AmeriCorps Research Guidance
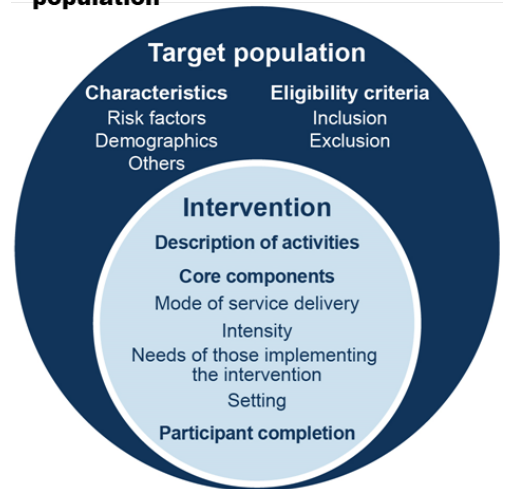
How to Fully Describe an Intervention

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Learn how to thoroughly describe your intervention to funders and stakeholders.

Developers design an intervention to be implemented in a standardized way (the intervention model) and for specific individuals or groups (the target population). They develop it to produce specific knowledge, attitudes, or behaviors or improve specific outcomes. For an organization to implement an intervention consistently, it is critical that developers clearly articulate its model. Indeed, a well-defined intervention helps an organization produce a consistent set of outcomes for participants and successfully expand, replicate, or adapt the intervention to a new population or setting.

A well-defined intervention model:

- Describes the activities that comprise the intervention.

- Describes each core component in detail and identifies the components that are critical. Each core component must be specifically described to ensure it is implemented reliably and consistently.

- Defines what it means to be a program participant and what is required to complete the program. Although each core component separately may improve some outcomes, the completion of all requirements should ensure the intended outcomes are achieved for program participants.

- Defines the target population.

A well-defined intervention and population

Target population

Characteristics
Risk factors
Demographics
Others

Eligibility criteria
Inclusion
Exclusion

Intervention

Description of activities

Core components
Mode of service delivery
Intensity
Needs of those implementing the intervention
Setting

Participant completion

This guide is intended to help practitioners to thoroughly describe their intervention and communicate the following to potential funders or stakeholders: (1) the intervention model as it was designed, (2) the intervention as it is implemented, and (3) the parts of the intervention and the population that were evaluated and its effectiveness. The guide also provides examples (see annotated sidebars) of a well-defined intervention and target population to serve as models of effective descriptions.

Describing the intervention

A clear description of an intervention includes an explanation of its activities and services and details about its core components. Examples include tutoring, facilitator-led classes or workshops, one-on-one coaching, case management, electronic or telephone communication with participants, and sustaining the capacity of the organization implementing it.

A full description of an intervention must be:

- **Operational.** The description must enable a component to be taught, learned, and practiced, and must promote consistent service delivery. It is important to be specific to ensure consistent implementation. For example, a component described as being offered "regularly" is not operational because the information is not specific enough to provide consistent service across locations.

Descriptions must be:

✔ **Operational**

✔ **Complete**

- **Complete.** Each core component must be thoroughly described. A thorough description includes:

  o **Mode of service delivery**, such as face-to-face or electronic communications.

  o **Intensity**, or how long, how often, and how much of the component each participant should receive. For example, a participant might need 2 hours of tutoring three times a week for 10 weeks (intensity = 60 hours).

  o **Workforce needs**, including the type of individuals who deliver the component, qualifications needed, and staffing arrangements (for example, direct services workforce-to-participant caseloads). Workforce includes anyone needed for the component's implementation regardless of whether they are paid by the main provider organization, a partner, or another entity (such as AmeriCorps members).

  o **Setting**, including location and venue. The location describes the geographic region and subregion, and indicates whether the setting is rural or urban. The venue describes the place where activities occur, such as a community center, home, nonprofit, park, or school. When the intervention is implemented in different settings, the description should explain which components occur in each setting. For example, job training might happen at a training site, and job coaching might happen at both the training site and the workplace.

The intervention description should also identify who is a participant and what a participant must do to complete or graduate from a program. Questions that arise in defining a participant might include: (1) Is everyone who enrolls a participant?; and (2) What is the minimum amount of services or length of time in the program for a person to be considered a participant? Examples of completion include, participants who finish a course and obtain a certificate, or participants who achieve their desired weight loss and maintain it for at least one month.

Describing the target population

A description of the target population should identify the main characteristics of the people it is intended to serve, including risk factors such as age or grade ranges, demographics, and others. It is important to be specific. For example, describing a population as "at-risk youth" is inadequate because neither *at-risk* nor *youth* is defined. It would be more specific to describe the population as "youth ages 12–17 who have been involved with the juvenile justice system." If a program is intended to serve more than one population, each must be described with such specificity.

Be sure to include:

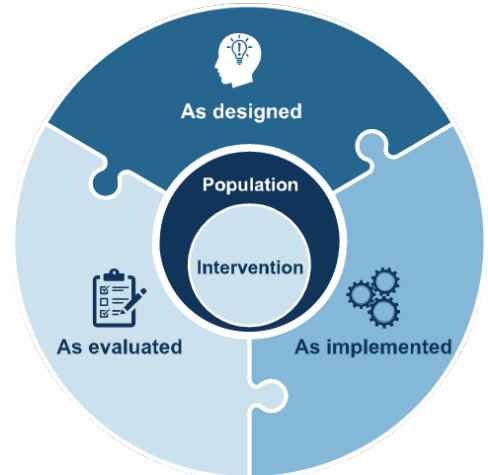✓ Specific descriptions

✓ Inclusion and exclusion criteria

The description of the target population should also include eligibility criteria for participation. For example, an adult obesity intervention might serve participants ages 18–64 who have a body-mass index of at least 30, but it may exclude all pregnant women. These requirements clearly define who can be included or excluded from the intervention.

Distinctions in describing the intervention

When describing the intervention, note any distinctions between these three angles:

1) **As designed.** The intervention model describes the intervention as the developer designed it.

2) **As implemented.** Although some practitioners implement the model strictly as it was designed, they could implement components in a different manner or target a different population. These changes may be intentional or may be an unintended consequence of an event. For example, the ratio of case manager to participant in the intervention design might be 1 to 15, but workforce turnover may push it closer to 1 to 25.

Describing variations

As designed · Population · Intervention · As evaluated · As implemented

3) **As evaluated.** Often, evaluations designed to show that the intervention improves outcomes are conducted only on a subset of the intervention's components or populations. For example, a nationwide after-school program focused on health education might tailor curricula differently for boys and girls. If a study examined outcomes for girls enrolled in schools that are located in large urban areas and offer weak in-school health education programs, the evidence of effectiveness could be attributed to those conditions only. The intervention may or may not be as effective for boys, for girls in schools that offer strong in-school health programs, or in nonurban settings.

Population and setting as defined

Population and setting as evaluated

Changes to the intervention model during implementation or an evaluation are not necessarily erroneous; indeed, they may be intentional or required (because of budget constraints, for example). However, funders and other stakeholders might question whether such changes will affect outcomes. A full description of the intervention or population therefore should justify any changes to the intervention model and describe why the same (or improved) outcomes might be expected.

For example, an organization with case management ratios that are higher than in the intervention model could highlight how it adopted new technology for virtual meetings that reduced time needed for travel and allowed those implementing the intervention to devote more time to participants, despite the higher ratios. Likewise, for the evaluation that was conducted only for girls in selected schools, the organization should provide evidence that the intervention might also be effective for boys, girls in schools with strong in-school health programs, or in non-urban areas. The organization would then plan accordingly for future evaluations to demonstrate effectiveness along these lines.

When variations in implementation exist:

✓ Justify the differences from the model

✓ Explain when variations from the intervention model exist

Further Reading

Community Tool Box, Designing Community Interventions (https://ctb.ku.edu/en/table-of-contents/analyze/where-to-start/design-community-interventions/main)

Home Visiting Evidence of Effectiveness Review, Reporting Guide for Study Authors (https://homvee.acf.hhs.gov/HomVee_Author%20Reporting%20Guide_051116_B508.pdf)

What Works Clearinghouse Review, Reporting Guide for Study Authors: Group Design Studies (https://ies.ed.gov/ncee/wwc/Docs/ReferenceResources/wwc_gd_guide_022218.pdf)

About the Series

The Corporation for National and Community Service (CNCS) supports the scaling of effective interventions that it funds and has engaged Mathematica Policy Research to conduct the Scaling Evidence-Based Models project (contract GS10F0050L/CNSHQ16F0049). As part of that project, Mathematica developed a series of guides to help practitioners collect evidence on their interventions' effectiveness and increase the likelihood of successfully scaling those interventions.

Each guide provides a succinct overview of a topic that can help practitioners. The guides are based on research and practitioners' experiences, but they do not provide exhaustive reviews of a topic. More in-depth articles can be found in the Further Reading section.