

Program Evaluation Guide

Module 2: Defining the Program



**DEFENSE CENTERS
OF EXCELLENCE**

For Psychological Health
& Traumatic Brain Injury

Table of Contents

Overview of the Program Evaluation Guide.....	1
Purpose and Use of the PEG	1
Overview of the Preparation Phase.....	2
Purpose and Use of this Module	2
Identify the Program’s Purpose and Target Population	3
Define the Program’s Intent with Mission, Goals and Objectives	3
Mission	3
Goals.....	4
Objectives	4
Specify How the Program Works Using a Logic Model.....	5
Identify Inputs, Activities, Outputs and Outcomes.....	6
Acknowledge Assumptions and External Factors	7
Develop a Program Logic Model.....	7
Conclusion	9
Key Takeaways.....	9
References	10
Selected Resources for Additional Study	10
Appendix A: Logic Model Examples	11
Example 1: Non-clinical Program.....	11
Example 2: Clinical Program	13
Template A: Worksheet for Developing Mission Statement, Goals and Objectives	15
Template B. Mission, Goals, Objectives.....	16
Template C. Logic Model Template.....	16

Overview of the Program Evaluation Guide

This Program Evaluation Guide (PEG) is developed and published by the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE). Program evaluation is an important part of the DCoE mission and helps military program administrators and leadership assess and improve service quality and outcomes. By making program evaluation an inherent part of everyday program activities, we create a culture of effectiveness to better build a sustainable, efficient and well-integrated continuum of prevention and care services for military members, their families and veterans.

The first edition of the PEG, published in July 2012, provided a standardized approach to program evaluation for psychological health and traumatic brain injury (TBI) program leaders. This version of the PEG (2nd Edition) has been updated and revised to reflect the most current needs of psychological health and TBI programs. This edition of the PEG is organized as a series of modules containing content specifically designed for use by program administrators or other staff members tasked with internal program evaluations as part of their duties within Defense Department psychological health and TBI programs. This PEG is designed for those who have limited prior knowledge and experience with the conduct of program evaluation activities.

Purpose and Use of the PEG

This PEG is one part of a collection of trainings, toolkits and support services offered by DCoE to assist personnel at the program level in developing their capabilities to conduct internal program evaluation activities. The PEG is designed for use in coordination with other training materials, such as DCoE's program evaluation and improvement webinar series, references provided in the PEG and webinar series, consultation with experts and other resources that may be available to program personnel.

The modules in this PEG are not intended to serve as a substitute for formal coursework on evaluation methods, statistics or data management. In addition, because the PEG is intended for use by a wide variety of programs, it will not provide specific guidance to programs on best practices for clinical or non-clinical services. Finally, the PEG is not intended as a manual for how evaluators who are external to a program should conduct their activities. However, the information herein will generally be useful in helping program personnel become more familiar with the evaluation process and consequently more effective in responding to external evaluation initiatives.

Defining the Program

Overview of the Preparation Phase

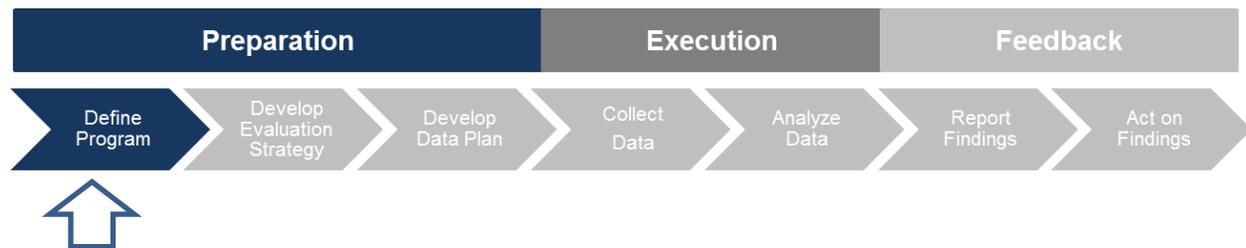
In the introductory module of the Program Evaluation Guide (PEG), the potential benefits of program evaluation were highlighted and DCoE's three-phase approach to evaluation – preparation, execution and feedback – were introduced. Proper preparation is essential before beginning a program evaluation effort in order to ensure its success. The preparation phase consists of three steps:

Step 1: Defining the Program

Step 2: Developing an Evaluation Strategy

Step 3: Developing a Data Plan

Prior to conducting evaluation activities, the first step is to develop a clear understanding of how the program is intended to operate and what it is intended to achieve. Only then can the evaluation team move to the second step and develop a strategy to evaluate *how well* the program is operating and *whether* it is effective in meeting its objectives. The third and final step in the preparation phase translates the evaluation strategy into a data plan that describes how data will be collected, coded, stored and maintained. This module focuses on Step 1 in the preparation phase: Defining the Program.



Purpose and Use of this Module

This module is designed to assist program personnel who are assigned the task of carrying out internal evaluations in order to clearly define a program's intent using a mission statement, goals and objectives. In addition, this module describes how to develop or refine a program logic model, which lays out the connections between a program's inputs, activities, outputs and outcomes. These program-defining features form the foundation against which evaluation results are compared to determine whether a program is effectively and efficiently achieving its intended purpose.

Because every program is different, this module provides broadly applicable guidance rather than specific direction for exactly how your program should be defined or how it should operate. It is suggested that this material be used as a starting point for defining a program while also collaborating with others and making use of the resources cited at the end of this module to provide more detail about how programs are defined and ensure that the evaluation is effectively and appropriately tailored to the program.

Identify the Program’s Purpose and Target Population

Before conducting evaluation activities, it is important to begin with an understanding of the program’s purpose, or the needs it addresses, and to have a clear idea of whom the program intends to serve. These needs are often defined by directives from leadership, or they may have emerged from the community in which the program operates in order to address a pressing problem (e.g., preventing suicide; building resilience; treating posttraumatic stress disorder, or PTSD; managing symptoms of traumatic brain injury, or TBI).

The **target population** is the group the program is meant to affect. It may be broad, as in all active-duty service members or all reservists or all veterans. Alternatively, the target population may be narrow, as in members of a specific service branch with a specific challenge (e.g., Navy members diagnosed with depression). Typically, clinical programs have a narrower target population than do non-clinical programs, with the latter designed for such purposes as screening, education, prevention and/or resilience promotion.

Define the Program’s Intent with Mission, Goals and Objectives

A mission statement, goals and objectives provide more specific information as to what a program intends to achieve, or in other words, what it intends to change in the target population. The end result of defining a program’s intent through these statements is a plan against which results can be compared. As seen in Figure 1, these statements are organized in a hierarchy: a single mission statement contains multiple goals, and each goal contains multiple objectives. Use the examples below and in Appendix A, along with the worksheet in Template A and the ready-to-use model in Template B, to assist you in developing or refining your program’s mission statement, goals and objectives.

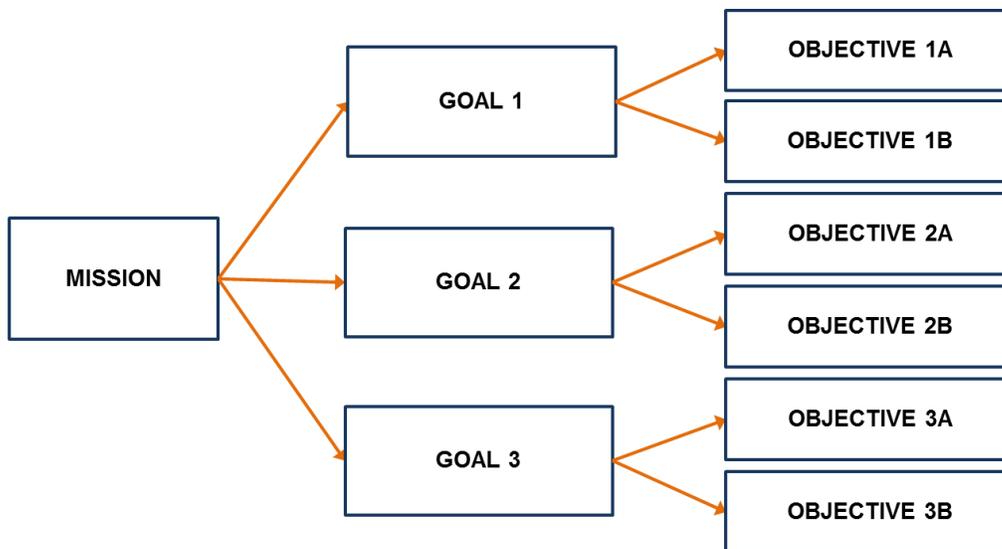


Figure 1: Hierarchical Organization of Mission, Goals and Objectives

Mission

In program planning, a **mission statement** explains the purpose for a program’s existence. In just one or two sentences, a mission statement encompasses everything the program

does and intends to achieve. A mission statement should align with the mission and goals of the parent organization, such as the service branch in which the program is located and/or the Defense Department as a whole.

Mission statement examples:

Our mission is to promote psychological health and readiness through high quality treatment and case management.

Our mission is to support the family members of those who serve our nation by helping them to effectively manage the challenges of military life.

Goals

Goals outline in more specific detail what a program intends to accomplish in terms of actionable statements. These statements lay out the major targets of a program within its mission. For this reason, there are likely to be several goals within a single mission.

Goal statement examples:

Program Alpha will screen all service members returning from deployment to identify those at-risk for future challenges and refer them to the appropriate level of supportive care.

Program Bravo will ensure all service members receive appropriate training in strategies to prevent traumatic brain injuries and notice signs and symptoms by conducting annual web-based required trainings.

Objectives

Objectives break down goals into smaller units that can be measured and analyzed to determine whether a program is working. It is essential that objective statements be **SMART**: specific, measurable, achievable, relevant and time-bound.

Objective statement examples:

Program Charlie will provide up to 12 sessions of evidence-based therapy to 500 active-duty service members per year who have been diagnosed with PTSD or referred by a medical or behavioral health professional for trauma-related concerns. Participating service members will demonstrate a 50 percent or greater reduction in symptoms following six or more sessions, as measured by a symptom checklist.

Program Delta will deliver two half-day, live web-based trainings per week to groups of up to 100 unit commanders, who will demonstrate increased knowledge and awareness of TBI symptoms from pre- to post-training assessment. Trainings will include opportunities for questions and provide pocket tools that commanders can use in the field.

In developing or refining objectives, examine whether the objective statements can be used to answer the questions posed in Table 1. If most of the questions can be answered, then the objectives are “SMART” and may be used for program evaluation purposes. If questions in Table 1 cannot be answered, the objective statements should be refined to enhance their

applicability to program evaluation. Objective statements can be improved by adding additional detail regarding inputs, activities, outputs and outcomes.

Table 1: Questions to Guide Development of SMART Objectives

Specific	Measurable	Achievable	Relevant	Time-Bound
Who will execute or deliver the program and how?	How much change is expected and in what direction?	How will the objective be accomplished?	Will the objective help the program meet its mission and goals?	When will the objective be achieved?
Who is the target population?	What kind of data will be used to determine whether changes have occurred?	Are necessary inputs available to accomplish the objective?	Does the objective help to address the situation or need that drives the program?	If the objective will be achieved in stages, what is the timeframe for each stage?
What are the outputs or products?	How will data be collected and from whom or what?	Is the objective too great, too small or appropriate?	Does the objective have support from staff, participants, and other stakeholders?	Is the time-frame for accomplishing the objective too short, too long or realistic?
What are the intended benefits or outcomes?	Are there other or more accurate sources of data?	Can the objective be accomplished given external factors?	Does the objective align with organizational priorities?	What internal and/or external deadlines are relevant to achieving the objective?

Specify How the Program Works Using a Logic Model

A **logic model** is “an action-oriented tool for program planning and evaluation,” (W.K. Kellogg Foundation, 2006). A logic model provides a visual depiction of the connections between a program’s resources, the activities of its staff, the products of those activities and the outcomes the program is designed to achieve. Below, we describe the major components of logic models and provide guidance on how to develop logic models using program information.

A logic model is an important tool that can help staff and stakeholders have a common understanding of how the program works. They are useful to programs because they:

- Provide a roadmap for progress and results
- Specify how activities should be sequenced
- Assist in identification of gaps and redundancies
- Guide program evaluation and improvement efforts

Identify Inputs, Activities, Outputs and Outcomes

Logic models are comprised of four core *components*: Inputs, Activities, Outputs and Outcomes. These components are arranged sequentially as seen in Figure 2. The details for each component will vary depending upon the nature of the program. Thus, a logic model should be tailored so that it accurately represents the actual program.



Figure 2: Core Logic Model Components

Table 2 provides definitions for each core logic model component as well as examples of commonly occurring *elements*, or program-specific details, that may fall within a component for a given program.

Table 2: Logic Model Component Definitions and Example Elements

Component	Definition	Example Elements
Inputs	What a program needs to operate; resources used to implement a program's activities and produce its outputs	<ul style="list-style-type: none"> – Funding, facilities, equipment and supplies (budgeted, in-kind donations) – Staff (administrative, professional, military) – Research and knowledge-base – Relationships, time and energy – Defense Department mandates
Activities	What the program does with its inputs in support of its mission; includes activities performed by staff and program administrators	<ul style="list-style-type: none"> – Clinical (assessment, treatment, medication management, rehabilitation) – Outreach (referrals, networking, advertising) – Education (development/delivery of workshops, trainings, materials) – Ancillary (surveillance, data collection, research, evaluation, reporting)
Outputs	Products of or participation in the program that are direct results of activities	<ul style="list-style-type: none"> – Number and characteristics of participants – Units of service provided and products created – Reports and documentation – Referrals and partnerships
Outcomes	Changes that result in program participants or a broader target population as a result of their participation	Intended or unintended changes over short-, medium- or long-term timeframes in: <ul style="list-style-type: none"> – Awareness, knowledge, skills – Symptoms, behavior, rates – Functioning in work and relationships

It is important to note that outcomes are often divided into short-, medium- and long-term. These distinctions refer to changes in participants that occur during and immediately after participation in a program (i.e., short-term), changes that occur following a modest amount of time after participation has ended (i.e., medium-term) and changes that occur following a lengthier period of time following participation (i.e., long-term). Specific time frames may be assigned to short-, medium- and long-term categories (e.g., up to six months following participation, six months to two years, two years and longer) based on the nature of the program and its objectives. In general, longer term outcomes should focus on population-level changes and sustained individual-level changes, while shorter term outcomes should focus mainly on immediate, individual-level changes.

Acknowledge Assumptions and External Factors

In addition to components that fall within a program, it is important to consider the assumptions and external factors that influence program operations and/or the target population. **Assumptions** refer to underlying ideas that influence how a program understands its purpose and why its inputs, activities and outputs are organized in a certain way to produce intended outcomes. For example, a program may in part be based on the assumption that PTSD is effectively treated through exposure-based therapy (i.e., treatments that involve exposing affected individuals to anxiety-provoking memories). Similarly, a program may be based on the idea that consistent helmet use during training exercises can reduce the number and severity of TBI cases. Assumptions are often driven by research and experience. They are not inherently good or bad; rather, they are important factors to acknowledge in understanding *why* a program is designed a certain way.

External factors include combinations of cultural, social, political, economic and technological features of the environment that influence how a program operates and the target population it serves. External factors often necessitate adaptations in order to match the program's services to its population and context. Relevant examples of external factors include stigma in military culture against seeking services, a hierarchical command structure, changes in funding priorities and cultural traditions within service branches.

As displayed in the logic model template displayed below in Figure 3 (as well as Appendices A and B and Template C), it is often useful to include assumptions and external factors so they are readily apparent to those who use the logic model to understand the program. Likewise, it is also useful to group sets of activities, outputs and outcomes together, as described in the subsection that follows.

Develop a Program Logic Model

Inputs, activities, outputs and outcomes specific to a given program may be identified by reviewing source materials including but not limited to the following:

- Data from previous evaluations
- Policy and procedure manuals
- Training manuals and presentations
- Program handbook
- Reports to stakeholders
- Program budgets

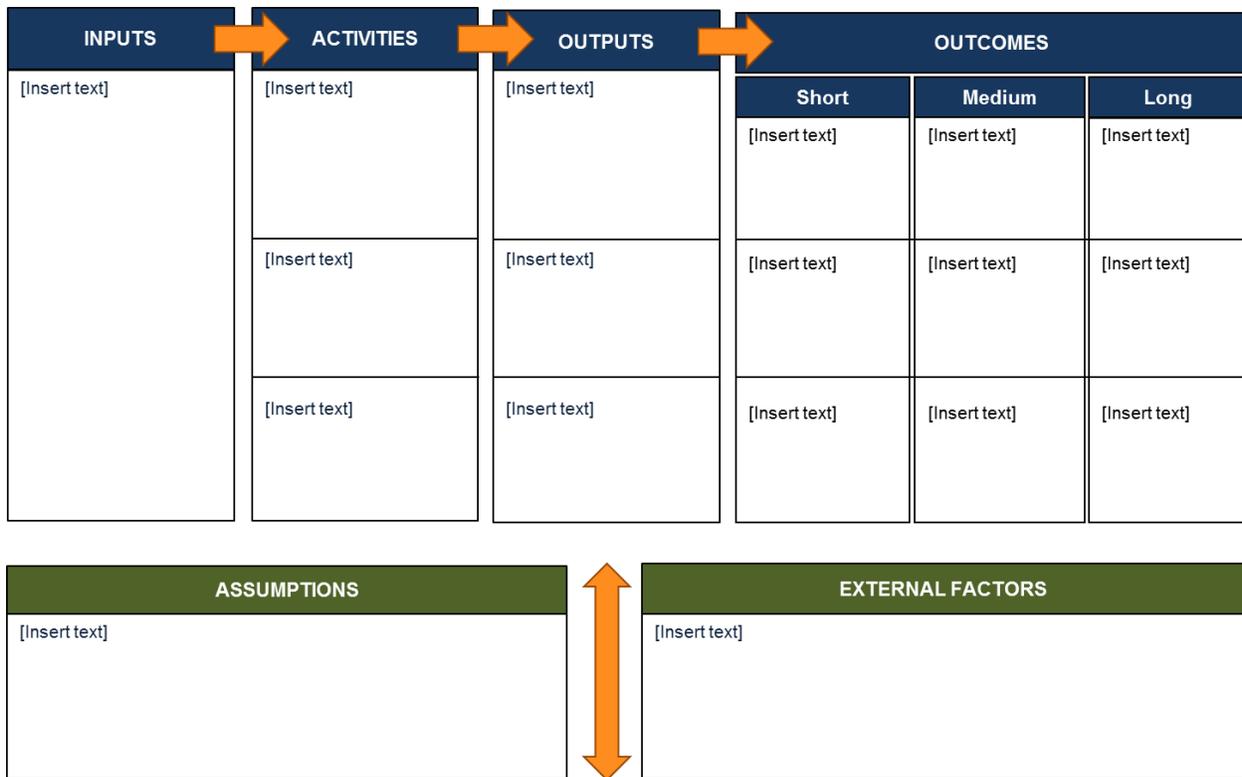


Figure 3: Logic Model Template

Outlined below are two strategies used to identify specific elements for inputs, activities, outputs and outcomes that may then be placed in a program logic model:

- **Forward mapping** – Begin by examining program inputs or activities and ask, “but why?” to describe the outputs and outcomes that are expected to result from them. For example, a key program activity for Program Delta is web-based trainings, “but why?” Program Delta anticipates that an outcome of the web-based trainings will be increased knowledge for attendees. It may also be helpful to define “but why” questions and answers as a series of “if/then” statements. Starting with program inputs and activities, think about what happens next in the program’s chain of events formed by the four logic model components – inputs, activities, outputs and outcomes.
- **Reverse mapping** – Begin with program outcomes and ask, “How did we get here?” in order to generate the inputs, activities and outputs that produce them. Consider an intended outcome of the program. With that outcome in mind, move backward and identify which output elements within the logic model are necessary to bring about that result. Move from outcomes to outputs, outputs to activities, and finally activities to inputs.

Note that it is often useful to develop relevant groupings or sets of activities, outputs and outcomes. Doing so will ensure that specific activities are linked to their specific purpose and lend greater clarity to the overall design and functioning of a program. As individual elements are identified within the logic model displayed in Figure 2, place them in Template C, or develop a logic model structure that suits the program’s needs.

Include as much detail as possible that is specific to the generation of program outputs and outcomes, as this will be useful to support a common understanding of the program. Avoid including most administrative tasks, infrequent activities and items unrelated to the program, as the resulting logic model will only serve to create confusion. Samples of completed logic models and their corresponding sets of a mission statement, goals and objectives are provided in Appendices A and B.

Conclusion

As part of this process, it is worth considering the role of program personnel in the evaluation process. Program personnel assigned the task of conducting internal evaluations serve a critical role in managing the evaluation process, communicating results to stakeholders, building support for the program and using results to guide improvement efforts. In some circumstances, these personnel may be involved with the day-to-day conduct of evaluation activities (e.g., collecting and analyzing data), while in other circumstances, their role may be more removed. Regardless of the specifics of their roles, however, personnel at the program level should begin with clear definitions of the program and its intent. This allows evaluators to more effectively use evaluation results to enhance a program's ability to meet its mission.

Key Takeaways

- The program evaluation process begins by clearly defining the nature and intent of a program.
- Mission statements, goals and objectives are increasingly specific statements about the program's intent that are used in evaluation to compare to measured results.
- Objectives should be SMART: specific, measurable, achievable, relevant and time-bound.
- A logic model lays out the connections between a program's inputs, the activities of its staff, its outputs and the outcomes it is designed to achieve.

References

- Centers for Disease Control and Prevention (2006). *Evaluation manual: Step 1 - Engage stakeholders*. Retrieved from: <http://www.cdc.gov/getsmart/program-planner/Step1.html>
- Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury. (2012). *Program evaluation guide*. Retrieved from: <http://www.dcoe.mil/mwg-internal/de5fs23hu73ds/progress?id=hlhAdwPNBK>
- W.K. Kellogg Foundation. (2006). *Logic model development guide*. Retrieved from: <http://www.wkkf.org/resource-directory/resource/2006/02/wk-kellogg-foundation-logic-model-development-guide>

Selected Resources for Additional Study

- Administration for Children and Families, Office of Planning, Research and Evaluation (2010). *The program manager's guide to evaluation* (2nd ed.). Retrieved from U.S. Department of Health and Human Services website: <http://www.acf.hhs.gov/programs/opre/resource/the-program-managers-guide-to-evaluation-second-edition>
- Centers for Disease Control and Prevention, Program Performance and Evaluation Office: <http://www.cdc.gov/program/>
- Centers for Disease Control and Prevention. (1999). *Framework for program evaluation in public health*. *MMWR*, 48 (No. RR-11). Retrieved from: <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr4811a1.htm>
- DCoE Program Evaluation and Improvement Webinar Training Series: http://www.dcoe.mil/About_DCoE/Program_Evaluation/Resources_and_Training.aspx
- Minnesota Department of Health, Quality Improvement Toolbox: <http://www.health.state.mn.us/divs/opi/qi/toolbox/>
- University of Kansas, Community Toolbox: <http://ctb.ku.edu/en>
- Wiseman, S.H., Chinman, M., Ebener, P.A., Hunter, S. B., Imm, P., & Wandersman, A. (2006). *Getting to outcomes: 10 steps for achieving results-based accountability*. Retrieved from RAND Corporation website: http://www.rand.org/pubs/technical_reports/TR101z2.html

Appendix A: Logic Model Examples

Example 1: Non-clinical Program

Mission: At Program Echo, we seek to ensure that service members who are wounded, ill or injured successfully reintegrate into civilian life or return to duty in the military. By performing our mission effectively, we hope to enhance force readiness and improve the quality and efficiency of services across the Defense Department.

Goal 1: Program Echo helps service members transition to civilian life or return to duty with increased functioning and a sustainable, individualized system of support and care to meet ongoing needs.

Objective 1A: To assess all service members referred to the program and work with the service member and his or her family or caregiver to determine their needs and develop a plan for reintegration, followed by guidance sessions and service referrals.

Objective 1B: To increase use of services and supports for participating service members and enhanced functioning in targeted areas measured on an ongoing basis.

Objective 1C: To ensure continuous access to medical and non-medical services from point of illness/injury and for as long as needed to secure resilience and stability.

Goal 2: Program Echo provides media materials and outreach in order to enhance service members' knowledge and awareness of the support and services available to assist them with reintegration.

Objective 2A: To produce and deliver media materials to targeted locations in order to increase awareness of services and supports as indicated by reports from other programs regarding source of referral or knowledge.

Objective 2B: To increase service use and improve quality by promoting effective support and care services to those who need them.

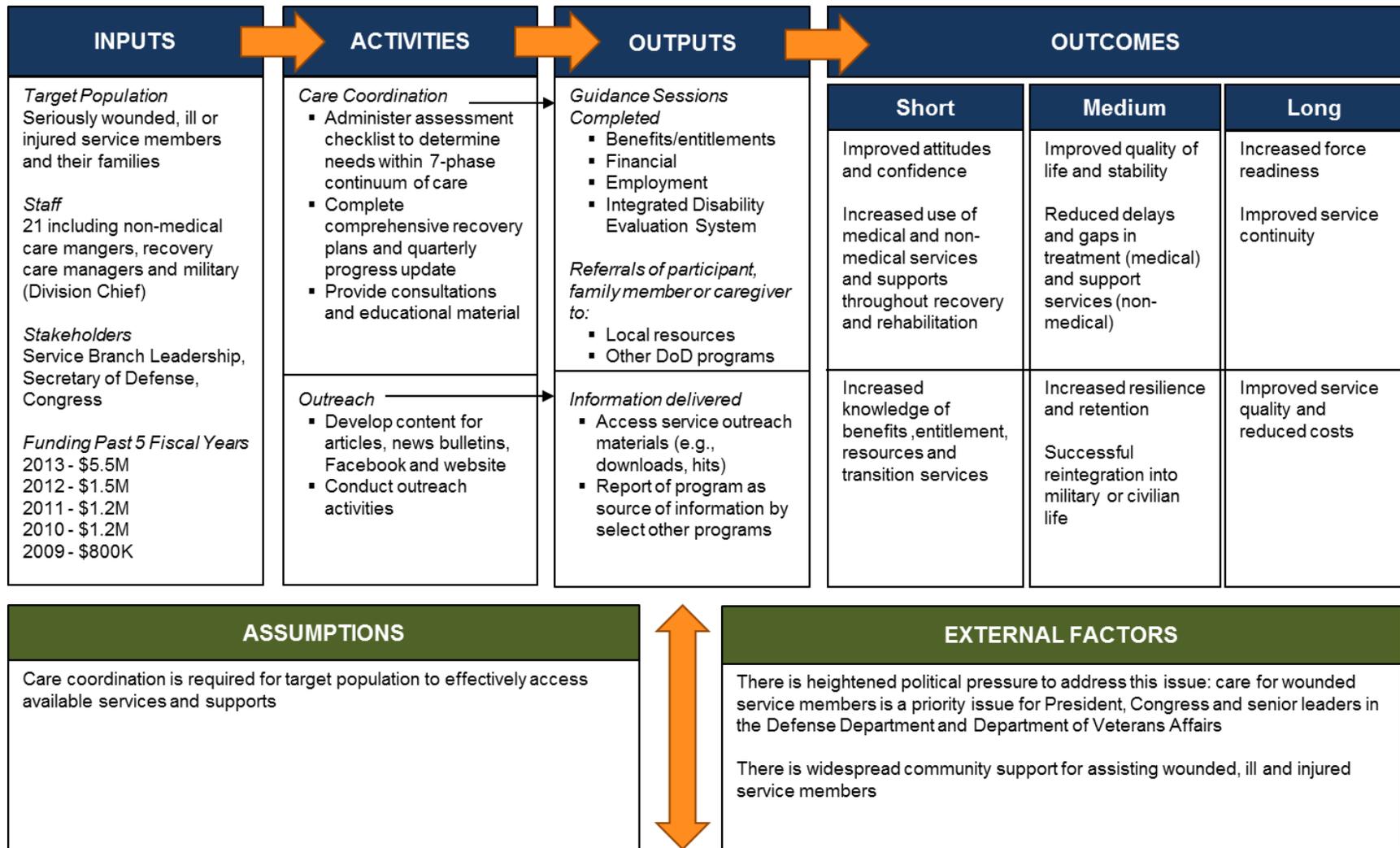


Figure 4: Example 1: Non-clinical Program Logic Model

Example 2: Clinical Program

Mission: At program Foxtrot, our mission is to provide the highest quality assessment and treatment to service members experiencing psychological health challenges. In doing so, we support a more resilient force that can meet the needs of our nation through their work at home and abroad.

Goal 1: Program Foxtrot provides evidence-based clinical assessment and treatment to help service members with psychological health challenges return to full function.

Objective 1A: Within 14 calendar days of initial contact, complete psychological intake session and treatment planning with service members and/or their families.

Objective 1B: Within 10 calendar days of intake session, complete consultation session to review results of intake and make referrals to appropriate alternative or collaborative services.

Objective 1C: If appropriate, provide up to 20 sessions of evidence-based therapy for service members diagnosed with a mental health condition.

Goal 2: Program Foxtrot engages in outreach activities and provides educational materials to enhance access to program services.

Objective 2A: Participate in outreach events with key stakeholder groups and provide educational materials that increase awareness among key stakeholder groups.

Goal 3: Program Foxtrot engages in data collection, analysis and reporting to monitor service quality and effectiveness in our ongoing efforts to provide the care our service members deserve.

Objective 3A: Provide timely reporting of data and results to stakeholder groups and collect DoD- and service-level data to measure quality and efficiency of services.

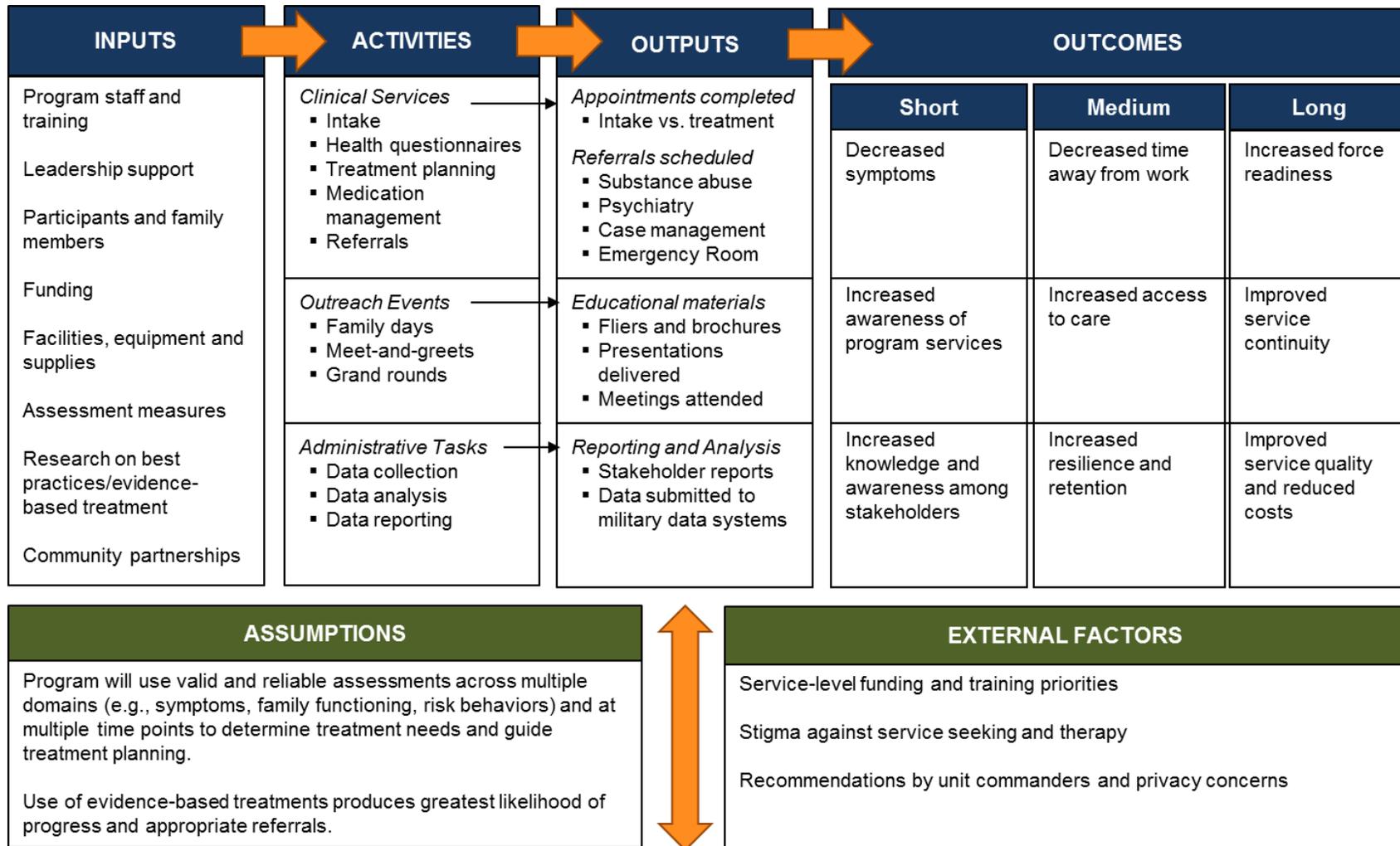


Figure 5: Example 2: Clinical Program Logic Model

Template A: Worksheet for Developing Mission Statement, Goals and Objectives

Purpose: This template is intended to guide the staff member(s) chosen to evaluate the program through the process of developing mission statements, goals and objectives. It begins with an examination of the program's background and purpose, followed by more specific statements of program intent.

Document Desired Outcome
What does the program intend to achieve? What need does this program attempt to address or fulfill? What is the desired result?
Document Current State
How and when did the program begin? For example, was the program established as a result of a law, Congressional mandate, directive from department headquarters or to address a specific concern?
Who is the program's target population?
What do stakeholders (e.g., leadership, staff members, participants) see as areas in need of improvement in terms of addressing the identified need or program?
What are the challenges of this program?
What are the successes of this program?

What other programs exist to address the need addressed by this program? What lessons learned, if any, can be applied from these programs?

What additional services and resources are needed to help this program achieve its mission?

What would you like to gain or learn as a result of conducting program evaluation activities?

Develop a Mission Statement

Consider the following questions in developing or refining a mission statement:

- What problem was the program developed to address?
- What does the program intend to achieve through the actions of its staff?
- What population does the program serve?
- What beliefs or assumptions underlie the approach used to address the identified need or problem?

Write the program's mission statement here:

Develop Goals

Consider the following questions in developing or refining goal statements:

- What must the program accomplish in order to achieve its mission?
- What changes must the program bring about in its target population or those participating in the program?
- What is the role of the program in relation to the community?
- What must be done to ensure that the program will have the resources it needs to operate?
- What is the program's role in advancing the state of the science with regard to the services it provides?

The goals selected should focus on outcomes or accomplishments, rather than activities or processes that lead to these accomplishments. Consider prioritizing goals according to time-frame, importance or type of outcomes.

Document Goals

[Add up to 3 goals. Additional goals may be added as needed]

Goal 1:

Goal 2:

Goal 3:

Develop Objectives

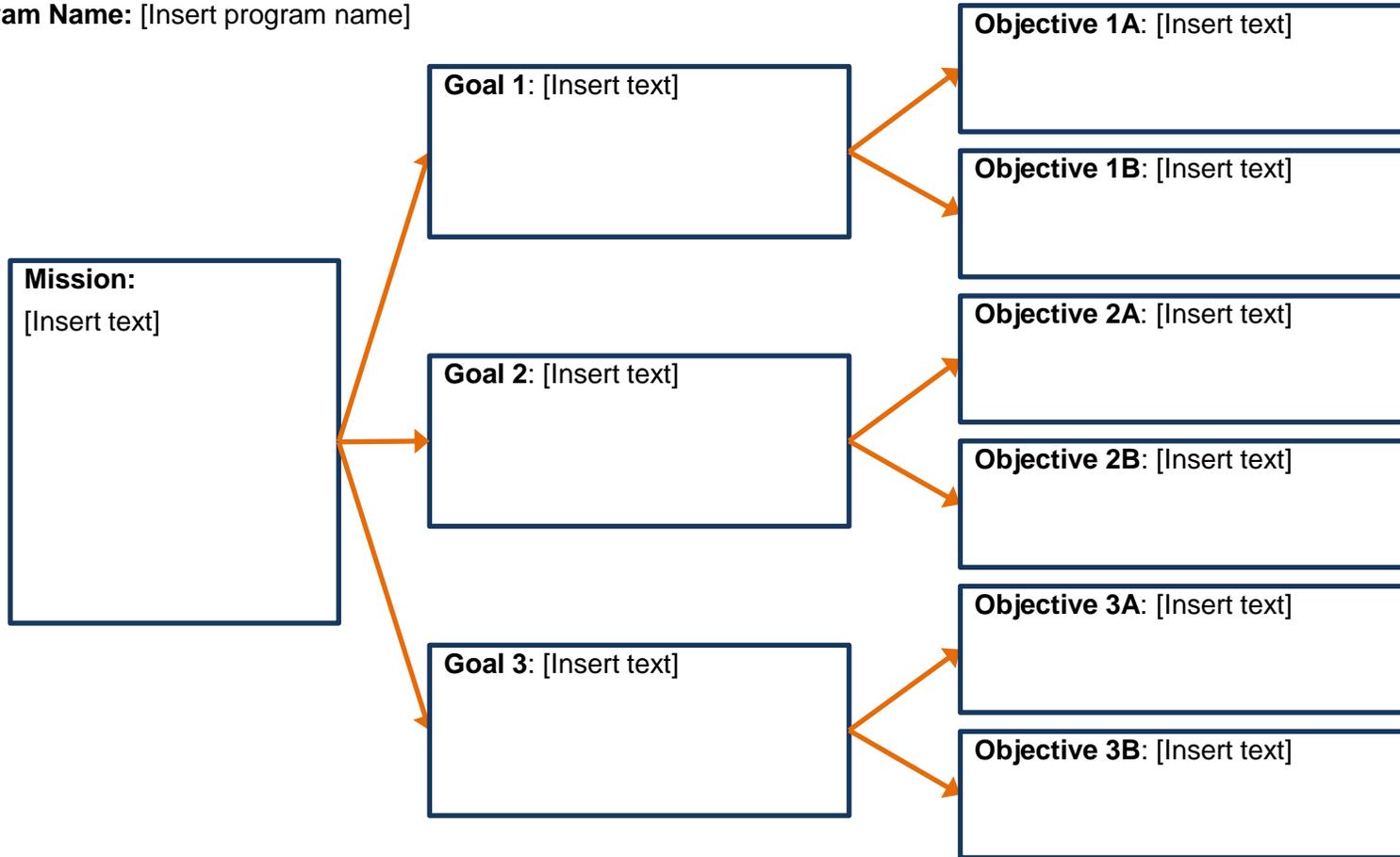
Document objective statements and place a check mark in the appropriate box if they meet the SMART (Specific, Measurable, Achievable, Relevant, Time-Bound) criteria.

The objectives selected should focus on outputs and outcomes. Consider prioritizing objectives according to time-frame, importance or type of outcomes. In addition, it may be useful to organize objectives such that they fall within the appropriate goal statement.

Document Objectives [Add up to 6 objectives. Each objective should correspond to a goal, such that Objective 1A and 1B correspond to Goal 1 and so forth. Additional objectives may be added as needed.]	S	M	A	R	T
Objective 1A:					
Objective 1B:					
Objective 2A:					
Objective 2B:					
Objective 3A:					
Objective 3B:					

Instructions: Insert text for mission statement, goals and relevant objectives for each goal. Programs may adapt this template by increasing or decreasing the number of relevant goals and objectives for each goal.

Program Name: [Insert program name]



Template C. Logic Model Template

Instructions: Insert text for inputs, relevant sets of activities, outputs corresponding to each set of activities, and short-, medium- and long-term outcomes. Programs may adapt this template by increasing or decreasing the number of relevant sets of activities/outputs/outcomes.

