

MEASUREMENT PRIMER

Logic Model

	Outputs	Outcomes	Impacts
Definition	Outputs are the direct products of program activities. They refer to the size and scope of the services delivered or produced by a program ¹ .	Outcomes refer to the changes in attitudes, behaviors, knowledge, skills, status, or level of functioning expected to result from program activities ² . (short-term outcomes 1-3 years, long-term outcomes 4-6 years)	Impact is the fundamental intended or unintended change occurring in organizations, communities or systems as a result of program activities (7-10 years) ³ .
Example(s)	Number of educational workshops held, number of patients attending the workshops, number of hours of outpatient service provided, etc.	Clients receiving inter-professional Comprehensive Geriatric Assessments, participants utilizing clinical and community support services, etc.	A dementia-educated community

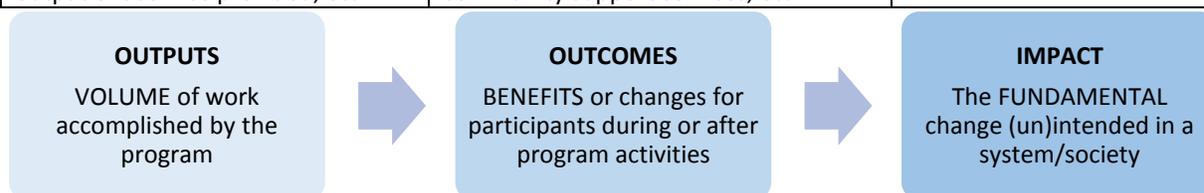


FIGURE 1: THE INTENDED RESULTS OF THE PROGRAM (W.K. Kellogg Foundation)

Performance Measurement

In order to recognize when goals have been achieved, it is important to define what the ‘better’ state looks like, and measure to know if the changes resulted in an improvement. The best approach is through the measurement of items called indicators, performance measures or measures.

Measures and Indicators

The terms “*measures and indicators*” are often used interchangeably. They refer to numerical information that quantifies structures, processes and outcomes of products, programs, projects, services, and the overall organization. *Measures and indicators* might be simple (derived from one *measurement*) or composite.⁴ They are designed to summarize information about a given priority topic in population health or health system performance.⁵ They provide comparable and actionable information across different geographic, organizational or administrative boundaries and/or can track progress over time.⁵

Types of Measures:

- Outcome measures:** are the “voice of the patient or customer” and capture system performance. They answer the question: “How is the system performing?”⁶ and “What are the end results of our QI work.”⁷ They usually relate to recovery, restoration of functionality and survival of patients⁸. Outcome measures should align or support the achievement of the goals or strategic directions of an organization. Examples: mortality rate, vaccination rates following an immunization campaign, number of injuries from falls after a fall prevention campaign, etc.
- Process measures (inputs & outputs):** are the “voice of the workings of the process” and logically connect to the outcome. They address how key parts or steps of the system are performing.⁹ Examples: % of referrals to community service, Number of visits, % of clients participating in an education program, etc.
- Balancing measures:** determine whether changes designed to improve one part of the system are causing new problems (unintended consequences) in other parts of the system.¹⁰ For example, does this new change improve staff satisfaction but decrease client satisfaction, unplanned financial implications on other areas of programming, etc.

The following approaches may be helpful while selecting/developing your indicators¹¹:

- Rates, ratios and percentages help you standardize your data so that it is expressed in a meaningful way that can be readily compared with other data. Ratios and rates may be expressed as percentages.
- Ratios may be used to adjust for the impact of natural changes in your system, such as volume.

^{1,2,3} W.K. Kellogg Foundation (2004), *Logic Model Development Guide*

⁴ Adapted from http://www.baldrige21.com/BALDRIGE_GLOSSARY/BN/Measures_and_Indicators.html

⁵ <https://www.cih.ca/en/health-indicators>

^{6,9} Provost, L.P. & Murray, S. (2011). *The Health Care Data Guide: Learning from Data for Improvement*. San Francisco: Jossey-Bass

^{7,10,11} Health Quality Ontario (2013) ; Quality Improvement Primers: measurement for Quality Improvement

⁸ https://www.aihw.gov.au/getmedia/780ca41d-b02c-4071-9d82-5368dd11c853/hse-75-10792_x03.pdf.aspx