Evaluating Telehealth Projects

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- **10.15 am – 12.15 pm Session 1 – Evaluation**
  This two hour interactive session will be facilitated by Dr Jenni Livingston.
  The session will provide an understanding of forms and approaches to evaluation and their usefulness in answering evaluation questions of importance to local projects.
- It will rely upon contributions from participants to work in small groups to begin the development of local evaluation plans whilst considering the role of common approaches to answering evaluation questions.
- Evaluation practice concerns with internal evaluation will also be discussed.
- Dr Jenni Livingston's program evaluation practice has included contracts with important Australian and Victorian government initiatives in health and education whilst working at the University of Melbourne's Centre for Health Program Evaluation in the Faculty of Medicine, Dentistry and Health Sciences. She has wide experience in providing training and professional development.

  Intended outcomes:
- Gain a broad understanding of program evaluation forms and approaches;
- Commence development of local evaluation plans; and
- Gain a practical understanding of internal evaluation concerns.

Workshop program

Introductions

What are your concerns about evaluating telehealth projects?

- Developing measures to apply across Victorian projects

- Measuring the user experience

- Providing accountability to government

- ?

- ?

Some concerns?

- Developing data collection strategies **before** there is clarity about the purpose of the evaluation
- Developing data collection strategies **before** evaluation questions have been articulated.
- Not having questions to answer!
- Not negotiating use of the evaluation findings with stakeholders
- Minimising data collection burden and maximising use of findings...
- Attempting to attribute long term outcomes to a small intervention/ program.

My concerns?

Evaluation…

Everyday evaluation

Evaluation of plans

Evaluation of people (appraisal)

Evaluation of policy

Evaluation of products

Evaluation of programs

- A **program** is a set of planned activities directed toward bringing about specified changes in an identified and identifiable audience

- It includes:
  - A specified purpose
  - A plan of action
  - Action consistent with the information contained in the plan

Smith (1989)

- These **program** evaluation approaches can also be used with *policies, products, plans and personnel.*

What is a program?

- Can the program be improved?
- Was the program implemented properly?
- Does the program work?
- Could this program be used elsewhere?
- Is there a better program to solve this problem?
- What has this program changed?
- Are these program's goals the right ones to solve this problem?

Common reasons for evaluations…

Evaluation can be viewed as:

- Assigning merit or worth; and/or
- Gathering information to assist in decision-making
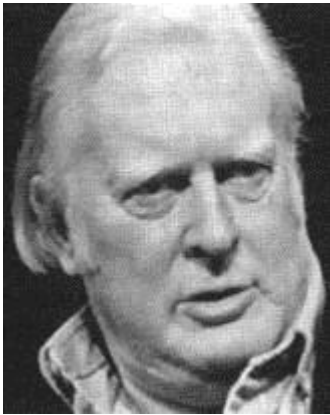
Michael Scriven

The process of determining the merit, worth or value of something, or the product of that process...

The evaluation process normally involves some identification of the relevant standards of merit, worth or value; some investigation of the performance of evaluands on these standards; and some integration or synthesis of the results to achieve an overall evaluation or set of associated evaluations. (Scriven 1991: 139)

Scriven, M. (1991), *Evaluation Thesaurus*, 4th edn. Newbury Park, CA: Sage

Penny Hawe

Judging the worth of something through observation and measurement, and then comparing the results against accepted standards or criteria of good practice

Hawe, P., Degeling, D. & Hall J (1990) *Evaluating Health Promotion: A Health Worker's Guide* Sydney: Maclennan &Petty

Penny Hawe: "We try to understand health by looking at larger processes . . . . how physical environments have an impact on health."
/ Photo by Ken Bendiktsen

John Owen

Program evaluation is the process of delineating, obtaining and disseminating information for use in describing or understanding the program, or making judgments or decisions related to the program (Owen 1993: 7)

Owen, J.M. (1999), *Program Evaluation: Forms and Approaches*, 2nd edn. St Leonards: Allen & Unwin.

- What is the **purpose** of the evaluation?
  - Improvement?
  - Comparison?
  - Accountability? Etc etc
- Who is the evaluation for? Who is the **audience?** What use will be made of the evaluation findings?
  - The program team?
  - The funding body?
- What is the "thing" being evaluated? What is the **evaluand**?
  - The training program to assist…
  - The workforce development intervention…
  - A change in service delivery

Critical dimensions of evaluation (negotiating evaluations HO)

- What **questions** will the evaluation answer?
  - The direction for the evaluation comes from the questions
  - There may be a broader overall question, and "subsidiary questions"
- What **form** of evaluation is best used to answer the question? (See HO)
  - Proactive – before the program
  - Clarificative – early stages
  - Interactive - during
  - Monitoring – stable
  - Impact - stable
- What **data** needs to be collected to answer the questions, reliably, validly and truthfully?
  - Can the data be triangulated?
  - Are all questions being answered?
- How will the evaluation be **reported**?
  - Findings, conclusions, judgments, or recommendations?
  - What form of reporting will encourage best use of the evaluation findings?

Critical dimensions of evaluation (continued)

What makes a good evaluation question?

- They are shaped by the functions they must perform
- Their principal role is
  - to focus the evaluation, and
  - to facilitate the development of a design for data collection that provides meaningful data.

  (Rossi, Freeman, Lipsey (1999) Evaluation: A Systematic Approach, 6th Ed. Sage)
- They should identify a *distinct, well defined and bounded aspect* of the program for study So that *"performance" of that dimension can be credibly assessed*.
- (The evaluand, the object of the evaluation)
- This means that the question is:
  - Reasonable and appropriate, and
  - Answerable.

Framing evaluation questions

- Questions about the **purpose** of the evaluation. (E.G. To find out if goals achieved? How to improve the program? Transferability questions? Accountability?)
- Questions about the **model** underpinning the program.
- Questions about the **knowledge, skills and style of the practitioners**
- Questions about the **implementation** of the program, including the extent to which there has been **adaptation**
- Questions about **specific elements** of the program
- Questions about **doing** the evaluation (Previous efforts? Problem analysis? Program documentation? Targets? Criteria? Stakeholders and their roles? End users? Limitations?)

General types of evaluation questions to consider...

Many criteria may be relevant, and the standards by which program performance may be judged, could be derived from:

- The needs or wants of the target population
- Stated program goals and objectives
- Professional standards
- Customary practice; norms for other programs
- Legal requirements...
- Ethical or moral values; social justice, equity
- Past performance; historical data
- Targets set by program managers
- Expert opinion
- Pre-intervention baseline levels for the target population
- Conditions expected in the absence of the program (the counterfactual)
- Cost or relative cost.

(Rossi, Freeman, Lipsey (1999) Evaluation: A Systematic Approach, 6th Ed. Sage, p84)

Evaluation criteria to choose from:

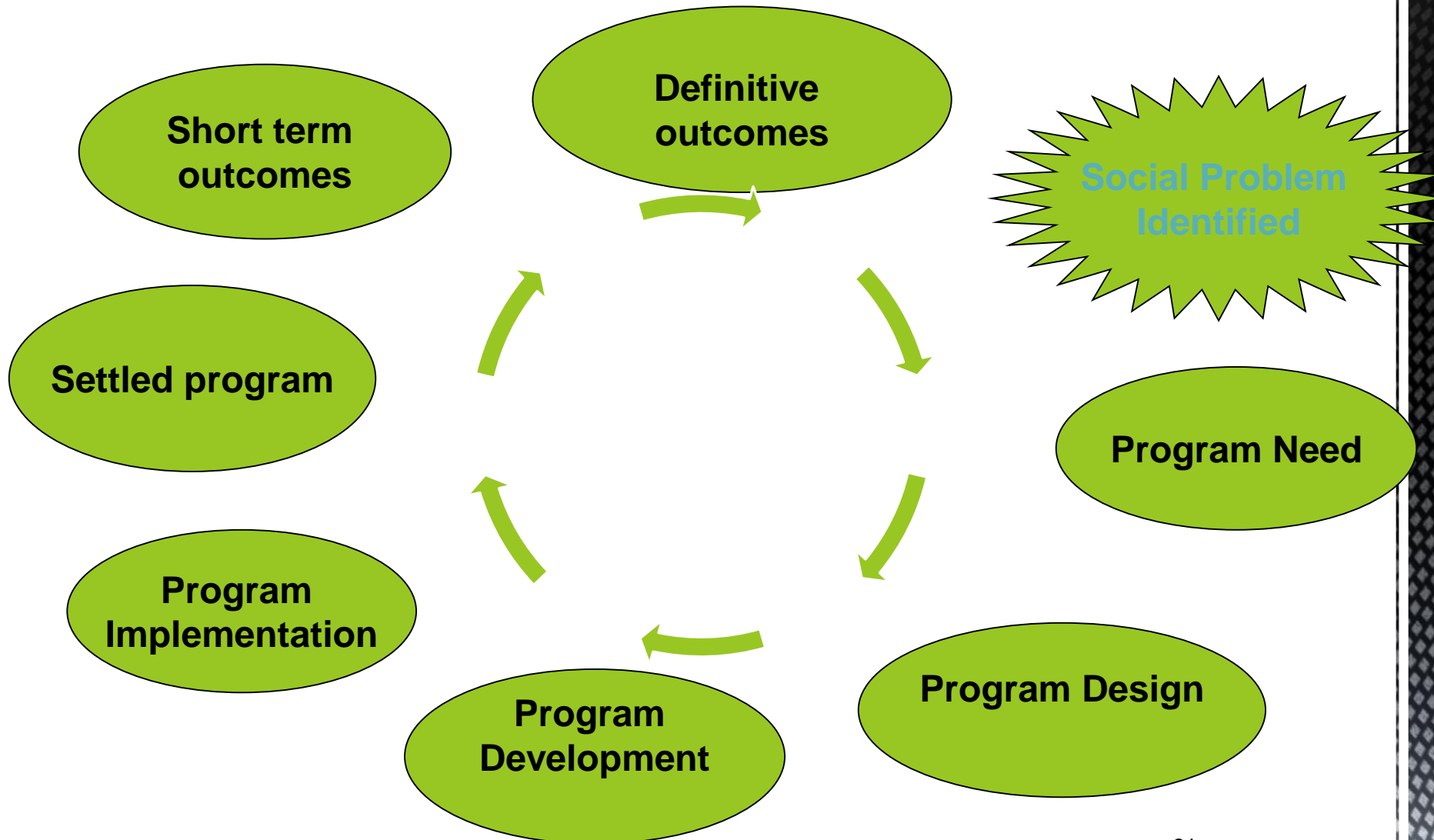What are the criteria we use in judging beauty?   Do they change over time?

- Construct some key evaluation questions for your project

Activity

Forms and approaches to evaluation

What type of evaluation is it?

How evaluation works at different stages of any program

Short term outcomes

Definitive outcomes

Social Problem Identified

Settled program

Program Need

Program Implementation

Program Development

Program Design

Adapted from Hawe (1990)

Program need
Proactive evaluation

Purpose/ orientation	Before the program exists To assist in decision-making about type of program/ how best to develop a program
Evaluator role	Adviser, provider of evidence about what is known, suggested format for program, or need for organisational changes
Typical issues	Is there a need for this program? What do we know about the problem? What is best practice? What does research tell us? What do we know about the problem? Can we rejuvenate a policy/program with new information? Has the need for this program been satisfied (and can we retire the program)?
Major approaches	Needs assessment/needs analysis Research/evidence base review Review of best practice

Program Design
Clarificative evaluation

Purpose/ orientation	To clarify the internal structure and functioning of a program, its program logic, the causal mechanisms. Before the program is implemented, preferably or evaluated for outcomes Design aspects
Evaluator role	Facilitate clarification of program logic Challenge program logic
Typical issues	What are the intended outcomes of this program and how is the program designed to achieve them? What is the underling rationale? What elements can be altered to improve program? Is the program plausible? Which aspects are amenable to impact or monitoring evaluation?
Major approaches	Program logic definition Evaluability assessment Accreditation-what is the worth of the program *guidelines*?

Program Implementation and Processes Interactive evaluation

Purpose/ orientation	Delivery or implementation information needed Providing findings to improve delivery or outcomes when it is possible to change the program Program is constantly evolving, changing
Evaluator role	Information to improve the program Facilitates learning and decision-making If an insider may also facilitate change Direct findings to middle level managers and program implementers
Typical issues	What is this program trying to achieve? How is the program going? Is the delivery working? Is delivery consistent with the program plan? Could delivery or the organisation's operations be changed to make it more effective?
Major approaches	Responsive evaluation, action research, quality review, developmental evaluation, empowerment evaluation

Settled program/Short term outcomes Monitoring evaluation

Purpose/ orientation	When program is well established and ongoing Managers need information to compare different sites, often through "performance indicators", but should be broader than this. Often need rapid response.
Evaluator role	Set up wide-range of ways to collect information, and establish ways in which analysis and use can proceed. Usually centrally located, with designated responsibilities at sites.
Typical issues	Is program reaching the target? Is implementation satisfying benchmarks? Between sites?
Major approaches	Component analysis, devolved performance assessment, systems analysis

Definitive outcomes
Impact evaluation

Purpose/ orientation	A logical, endpoint analysis, establishing outcomes, the extent and level of attainment of objectives, level of performance, finding intended and unintended outcomes. Find merit or worth = summative but need to make sure that implementation has taken place.
Evaluator role	Is the program in a fit state for impact evaluation? What is the basis for making a judgment of merit of worth? What evidence do I need, and how best should I collect it?
Typical issues	Has the program been implemented as planned? Have the stated goals been achieved? Needs served? Implementation aspects – do they make a difference?
Major approaches	Objectives based, process-outcome, needs based (of participants), goal free (unintended too), performance audit.

Evaluation Forms: orientation, typical issues and key approaches

	Proactive	Clarificative	Interactive	Monitoring	Impact
Orientation	Synthesis	Clarification	Improvement	Checking/refining/ accountability	Learning/accountability
Typical issues	• Is there a need for the program? • What do we know about this problem that the program will address? • What is recognised as best practice in this area? • Have there been other attempts to find solutions to this problem? • What does the relevant research or conventional wisdom tell us about this problem? • What do we know about the problem that the program will address? • What could we find out from external sources to rejuvenate an existing policy or program?	• What are the intended outomes and how is the program designed to achieve them? • What is the underlying rationale for this program? • What program elements need to be modified in order to maximise the intended outcomes? • Is the program plausible? • Which aspects of this program are amenable to a subsequent monitoring or impact assessment?	• What is this program trying to achieve? • How is this service going? • Is the delivery working? • Is delivery consistent with the program plan? • How could delivery be changed to make it more effective? • How could this organisation be changed so as to make it more effective?	• Is the program reaching the target population? • Is implementation meeting program benchmarks? • How is implementation going between sites? • How is implementation now compared with a month ago? • Are our costs rising or falling? • How can we fine-tune the program to make it more efficient? • How can we fine-tune the program to make it more effective? • Is there a program site which needs attention to ensure more effective delivery?	• Has the program been implemented as planned? • Have the stated goals of the program been achieved? • Have the needs of those served by the program been achieved? • What are the unintended outcomes? • Does the implementation strategy lead to intended outcomes? • How do differences in implementation affect program outcomes? • Is the program more effective for some participants than for others? • Has the program been cost-effective?
State of Program	None	Development	Development	Settled	Settled
Major focus	Program context	All elements	Delivery	Delivery/outcomes	Delivery/outcomes
Timing (vis-à-vis program delivery)	Before	During	Mainly during but could be at other times	During	After
Key Approaches	• Needs assessment • Research synthesis (evidence-based practice) • Review of best practice (Benchmarking)	• Evaluability assessment • Logic development • Ex-ante	• Responsive • Action research • Developmental • Empowerment • Quality review	• Component analysis • Devolved performance assessment • Systems analysis	• Objectives-based • Needs-based • Goal-free • Process-outcome • Realistic • Performance audit
Assembly of evidence	Review of documents and data bases, site visits and other interactive methods. Focus groups, nominal groups and delphi technique useful for needs assessments.	Generally relies on combination of document analysis, interview and observation. Findings include program plan and implications for organisation. Can lead to improved morale.	Relies on intensive onsite studies, including observation. Degree of data structure depends on approach. May involve providers and program participants.	Systems approach requires availability of management information systems (MIS), the use of indicators and the meaningful use of performance information	Traditionally required use of pre-ordinate research designs, where possible the use of treatment and control groups, and the use of tests and other quantitative data. Studies of implementation generally require observational data. Determining all the outcomes requires use of more exploratory methods and the use of qualitative evidence.

- Look at your evaluation questions.
- Which evaluation form does the question seem to fit into?

- If you have a number of evaluation questions, you may have a number of forms.
- You need to decide whether you are going to stay with one form or a number of them.
- This is important because it will affect the way you collect your data.
- One form means it is a simpler evaluation

Activity

- What do you **really** want to find out? Do you want to look at outcomes or processes or both? Why? What is the question you want to answer? What are you most concerned about?

- Do you want the evaluation to recognise the uniqueness of the service, and so be consistent with program's approach or style? Or is the evaluation more useful if it is more generic?

- Contextual and "predisposing" factors are important. They contribute in varying and usually unknown ways to the outcomes of a program.

- Asking too much of clinicians and patients in gathering data. Most information collected is not used to answer the key questions. (And data needed to answer important questions is overlooked or omitted.)

Some general issues in the evaluation of service delivery programs

- Many suggestions for comprehensive "measures".
- Validated?
- St V's report – declined service because of language barriers and technology problems
- Draft suggestions:
  - Net promoter score
  - Empowerment of providers
  - Use by patients
  - Reduce travel costs
  - DNAs
- More?
  - Requested by patient or offered
  - Better than the alternative for patient
  - Comparable diagnostically to face to face for provider and patient
  - ?
  - ?

Specific issues in the evaluation of telehealth service delivery programs

Evaluation practice – three aspects

1. Negotiating and Planning
2. Data Collection and Analysis
3. Reporting and Utilisation

Negotiating and planning

Data collection and analysis

Reporting and utilisation

- Objectives for each session were set when the conference was planned
- Achievement of these objectives was measured through survey at the final session

Case 1 Conference evaluation

1. If there was a gap between your expectations and what was delivered, could you please tell us about it, so that we can refine the marketing information or the course (or both!)

2. Which aspects of the course do you anticipate will be most useful in your current work?

3. Do you have any suggestions about improving the way we delivered the course?

**Case 2
Health Program
Evaluation three
day short course**

- Program designed to build linkage between public and private mental health services

- 10 different data collection strategies, triangulated to enhance validity of the findings.

- Four different service delivery contexts.

- Six monthly reports over a three year trial.

- Informed by a program logic model developed jointly by evaluators and program developers.

- Service delivery adaptations needed to be taken into account

- One general metric that provide to be inconsistently applied and therefore not useful in the evaluation

**Case 3
Partnership
Project program
evaluation**

Small number strategies versus large number strategies

- Small number surveys, focus groups, in-depth interviews
- Semi-structured questionnaires
- Open questions
- Discursive reports with verbatim quotations, short case studies…

- Large number surveys, random samples
- Structured questionnaires
- Numerical data from closed questions
- Short response open questions
- Results in tables and graphs in reports
- Evaluation questions examine description of characteristics and relationships between variables

Thin

Depth of
analysis

Small
Number
strategies

Large number
strategies

Thick

Risky ← Safe

Generalisability
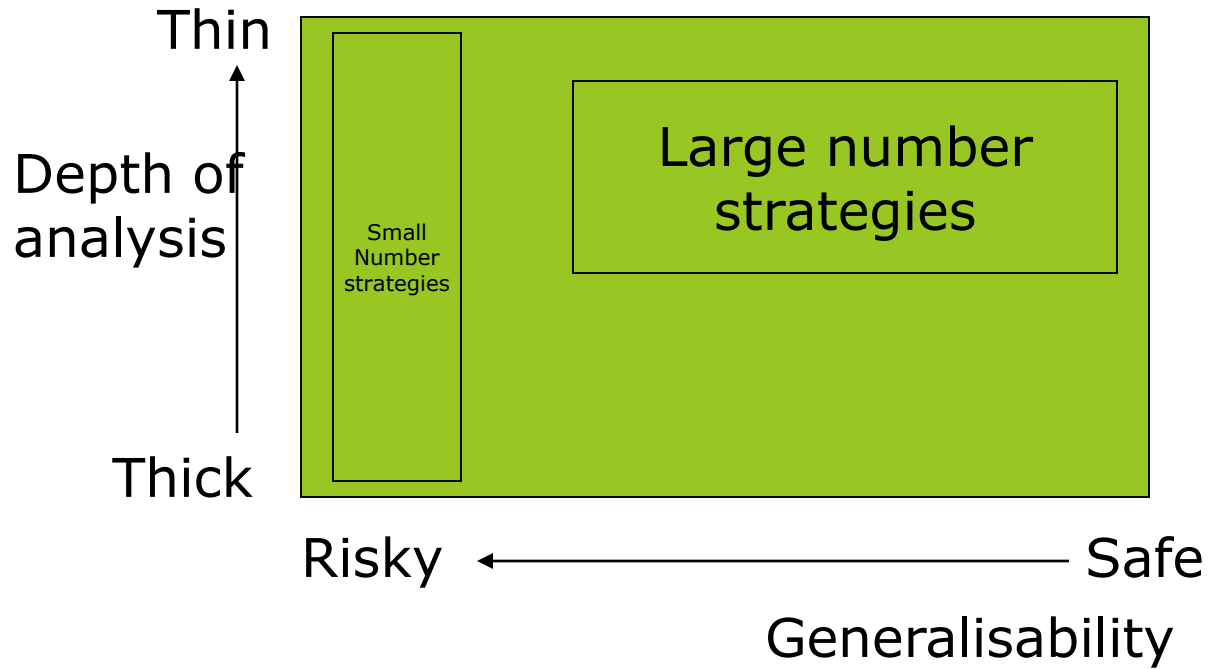
(Thanks to Neil Day for these ideas)

As a consumer of program evaluations, I want evaluation reports that tell me what we are doing well, what we need to improve, and what we might do to make those improvements. I also want clearly reported data that I can use to make my own judgements. I try to select evaluators who have considerable expertise in the area being evaluated and expect that they will use that expertise in making judgements and recommendations about the program. After those judgements/recommendations are received, I can agree or disagree with them, but at least they provide additional insight from someone who has carefully examined a program. The presence of the evaluator's judgements from the evaluation, as I see it enhance my ability to make judgements. This is not an "either-or" issue in my view. I think evaluation is more useful when it is "both/and".

Debra Hamm

Knowledge products of evaluation

- **Evidence:** The data that has been gathered during the evaluation, this could be regarded as information

- **Conclusions:** The synthesis of data and information. These are interpretations or meanings made through analysis. Conclusions result from analytical processes involving data display, data reduction and verification.

- **Judgments:** in which values are placed on the conclusions: Criteria are applied to the conclusions stating that the program is "good" or "bad", or the results are "positive", "in the direction desired" or "below expectations", for example.

- **Recommendations:** These are suggested courses of action, advice to policy makers, program managers or providers about what to do in the light of the evidence and conclusions. (Owen, 1999:4)

Factors affecting utilisation – at the evaluation level

Evaluation quality	Rigour and elegance of design, data collection and analysis
Credibility	Characteristics of evaluator and processes – objectivity and believability
Relevance	As seen by audience
Communication quality	In negotiation, data collection and analysis and reporting stages
Findings	Value for decision-making, closeness to expectations, and feasible regarding resources
Timeliness	Findings reach audience when needed for making judgments and decisions

Factors affecting utilisation – policy-setting or decision level

Information needs	What decision makers perceive their needs to be, and variations here
Decision characteristics	Context, importance and significance, type of decision, area of decision
Political climate	Orientation of commissioners, dependence on funding, rivalries
Competing information	From beyond the evaluation – personal, colleagues, similar programs
Personal characteristics	Organisational position and experience, nature of leadership
Commitment	Attitudes to program, evaluation and organisational resistance to change
Financial climate	Of organisation and program

Activity

Refining your questions
Constructing the evaluation plan

- Best considered in conjunction with **commissioning and reporting** of an evaluation
  - External report and external evaluator
  - External report and internal evaluator
  - Internal report and external evaluator
  - Internal report and internal evaluator
  - Combinations of internal and external

External and internal evaluation

- What are the concerns attached to internal evaluation?
- Are they valid concerns?
- Is the an evaluation steering committee?

Internal evaluation for an external commissioner…

Strength of evidence supporting internal and external evaluation

Factor	Internal	External	Guideline
Cost	Weak		Cost comparison calculation needed in each case
Availability	Weak		Assessment of current availability needed in each case
Knowledge of program and operations	Weak		Depends on amount of organisational information
Knowledge of context	Weak		Depends on how unusual the organisation is
Ability to collect Information		Weak	Depends on how 'territorial' the organisation is
Flexibility			Not a determining factor
Specialist skills and expertise			Not a determining factor
Objectivity			Not a determining factor
Perceived objectivity		Strong	May be important for 'sensitive' evaluations and specific audiences
Accountability for use of government funds		Strong	Government and organisations receiving government funding should consider this factor
Willingness to criticise		Weak	Not usually a determining factor
Utilisation of evaluation	Weak		Depends on purpose of evaluation, especially if focused on organisational improvement
Dissemination of results			Not a determining factor
Ethical issues			Not a determining factor
Organisational investment	Weak		Depends on organisation's future evaluation needs

Conley-Tyler 2005

Program evaluation entails:

- The collection of (valid, plausible, believable) data
- Interaction (negotiation, etc.) with "stakeholders"
- An understanding of the program's purposes, goals, objectives, desired outcomes, structures, strategies, personnel, implementation contexts etc.
- An assessment of the client's needs
- An appreciation of the diverse values in the program's constituency
- Judgment, of the effectiveness of the program (does it work?)
- Recommendations (to decision-makers)
- A commitment to social justice
- An analysis of costs

(Elsworth, after House 1980)

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Thank you

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