

Program Evaluation Tip Sheet: Reach and Impact

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This tip sheet is intended for programs funded through the Centers for Disease Control and Prevention's (CDC) Division for Heart Disease and Stroke Prevention. This document offers working definitions of *reach* and *impact* (recognizing that there are many possible definitions), provides examples, and presents practical tips—it is not intended as a comprehensive guide to reach and impact.

What Is Reach? Reach is the extent to which a program attracts its intended audience.¹

Key Considerations:

- **Consider multiple levels.** Reach can be expressed as people, organizations, communities, etc. and is largely based on the intervention's scope.
- **Calculate a proportion.** Reach is calculated using a simple formula. The numerator (top number) represents the actual number served. The denominator (bottom number) represents the potential number served, which may be determined by your sphere of influence. For example: Your intervention has served 1,800 individuals (numerator). Participating health centers in your target area have a potential patient population of 3,000 (denominator). The reach is 60% of the patient population.
- **Define a geographic area.** Reach is based on the intervention's scope. As the intervention grows, so may the reach. The focus may move from specific counties or regions to the entire state.

Reach Formula

$$\frac{\text{Actual number of people/entities served}}{\text{Potential number of people/entities served}} = \text{Percentage reached}$$

What Is Impact? Impact is the effect that interventions have on people, organizations, or systems to influence health.²

Key Considerations:

- **Make it measurable.** Impact is concrete, meaningful to stakeholders, and speaks to the value of your program.
- **Identify a realistic level of change.** Impact is how an intervention helps achieve public health goals. Since public health goals such as reduction in morbidity and mortality take time to occur, consider demonstrating impact using short-term change (e.g., reducing risk factors for hypertension and high cholesterol).

Why Measure Reach and Impact? Reach and impact are concise, objective, quantifiable measures of a program's progress. Reach and impact are essential to the following:

- **Demonstrate results.** Reach and impact offer program staff, partners, and funders a concise way of communicating the key accomplishments of a program.
- **Use as a management tool.** Reach and impact can help you track your program's achievements and progress from year to year.
- **Show accountability.** Policymakers and the public often ask who has been affected and what has been accomplished. We have a responsibility to demonstrate good stewardship of public funds. Program managers are better prepared to account for resources spent when they can speak to a program's reach and impact.
- **Present a national perspective.** CDC's ability to describe reach and impact is based on grantees' reporting of these measures, which results in a better understanding of progress made at the national level.

You may have been asked to describe your program in only a few sentences—reach and impact can give you the perfect elevator speech!

What About Data? When calculating reach and impact, ensure that your identified data sources are accessible. Data collection mechanisms can be monitored (if they already exist) or created (when feasible) to track progress. Possible data sources may include electronic medical records, population-based surveys, or legislative tracking databases.

Key Considerations:

- Is a formal data-sharing agreement that specifies the format, frequency, and key individuals involved needed? If so, having an agreement early on will simplify the data collection process.
- How will change over time be measured? Will multiple data collection points be necessary?



Below are hypothetical examples of how reach and impact might be defined for three CDC programs, along with tips tailored to each respective program.

Grantee A: Paul Coverdell National Acute Stroke Registry

Organizational Reach	28 out of a possible 72 (39%) acute care hospitals are participating in the registry
Individual Reach	16,200 patients are included in the registry out of a possible 28,733 (56%) patients
Impact	8,700 patients received defect-free care out of the 16,200 (54%) patients in the registry ³

Tips

- To define the denominator, it is critical to determine the total number of acute care hospitals in the state (note level of specificity).
- Compare like units, such as number of patients included in the registry and the number of potential patients. For instance, do not mix individuals with hospitals when calculating reach or impact.

Grantee B: Well-Integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN)

Organizational Reach	5 screening sites out of a possible 14 (36%) federally qualified health centers
Individual Reach	1,250 low-income women aged 40–64 years screened out of a possible 2,200 (57%)
Impact	405 women reported a positive behavioral change in physical activity out of the 900 (45%) who received lifestyle interventions

Tips

- Ideally provider sites should be categorized (i.e., Federally Qualified Health Centers, private clinics, local public health departments).
- Keep in mind that the long-term impact of WISEWOMAN lifestyle interventions is to foster heart health.

Grantee C: National Heart Disease and Stroke Prevention Program

Organizational Reach	24 out of a possible of 52 (46%) community health centers use electronic medical records (EMRs)
Individual Reach	13,000 patients out of a possible 31,700 (41%) affected by use of EMRs
Impact	3,570 patients have achieved hypertension control out of the 9,400 (38%) hypertensive patients in the EMR

Tips

- Keep in mind your purpose and scope—what are you trying to change and in what setting (i.e., work site, health care, or community)?
- While you may only have data to report immediate impact in terms of policy or systems change, do take steps—such as establishing data sharing agreements—to document the full range of change.

Although the concepts of reach and impact may appear straightforward, take time to consider how you will apply them to the unique aspects of your program. To learn more about specific guidance available on this topic or for help defining reach and impact for your program, contact your project officer who can engage your evaluation consultant as needed.

Resources

- ¹ Based on the work of: Basia B, Toober D, Glasgow RE. *Program Planning: Overview and Applications*. National Council on Aging & Center for Healthy Aging. Available at http://www.mipath.org/documents/Re-AimBrief_FINAL.pdf
- ² Based on the work of: Jillcott S, Ammerman A, Sommers J, Glasgow RE. Applying the RE-AIM framework to assess the public health impact of policy change. *Ann Behav Med*. 2007; 34(2):105–14.
- ³ “Defect-free care” is a descriptor that indicates whether patients received all of the quality-of-care measures for which they were eligible. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6007a2.htm>

