Some approaches to evaluation: a focus on outcomes

Janet E. Sansoni

University of Wollongong, jans@uow.edu.au
Some approaches to evaluation: a focus on outcomes

Abstract
Powerpoint presentation presented at the Seventh Annual Disease Management Conference, Canberra

Keywords
approaches, evaluation, focus, outcomes

Publication Details
Some Approaches to Evaluation: A Focus on Outcomes

Assoc Prof Jan Sansoni

Australian Health Outcomes Collaboration
Australian Health Services Research Institute, UOW

University of Wollongong
Purpose of Evaluation

• Inform decision making; review programs
• Describes how program/intervention worked, what outcomes achieved, and their impact – implications for practice

Three main types
- **Process** – focus on processes and strategies used
- **Outcome** – effectiveness/ result of intervention/program
- **Impact** - also focuses on effectiveness and whether objectives met but considers the broader implications for practice and the outcomes of the strategies, processes, and interventions
Methods Used

- **Process** – can include site visits, informant interviews, surveys of participants, analysis of reports and minutes, direct observation, outcome related performance indicators

- **Outcomes** – with/without, before and after, research paradigms with standardised assessments - but also outcome related performance indicators, surveys, focus & other group techniques, time series designs etc

- **Impact** – surveys, questionnaires, focus and nominal group techniques and other qualitative and quantitative approaches – results produced by both strategies and interventions
The Service Evaluation Cycle

- **Structure**  Context, organization/ model, inputs, e.g. adequacy of $, staff training etc.

- **Process**  How service delivered, procedural endpoints, process outcomes, e.g. standards, QA, care paths, timeliness

- **Outputs**  Efficiency, throughputs - often tied to costs data, e.g. alos, $ per episode

- **Outcome**  Change in health status due to intervention, e.g. dead/ alive/ hrqol/ disability

- **Impact**  Effect on the broader health and economic context
Some Questions to Ask

What is the intervention being evaluated?
What are the goals of the intervention?
What is the hypothesis?
Are we examining group or individual outcomes?
How do you define the intervention?
What are the desired outcomes of this intervention - if this treatment or service works what would you expect to happen?
What information does the organization collect routinely - does any of this reflect on outcome?
Is there any baseline information?
CDSM

- This is both a **health** and an **educational** intervention
- Train patients to manage their condition better
- Did patients acquire the knowledge to do this?
- Did they apply the knowledge?
- If so, you would expect improvement in HO – health status, health behaviours, disability, fatigue, pain, social role, depression, self efficacy; and health service utilisation (Stanford)
What is a health outcome?

A health outcome is a change in the health of an individual, or a group of people or a population, which is wholly or partially attributable to an intervention or series of interventions (AHMAC 1993, Modified NHIMG 1996).
Health Outcomes Related Performance Indicators

An outcome-related performance indicator in the health and welfare field is a statistic or other unit of information which reflects, directly or indirectly, the performance of a health or welfare intervention, facility, service or system in maintaining or increasing the wellbeing of its target population (Armstrong, 1994).

CRS example – time to treatment
Health Outcomes Framework

Population Health

Dimensions of Health
- physical
- mental
- social
- pain
- HRQOL
- Disease
- impairment
- life
- expectancy

Determinants of Health
- Fixed and modifiable risk factors

Intermediate Outcomes

Direct Outcomes
- Interventions programs services
- Outputs
- Process
- Inputs

Health outcome related performance indicators

Outputs
- Process
- Inputs
Q.A. and Health Outcomes Monitoring Throughout the Clinical Pathway

- Patient Health Status/Outcomes
- Clinical Care & Complications
- Costs
- Patient Satisfaction
Heart Valve Replacement: Time Issues
TYPOLOGY OF OUTCOME MEASURES

- QUANTITY of LIFE
  - Mortality, period of survival, avoidable premature mortality

- PROCESS
  - Practice Variations, ORPIs - readmission, HSU, complication rates etc

- QUALITY of LIFE
  - Generic and specific measures: health status, HRQOL, QOL

- SATISFACTION
  - Client surveys, focus groups
Health Related Quality of Life

- Physical
- Mental
- Social

Impairment
Disability
Handicap/
Capacitation

Disease/
Symptom
Condition
Generic
Measures

Single
Multiple
Measures
Profiles/
Indexes
Types of Measures

Generic HRQoL/ Health Status Measures: e.g. SF-36 and Generic QoL Measures: e.g. WHOQOL (Why we use generics)

Disease/ Symptom Specific: Symptom checklists of a particular disease e.g. diabetes. May include symptom severity and impact items. Clinical indicators related to disease control e.g. blood glucose levels, no. of asthma attacks etc.

Condition Specific: Chronic Illness, Ageing, Mental Health – broader conditions vs. specific diseases

Blends: A quality of life or HRQoL measure is combined with a disease / condition specific measure (e.g. Asthma QOL). Some issues with these measures (avoid).
Types of Measures

- **Functional Status Measures**: Disability (e.g. HAQ); ADL/ IADL; FIM, Barthel, OARS; Cognitive Status; Aged Care - ONI

- **Health Utility Indexes**: For economic evaluation (impact)

- **Patient Satisfaction Measures**: SAPS, Visit/Consult surveys

- **Outcome Measurement Suites**: Stanford CDSM, DOMS

  CDSM - also might consider Health Education Impact Q (HeiQ), and educational assessments e.g. knowledge gained/applied; self efficacy measures, and broader measures such as the Patient Assessment Chronic Illness Care (PACIC) and Stanford Q
Criteria for Instrument Selection

- **Normative Data/ Clinical Data**: is information available for comparison purposes/ benchmarks?
- **Type of Instrument**: well-being measure, generic health status measure, health utility index, disease specific measure, symptom index, condition specific measure
- **Style of Instrument**: self-report inventory, clinical rating scale, goal attainment scale - issue of proxy reports
Criteria for Selection

- **Practical Utility:** respondent burden, costs, training
- **Freedom from Confounding Factors:** social desirability, inappropriate questions, literacy levels
- **Relevance and Suitability of Application:** does the instrument cover the dimensions of interest
- **Mode of Administration:** client fills in survey, structured interview, computer assisted telephone interview (norms can vary by method)
- **Culture, Gender, Age Appropriateness:** Some instruments need language modifications for Australia.
- **Psychometric Properties:** is the instrument, reliable valid and sensitive to change in target group
CDSM Instruments

- **Health Ed Impact (HeiQ)** - 42 items: positive life engagement; health directed behaviour; skill acquisition; constructive attitudes/approaches; self-monitoring insight; health service navigation; social integration/support; emotional well-being
  
  HeiQ: health and education focus, proximal outcomes focus,

- **PACIC** – 20 items - overall quality of chronic illness care: patient activation, delivery system design/decision support, goal setting, problem solving/counselling, follow-up/coordination (**process evaluation focus** – needs to be assessed for outcome evaluation)

- **Stanford Measurement Suite** – 32 items: health status, health behaviours, disability, fatigue, pain, breathlessness, health distress, social role, self efficacy; health service utilisation – some are more distal outcomes
If Using Instruments...

- Standardised instruments/items are better than DIY as they have known psychometric properties and these can be evaluated when selecting your measures.

- Instrument/survey/questionnaire/item design and development is a complicated process.

- Selecting the best measures/items requires careful thought and it is often useful to gain advice – AHOC happy to help.
• Thank you