

HEALTH PROGRAM EVALUATION

WHAT, WHY, WHEN, HOW

This is the first of a series on evaluation of health programs - the what, why and when.

Subsequent series will cover the 'how' of program evaluation

- Specifying a program theory and development of a logic model
- Gathering credible evidence 1: Study designs for determining effectiveness
- Gathering credible evidence 2: Economic analysis to determine if program costs outweighs benefits

HAVE A QUESTION REGARDING RESEARCH?

Drop us a note at the researchtraining@nhg.com.sg and we'll have it answered by experts in upcoming editions! Here's one from our readers.

WHAT IS PROGRAM EVALUATION?

Program Evaluation is "the **systematic collection** of information about the **activities, characteristics, and results** of programs to make judgments about the program, **improve** or further develop **program effectiveness**, **inform** decisions about **future program development**, and/or **increase understanding**." – Patton, 2008

SYSTEMATIC:

Evaluation methods are systematic using rigorous quantitative and qualitative research methods.

FOCUS:

Evaluations focuses on studying processes, how it is implemented and on outcomes.

JUDGEMENT:

We compare program performance either with its goals or with patients who were not in the program.

PURPOSE:

Is it working as intended? Can it work better? Should we reallocate resources?

WHY EVALUATE PROGRAM?

In a NEW program

- Defines the need for a program
- Plans the objectives, activities and expectations
- Identify critical success factors

In a DEVELOPING program

- Monitors program progress
- Potential gaps and problems can be identified early leading to redesigning the program or adjusting expectations

In a STABLE program

- Highlight program successes and improvement areas
- To demonstrate the worth of the program and support further funding

WHEN SHOULD I PLAN FOR AN EVALUATION?

- Right from the beginning of the program planning.
- Leaving it to the end:
 - Will delay identifying gaps in the program design and implementation
 - Data required for determining effectiveness of the program may be limited or unavailable.



TYPES OF EVALUATION

PLAN

1. Formative Evaluation -

Is the program being planned, developed and implemented as intended. Does it reach the target audience? Information is collected about the activities carried out in the program and its coverage.

IMPLEMENT

EVALUATE

2. Summative Evaluation -

Focuses on program outcomes and determines whether a program has achieved its goals and objectives.



CASE STUDY

A case management program, Integrating Services and Interventions for Stroke (ISIS), was introduced in Tan Tock Seng Hospital (TTSH), National University Hospital (NUH), Alexandra Hospital (AH) and National Healthcare Group Polyclinics (NHGP) to coordinate post-discharge care for stroke patients.

Goal of ISIS

To ensure continuity of care for stroke patients through smooth and seamless coordination of care and services required at primary and tertiary settings.

Objectives of ISIS:

1. Ensure optimal control of risk factors: hypertension, hyperlipidemia and diabetes
2. To refer patients screened with poor function, cognitive impairment and falls risk referral to rehab, memory clinic and falls prevention counseling, respectively
3. Ensure continuity of care by reducing outpatient defaulter rate
4. Reduce stroke recurrence

FORMATIVE EVALUATION

ISIS activities included:

- Education: on stroke management including advising on control of risk factors.
- Screening: for depression, functional status, cognitive impairment and falls risk.
- Referral: to appropriate community services such as rehabilitation, dementia clinic.
- Tracking: patients' attendance for outpatient appointment and management.

Indicators for coverage:

- Proportion of stroke patients recruited into the program

Indicator for monitoring program implementation*

- Proportion of ISIS patients screened for depression, functional status, cognitive impairment and complications
- Proportion of patients who required and received referral to community services
- Proportion of patients successfully contacted by case managers to be rescheduled for their missed outpatient appointments



SUMMATIVE EVALUATION

The outcomes of stroke patients in ISIS were compared to those who did not participate in ISIS. The comparison is essential in determining whether or not the outcomes were due to the program.

Outcomes assessed:

1. Functional status using the modified Barthel Index
2. Control of risk factors (Blood pressure, LDLc, HbA1c readings)
3. Stroke recurrence at 1 year

How has the evaluation results helped to improve the program?

1. When comparing outcomes on control of risk factors, a large proportion of data from the patients in the specialist clinics was missing. This reflected clinical practice in which readings were not taken unless required by the physician. Without the data, case managers were unable to monitor patient's control of risk factors.
2. Barriers were identified that reduced the uptake of referrals for rehabilitation services. Reasons included financial constraints, lack of an accompanying person and not seeing the need for rehabilitation.

Reference

1. Michael Quinn Patton. (2008) *Utilization-Focused Evaluation*. 4th ed. Sage Publications
2. Carol H. Weiss. (1997) *Evaluation*. 2nd ed. New Jersey: Pearson Prentice Hall

*List of indicators presented is not comprehensive