed all the sections of the template, you should have a clear picture of the training outcomes you are planning to evaluate and how you will go about the evaluation process.

Conclusion

Once you have worked your way through these six steps, you'll be more familiar with the TEFT tools. You should also have a more focused plan for how you'll structure and conduct your evaluation. You may also find the TEFT useful during discussions with stakeholders, funders, training implementers, and your evaluation team.

Implementing the evaluation, analyzing the data, interpreting the results, and disseminating the findings are all activities that you'll begin *after* the TEFT— but they will all benefit from the planning and foundation you've completed.

Of course, the TEFT is only a planning tool. It can't tell you exactly which approach to take or which outcomes to focus on. However, it can help you plan and implement insightful, efficient, and successful evaluations.

Visit TEFT online for tools and resources

All the TEFT tools, along with additional resources, are available online in PDF or Word format. To download the tools, watch a video presentation of this content, and access other resources, please visit our free online resource: www.go2itechl.org/resources/TEFT