



**ACI** NSW Agency  
for Clinical  
Innovation

# Understanding Program Evaluation

## An ACI Framework

**AGENCY FOR CLINICAL INNOVATION**

Level 4, Sage Building  
67 Albert Avenue  
Chatswood NSW 2067

PO Box 699  
Chatswood NSW 2057  
T +61 2 9464 4666 | F +61 2 9464 4728

E [info@aci.health.nsw.gov.au](mailto:info@aci.health.nsw.gov.au) | [www.aci.health.nsw.gov.au](http://www.aci.health.nsw.gov.au)

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# 1. ABOUT THIS DOCUMENT

Evaluation is a critical component in the development of evidence based programs by the NSW Agency for Clinical Innovation (ACI) and ultimately will contribute to improvements in the health and well being of the residents of NSW. The aim of this document is to provide a framework for undertaking evaluations in ACI and to position evaluation as an integral part of our business. The framework is set out in three sections comprising:

- the purpose of the framework and the principles that underpin evaluation in ACI
- an overview of the steps to undertake an evaluation
- an overview of the recommended governance structure for evaluations in ACI

The Appendices include template and data examples used in evaluation.

# 2. PURPOSE AND PRINCIPLES

## 2.1 Introduction

High quality evaluation supports accountability and provides a rigorous evidence base to inform health service development and program design. As an integral part of program management, it will provide the information needed to guide better resource allocation and improved services.

## 2.2 ACI definition of evaluation

Program evaluation in ACI is defined as a systematic process designed to examine the worth of a program or project in terms of effectiveness, efficiency and appropriateness<sup>1</sup>. In ACI, programs refer to projects, Models of Care (MoC), Clinical Pathways and Guidelines and other innovations and interventions aimed at improving health outcomes. It is also important for continued improvement to evaluate specific projects such as strategies to improve consumer and community engagement, training, workshops and public forum events.

In contributing to the ACI knowledge base and evidence based decision making, evaluations essentially ask questions of programs such as:

- do they meet the needs of the community?
- are they achieving their intended outcomes?
- Or producing unintended outcomes?
- is there a better way of achieving those outcomes?
- are they aligned to current Government priorities?
- should they be continued, expanded, modified or discontinued?
- can resources be allocated more efficiently?

## 2.3 Principles

To be effective, evaluation needs to be fit for purpose, incorporate rigorous methodology, and be accurate and collaborative. These goals are supported by the principles articulated below that will underpin all ACI evaluation:

- Evaluation is to be undertaken in a **timely** manner. This means it should:
  - start when a MoC is near completion and before implementation so baseline data can be collected as a comparator for further analysis
  - finish before decisions are made for future reinvestment in existing programs. This will ensure that decisions are evidence based
  - not be done too early before measurable results are produced.
- Stakeholders are to be identified and **actively involved** at the beginning of evaluation design. This will ensure that the definition of outcomes, activities and outputs as well as what is important to measure in assessing program success is determined in a collaborative way. Stakeholders are vital in contributing to the interpretation of evaluation information and in formulating recommendations.
- Contexts and assumptions are to be **explicit** and evaluation designed accordingly, for example, what is considered important at small sites and large sites may be different, as may be the concerns of clinicians and consumers.
- Evaluation is to use appropriate methods and relevant data that are **valid** and **reliable**
- Evaluations will be conducted in an **ethical** manner. Evaluations may require access to personal data, patient level interviews and information from vulnerable populations. Provisions and policies relating to the gathering and use of information, engagement with patients/clients and adherence to standards are to be observed.

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<sup>1</sup> Owen, 2007

# 3. TYPES OF EVALUATION AND THE EVALUATION CYCLE

## 3.1 Types of evaluation

There are several types of, and approaches to evaluation that are undertaken in the ACI. In general, evaluation is formative, process or summative. All ACI evaluations use a program logic to inform the evaluation questions of what should be measured and when. More detail about developing program logic is included in section 3.2, *The evaluation cycle*.<sup>2</sup>

### 3.1.1 Formative evaluation

Formative evaluation assesses program design, early implementation and associated outcomes and is generally undertaken before a program is implemented across the system. A formative evaluation is sometimes conducted on a pilot of a MoC in a selected site(s) or on the first phase of implementation. The data and findings from a formative evaluation can be used:

- as the basis to determine the impact that a MoC might have if it was implemented systematically across NSW Health.
- to further refine the MoC by establishing early outcomes arising from programs and to identify areas requiring improvement
- to enhance the probability of achieving program outcomes in the short, medium and longer term.

In most instances a formative evaluation should be undertaken for all major programs. Ideally it should be undertaken when the MoC is advanced enough for a clear service delivery model to be determined and used.

A formative evaluation approach can include undertaking a *needs assessment and building a case for change*. This can include gap analysis, research synthesis and / or review of best practice. The typical questions explored are:

- what do we know about the problem that the program will address?
- what is the accepted best practice?
- what does the research and evidence tell us about this problem?

### 3.1.2 Process evaluation

A process evaluation is undertaken to determine the extent to which a program is being implemented according to plan, to provide feedback on the quality of implementation. Typical questions examined in process evaluation include:

- to what extent has the program been implemented?
- have all the components been delivered?
- is the program reaching the target population?
- can the program be fine-tuned to improve efficiency and effectiveness?
- are staff and clients satisfied with the program?

<sup>2</sup> Adapted from Owen 2007 and Trochim 2007

### 3.1.3 Summative evaluation

A summative evaluation assesses quality, outcomes and impact of implemented projects to see if it has achieved its stated outcomes and generally occurs at the completion of a project or at least well after implementation. Summative evaluations may include the following:

*Outcome evaluations* Outcome evaluation assesses whether longer term goals of the initiative/project have been met, such as changes in health and economic outcomes (effectiveness).

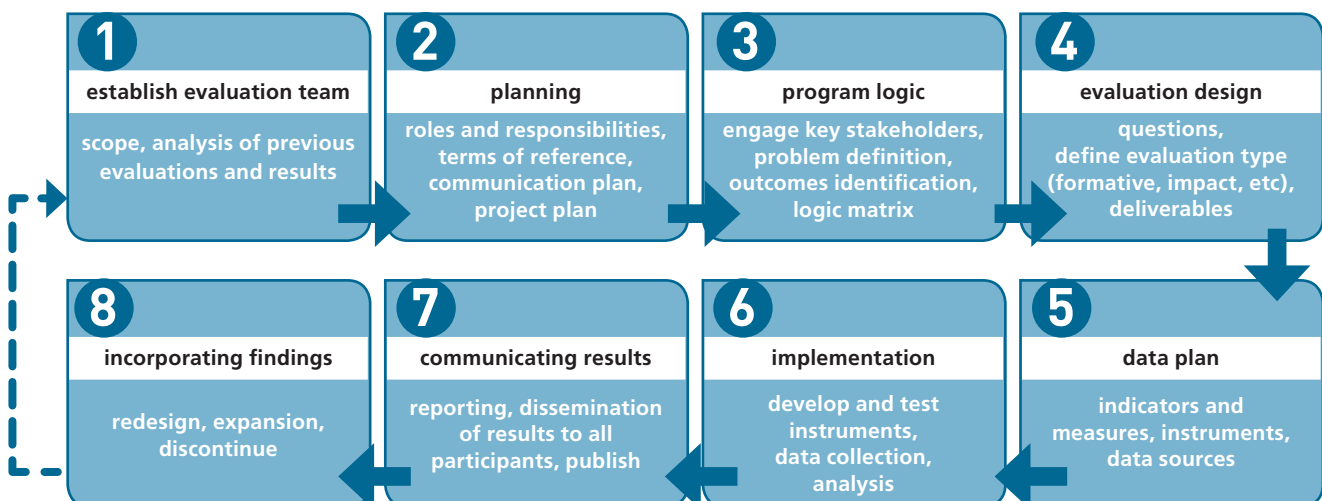
An *impact evaluation* measures the impact of a program. It is broader than an outcomes evaluation and determines the overall effects of a program, either intended or unintended. Questions in outcome and impact evaluations may include:

- to what extent has knowledge and awareness changed?
- what do staff, patients and carers perceive the value of the program to be?
- to what extent have behaviours changed?
- has the program been implemented as planned?
- have the stated goals/outcomes been achieved?
- have the needs of those served by the program been achieved?
- what are the unintended outcomes?
- does the implementation strategy lead to the 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?

## 3.2 The evaluation cycle

The following figure illustrates the evaluation cycle for ACI. A brief overview of each step is provided below.

Figure 1: ACI evaluation cycle<sup>3</sup>



<sup>3</sup> Adapted from *Promoting the generation and effective use of population health research in NSW: A strategy for NSW Health 2011-15*, NPS: Better choices, Better health, An evaluation framework for NPS, Sydney National Prescribing Service 2010 and Spaulding, D., 2008, *Program evaluation in practice: core concepts and examples for discussion and analysis*, Jossey-Bass, San Francisco

### 3.3 Establishing an evaluation team

A mix of expertise and independence is required for effective evaluation. This occurs through the establishment of an evaluation team ensuring subject matter expertise is included along with evaluation expertise.

The role of the team is to facilitate the planning, implementation, analysis and reporting of the evaluation. The team is responsible for undertaking the actual evaluation or guiding external evaluators, and keeping the steering committee and/or Network informed of progress, risks and results.

### 3.4 Planning

Good planning is essential to guide a robust evaluation. Planning is undertaken by the evaluation team and includes development of a communications plan outlining stakeholder engagement, dissemination of results and reporting. The program design outlines the remainder of the steps below and identifies timeframes, key roles, responsibilities and oversight of the evaluation, for example, establishing an agreed terms of reference.

### 3.5 Program logic and engaging key stakeholders

It is important that stakeholders are actively involved in evaluations from the beginning and throughout the process. Stakeholders may include clinicians, networks, Local Health Districts (LHDs), patients and their carers, other agencies, peak bodies, community members and leaders.

Meaningful engagement with stakeholders will assist in building shared understandings and cultivating positive relationships. The involvement of stakeholders contributes to capturing diverse perspectives, defining the political context, transparency, increasing the quality, scope and depth of evaluation questions and building capacity.

Program logic is a useful tool for illustrating a program and defining what should be measured and when this should occur in an evaluation. Program logic can:

- describe the change process underlying an intervention, program or policy
- document connections between the critical components in a project and identify where evaluation is most important
- be an effective tool in facilitating participation of stakeholders as it encourages discussions about the program to be evaluated and therefore shared understandings and priorities.

Program logic can be a simple overview or incorporate complex approaches. Additional items can be added as needed such as “responsibilities”, “contexts” and “audiences”.

Program logics vary according to the project and complexity but in general, the components are:

**Inputs** – the resources that are used to implement a project. Typically this highlights the resources consumed including staff, funding, in kind support, equipment/capital, utilisation of health services etc.

**Activities** – the activities are the actions undertaken by the project to achieve the desired goals. Examples of activities are providing staff training, developing new systems to support new MoCs.

**Outputs** – the immediate results/products from an action. These are usually measured in numbers (but not always). Examples include number of staff trained, number of procedures, implementation of MoC across a specified number of sites.

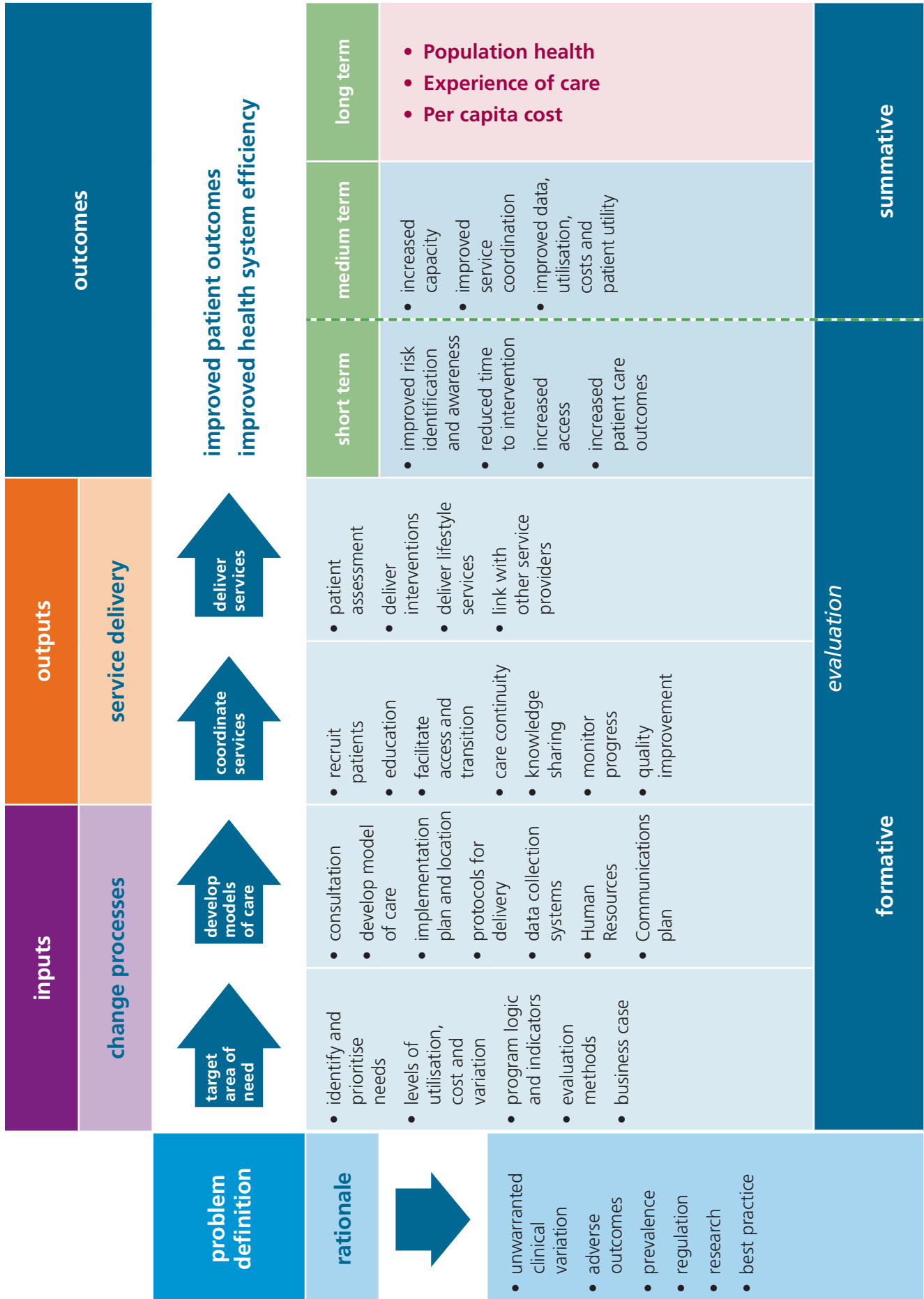
**Outcomes** – the changes that occur showing movement towards the ultimate goals and objectives of a project. Outcomes are desired accomplishments or changes and are defined as short, intermediate and long term. There is no hard and fast rule to defining what we mean by these intervals but usually short refers to 2 years or less, intermediate up to 5 years and long term 5 years or more – depending on the program.

Developing program logic for the evaluation will assist in maintaining a focus on outcomes for the program and provide a clear illustration of the components to assist in determining what aspects are to be evaluated.

Figure 2 shows an example of a program logic for ACI. Each program logic will differ to suits the needs of the specific program.



Figure 2: Draft ACI program logic



## 3.6 Evaluation design

The evaluation design is an essential stage in evaluation practice and involves defining the specific questions that will examine the program objectives and desired outcomes. It builds on the program logic using each step (inputs, activities, outputs, outcomes) to define evaluation questions. The questions then guide the selection of appropriate indicators and measures.

The type of evaluation is specified in the design and this guides the selection of examination methods and data sources. Ongoing consultations with stakeholders is essential throughout the design stage to ensure that all perspectives are included and the evaluation incorporates and measures what is considered important to all participants. See appendix 6.1 for an example template of an evaluation design.

## 3.7 Data and data plan

An essential element of evaluation is to compare data rather than merely describe the benefits of a program. This provides information to determine whether the outcomes of a program are better or worse than before the program was implemented, allows comparisons of program outcomes at different locations and examination of outcomes between different programs. To enable comparisons, evaluations require baseline data in which to compare program data and/or standards such as clinical guidelines in which to compare current activities.

The role of evaluation is to produce accurate and robust findings to assess if programs are achieving the desired outcomes. This is supported by the evaluation design and selected questions. Several data sources and methods are required to adequately examine the lines of inquiry covering several perspectives. This will include quantitative and qualitative methods, data sources and sometimes data linkages. A data plan is developed that summarises the key questions, tools, frequency, sources and responsibilities. See appendix 6.2 for an example template.

## 3.8 Undertaking the evaluation

Undertaking the evaluation involves the development of instruments, data collection, analysis and interpretation of results.

The evaluation instruments are the tools that will be used to collect some sources of data and may include surveys, interviews, observation overviews and associated documents such as interview guides and focus group prompts. Where it is possible, it is suggested that instruments are tested on a sample of similar participants to identify and revise any potential issues before going live.

Any primary and secondary data identified in the data plan is collected during the evaluation implementation stage. Data analysis and interpretation then occurs within the context of the evaluation and specific for the audience that it is intended.

## 3.9 Communication of results

The communication plan established at the planning stage is to define how the results of the evaluation will be communicated. It is good practice to keep all participants and stakeholders of the evaluation informed of progress and results. There are a number of ways this can occur -through regular newsletters, Network feedback processes, ACI newsletters, and where appropriate, through conference papers and peer reviewed journals.

It is also essential to ensure that results are communicated to the governance sponsor body ie, ACI Executive Team and Network Executive for all Level 1 evaluations, Clinical Directors and Network Executive for Level 2 and Level 3 evaluations. See example 6.3 for an example template.

Overall, communicating evaluation results informs evidence based decision making and contributes to the learning and knowledge base of the organisation.

## 3.10 Incorporating evaluation findings

Evaluation results are used to support and contribute to evidence based decision making and ultimately influence the future aspects of a program through redesign, expansion or discontinuation. To do this effectively, an objective of all evaluations is to use the results to determine the ongoing functions of a program.

The final evaluation report is to include a section on what the results mean and how they could be incorporated into decision making. Evaluation results should also be the subject of discussions around the learning and knowledge management cycle.

# 4. GOVERNANCE

## 4.1 Governance process for ACI evaluations

It is important to have a clear governance structure for all evaluations. The role of the governance structure is to monitor evaluation processes against the principles, ensure compliance with data governance requirements and responsibilities, timeliness of the evaluation and dissemination of results. The levels of governance are shown in Figure 3.

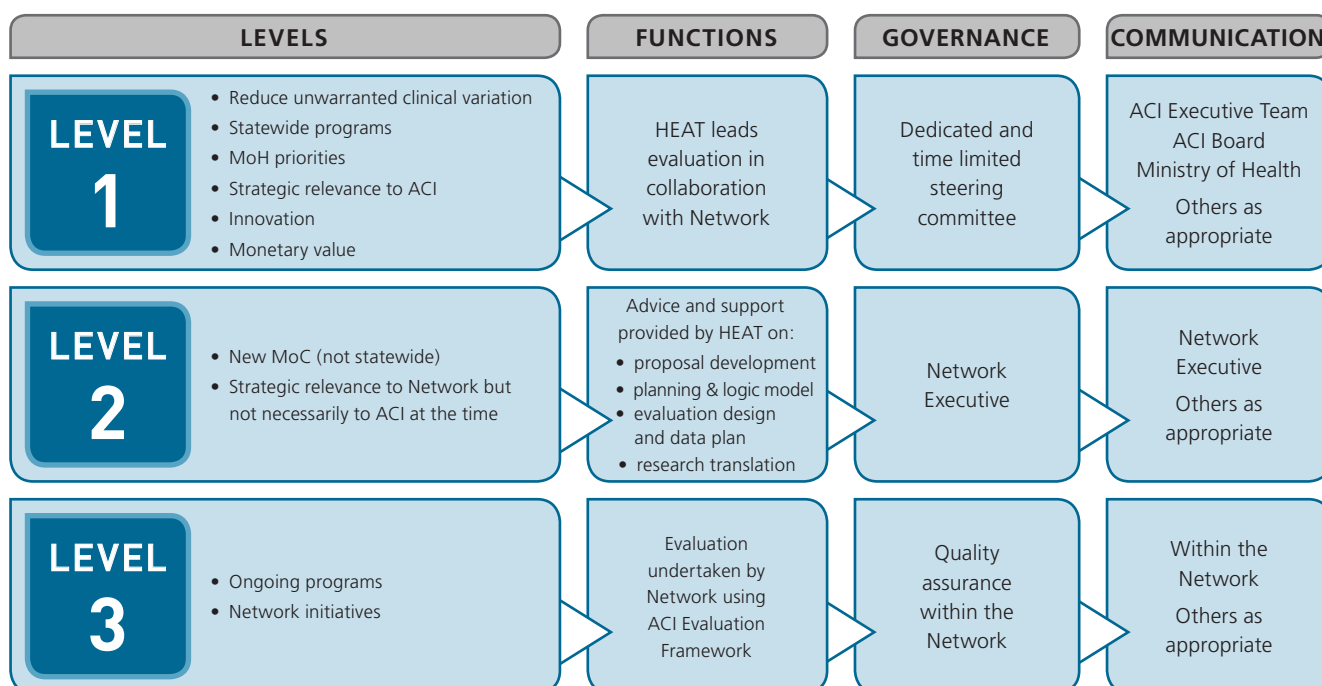
## 4.2 Process for determining responsibilities

**Level 1** evaluations are those that are led by the Health Economics and Analysis<sup>4</sup> Team (HEAT) in collaboration with the relevant Portfolio Director, Network or agency. Level 1 evaluations are associated with ACI strategic priorities (for example, state-wide MoC), programs with significant resource investments and Government and state-wide strategic priorities.

**Level 2** evaluations are of strategic importance to the respective Network. The HEAT can provide advice and support for Level 2 evaluations through assistance in developing proposals/specifications for engaging external evaluators, assistance in developing program logic matrices, evaluation design and data planning, monitoring systems and translating research into initiatives.

**Level 3** evaluations encompass all other evaluations other than those noted in Levels 1 and 2. Level 3 evaluations are determined by the Portfolio Directors, Network Managers and Executive and broader membership. Any further information can be obtained by contacting the HEAT.

Figure 3: ACI evaluation levels



<sup>4</sup> The Health Economics and Analysis Team is part of the Clinical Program Design and Implementation portfolio

Increasingly, whole of government programs are being established to address societal issues holistically across a continuum of activities. These programs are often led by a single agency and evaluations including all agencies and stakeholders are required to assess outcomes. At times, such programs will be a Government priority and a strategic priority for the lead agency but may not be a priority for ACI at the time. Consequently, involvement in inter-agency evaluations will be assessed on a case by case basis. The HEAT can provide guidance if required.

Similarly, program design and service delivery is increasingly being co-produced with the non-government, community and private sectors. Effective evaluation necessarily needs to include all relevant stakeholders to ensure a collaborative approach.

## 4.3 Using an external evaluator

There are no prescriptive rules about the engagement of external evaluators, however, an external evaluator may be considered if any of the following apply:

- there are any conflicts of interests or perception of potential bias of the program within ACI
- the program is politically sensitive
- the program is considered high risk for ACI
- the required skills to undertake the evaluation are not available in-house.

# 5. APPENDICES

## 5.1 Evaluation design template example

### 1 Title

### 2 Background

Provide a brief background to the program including items such as problem definition, model of care, literature search findings

### 3 Goals and objectives

Document the overall goals and objectives of the program. This is consistent with the short, intermediate and long term goals.

### 4 Purpose of the evaluation

Provide an overview of evaluation purpose ie, to assess progress of an innovation, review of existing program, to assist in decision making about expansion, to assist in assessing the implementation and embedding of MoC.

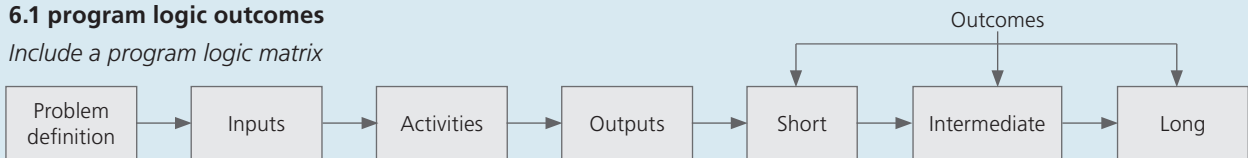
### 5 Parameters of the evaluation

Outline the scope of the evaluation and what is not included. Include any performance indicators that will be assessed.

### 6 Evaluation design

#### 6.1 program logic outcomes

Include a program logic matrix



#### 6.2 evaluation questions (sample only – not all questions are relevant for all evaluations)

Outline evaluation questions derived from the program logic, for example:

What is the need for services for people requiring the program and how were these needs quantified?	What were the key processes used to implement the model of care/ pathway at the sites?	What outcomes have been achieved for the participants, service providers, and the healthcare system?
Are the needs consistent with research and best practice in this area?	How was the implementation structured at each site and how was it resourced?	What unexpected outcomes occurred throughout the program either adverse or positive?
Is the model of care acceptable to policy directions, service providers and the patient cohort?	How many participants are treated at each site?	Did the performance indicators relate to the program and quality improvement?
	What improvements can be made to the program?	Are program outcomes sustainable and adaptable to further sites?

#### 6.3 evaluation components

Through an examination of the evaluation questions, document each component (processes, impacts, outcomes) of the evaluation and include in the data plan.

### 7 Communication of findings

Outline how findings will be communicated and published if applicable. Include the communication plan.

### 8 Evaluation timeframe

Include an indicative timeframe for the completion of the evaluation.

## 5.2 Data plan template example

Question	Evaluation component	Methods & instruments	Data source	Frequency	Baseline	Mid	Final	Comments
Evaluation questions	Impact, process, outcomes, etc	Tools used to measured and outline of what will be measured	What data sets will be used and any linked data	How often is data available	Date/year	Date/year	Date/year	Any comments about the data used and potential bias, limitations, benefits, etc

## 5.3 Potential data sources and measures

Evaluation examines changes in programs and usually includes a mixed method of data collection measuring changes in service utilisation, waiting times, awareness, attitudes, knowledge, satisfaction, costs of services, procedures and pharmaceuticals, and other changes specific to the program and evaluation perspective.

The ACI has an arrangement with the Centre for Epidemiology and Evidence to facilitate access to much of the data that is needed for evaluations including access to admitted patient data and linked data. The Health Economics and Analysis Team can assist with access to this data.

There are multiple sources of data can be used to answer evaluation questions. The following provides a brief overview only and is in no way conclusive.

Measuring health outputs and outcomes	Summary
Admitted patient data	<p>Admitted patient data can be used to compare changes in patient outcomes for specific medical conditions and surgery as well as resource utilisation. Health service costs can be compared for specific conditions using National Weighted Activity Units (NWAUs) and payment data (public/private).</p> <p><b>Sources:</b> NSW Admitted Patient Data Collection, Activity Based Funding collections, Clinical Registries, Australian Institute of Health and Welfare (AIHW) datasets, hospital records, previous research on utilisation.</p> <p><b>Examples of indicators that can be derived:</b> Unplanned hospital readmissions, average length of stay, bed-days, primary and secondary conditions, potentially preventable hospitalisations and complexity of care</p>
Non-admitted data	<p>Similar to admitted patient data in purpose, non-admitted data is used for comparison pre and post program implementation and across sites.</p> <p><b>Sources:</b> Emergency Department data, Outpatient Clinics, and some ambulatory forms of care</p> <p><b>Examples of indicators that can be derived:</b> Waiting times for emergency department care, outpatient clinic utilisation, some hospital in the home data</p>

Measuring health outputs and outcomes	Summary
Sub-acute data	<p>Sub-acute data is used similarly to admitted and non admitted data.</p> <p><b>Examples:</b> Sub acute care collections relating to Rehabilitation, Palliative Care, Geriatric Evaluation and Management, and Psycho-geriatric data sets.</p> <p><b>Examples of indicators that can be derived:</b> Occasions of service, care setting, care following acute care (if data is linked)</p>
Community data	<p>As per the above patient data, community data is used for comparisons in evaluations.</p> <p>Examples: Specific service records, MBS data.</p> <p><b>Examples of indicators that can be derived:</b> Access to GP type services, care plan utilisation</p>
Population health	<p>Information at a population level can define “at risk” populations and enable comparisons using standardised data across geographies..</p> <p><b>Sources:</b> Centre for Epidemiology and Evidence (MoH), Australian Bureau of Statistics (ABS) Community Profiles, Remoteness, Socio Economic Indicators for Area (SEIFA), Mortality tables, Cancer Registry, NSW Health Hospital Statistics Reports, NSW Planning Population Projections.</p> <p><b>Examples of indicators to be derived:</b> This can be used to examine incidence and prevalence rates and compare effectiveness of targeted programs</p>
Waiting times	<p>Waiting times can provide useful information about the capacity and performance of a service and supply and demand. This data can be used to compare the performance across services or to benchmark against key performance indicators. This can include waiting times for surgery, General Practitioners and other service visits, emergency department treatment, discharge and transport.</p> <p><b>Sources:</b> Elective Surgery Waiting Times National Minimum Data Set, specific hospital service records.</p> <p><b>Examples of indicators to be derived:</b> Waiting times for specific procedures, waiting list movements/delays</p>
Other possible variables	
Awareness, attitudes and satisfaction	<p>Changes in awareness, knowledge, attitudes and satisfaction (both staff and patients/ carers) are essential for programs to be effective and appropriate. These changes can be tracked over time and compared using surveys, focus groups, interviews, case studies and feedback assessments.</p> <p><b>Examples:</b> NSW Patient Satisfaction and Experience Survey, Cancer Patient Satisfaction Survey, National Quality Measures.</p>
Self rated health status	<p>Self rated health provides a measure of how people perceive their health status in terms of physical, environmental and psychological factors. Results can indicate the need for, satisfaction with, and effectiveness of specific services and identify risk behaviours.</p> <p><b>Examples:</b> Population Health Surveys, Australian Bureau of Statistics (ABS) Health Survey, the SAX Institute 45 and Up Study, Australian Longitudinal Study on Women’s Health</p>



Measuring health outputs and outcomes	Summary
Specific datasets	<p>There are many data collections collecting information about specific health outcomes. These can be used to measure trends, changes, prevalence and incidence of the respective conditions.</p> <p><b>Examples:</b> National Hospital Morbidity Data Collection, National Cardiovascular Disease and Diabetes Database, BreastScreen Australia, the National Cervical Cancer Screening Program, the Needle and Syringe Program.</p>
Resourcing	<p>It can be useful to measure the resources used to deliver a program and compare these across sites or pre/post program implementation to assess efficiency. This may include the number of staff required, quantum of diagnostics, pathology and pharmacy. In some cases, this may also examine one off capital cost and physical space requirements.</p> <p><b>Examples:</b> Annual Reports, NSW Ministry of Health Workforce Reports, National Health Labour Force Minimum Data Set</p>

Detailed information on National databases used to measure key performance indicators (KPIs) of health improvement as outlined in the National Healthcare Agreement Review Report July 2012 can be found at: <http://www.coag.gov.au/sites/default/files/National%20Healthcare%20Agreement%20Review%20Report.pdf>

Further KPIs that may be useful in evaluations include those defined in the National Safety and Quality Health Service Standards September 2012.

## 5.4 Results summary template example

<b>Key results:</b>
<p><b>Strategic significance:</b></p> <p><i>What are the projected outcomes of implementing the results?</i></p> <p><i>Are these linked to strategic priorities?</i></p>
<p><b>How will results be incorporated into program?</b></p> <p><i>Identify if redesign/expansion/discontinuation is needed and how this will be done</i></p>
<b>Timeframe for changes to occur</b>
<p><b>Risks identified in implementing results</b></p> <p><i>Include mitigation strategies</i></p>
<b>Budget required for implementing results</b>

# 6 REFERENCES AND SUGGESTED FURTHER READING

## 6.1 Books

- Alford, J., 2009, **Engaging public sector clients**, Palgrave Macmillan, Hampshire
- Argyrous, G. (ed), 2009, **A practical guide – evidence for policy and decision making**, University of NSW Press Ltd, Sydney
- Donaldson, S., Christie, C., Mark, M. (eds), 2009, **What counts as credible evidence in applied research and evaluation practice?**, Sage Publications, California
- Drummond, M., Sculpher, M., Torrance, G., O'Brien, B., Stoddart, G., 2005, **Methods for the economic evaluation of health care programs – third edition**, Oxford University Press, New York
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- Spaulding, D., 2008, **Program evaluation in practice: core concepts and examples for discussion and analysis**, Jossey-Bass, San Francisco
- Werner, A., 2004, **A guide to implementation research**, The Urban Institute Press, Washington D.C.

## 6.2 Reports and journal articles

- Center for Disease Control and Prevention, **Framework for program evaluation in public health**, September 1999, United States
- NSW 2021: A plan to make NSW number one**, NSW State Plan 2011/21
- NPS: Better choices, Better health, An evaluation framework for NPS**, Sydney National Prescribing Service 2010
- Promoting the generation and effective use of population health research in NSW: A strategy for NSW Health 2011-15**
- The Magenta Book: Guidance for evaluation**, HM Treasury UK, April 2011
- The Green Book: Appraisal and evaluation in central Government**, HM Treasury, July 2011
- W.K. Kellogg Foundation, **Evaluation handbook**, January 1998
- Evaluating health promotion programs**, Centre for Health promotion, University of Toronto, August 2007

## 6.3 Web resources

Centers for Disease Control and Prevention (US) evaluation site: <http://www.cdc.gov/eval/resources.htm>

Logic Model Development Guide (2004). W.K. Kellogg Foundation <http://www.wkkf.org>

National Health Care Agreement 2012

<http://www.federalfinancialrelations.gov.au/content/npa/healthcare/national-agreement.pdf>

National Healthcare Agreement Review Report July 2012 <http://www.coag.gov.au/sites/default/files/National%20Healthcare%20Agreement%20Review%20Report.pdf>

National Safety and Quality Health Services Standards September 2012

<http://www.swah2.com.au/assets/A/1230/00b2a5710a331f7d75099a26c37952b0/NSQHS-Standards-Sept-2012.pdf>

Research Methods Knowledge Base, Trochim, M.K., 2007

<http://anatomyfacts.com/Research/ResearchMethodsKnowledgeBase.pdf>

University of Wisconsin-Extension Program, Development and Evaluation sites:

<http://www.uwex.edu/ces/pdande/> <http://www.uwex.edu/ces/lmcourse/>

