

USING PROGRAM LOGIC IN EVALUATION & TRANSLATIONAL RESEARCH

A Short Guide

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- CMHDARN, go to www.cmhdaresearchnetwork.com.au
- NADA, go to <http://nada.org.au>
- MHCC, go to <http://mhcc.org.au/>
- The Mental Health Commission of NSW, go to <http://nswmentalhealthcommission.com.au>

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About CMHDARN

The Community Mental Health Drug and Alcohol Research Network (CMHDARN) is a partnership project between the Mental Health Coordinating Council (MHCC), the Network of Alcohol and other Drugs Agencies (NADA) and the Mental Health Commission of NSW.

CMHDARN was established in 2010 to broaden the involvement of the community mental health and alcohol and other drugs sectors in practice-based research and to promote the value of research and the use of research evidence in practice.

Its overall aim is to:

- improve quality of service delivery and correspondingly, the outcomes for consumers of community managed services; and
- promote increased understanding and awareness of co-existing mental health and substance use.

CMHDARN aims to facilitate the development of a culture of research by providing opportunities and a context for the exchange of ideas, the sharing of resources, support and collaboration among community organisations and between community organisations and research bodies, including universities and research institutes.

In order to build the research capacity of the sectors, the Network shares information via its website, workshops, forums, webinars/webcasts, E-communications and other activities.

Introduction

Critical assessment and evaluation are essential elements of practice-based translational research to successfully develop and review programs and build the capacity of a service/organisation to support improved outcomes for people using services¹.

In evaluating a program, consideration of whether: the needs of the target group are being met; there is a more effective way of achieving intended outcomes; the program is meeting its objectives or aligning with governing priorities/frameworks; or whether the program has delivered unintentional outcomes, are critical points for reflection¹.

In short, organisations should be assessing what difference they are making, what the value of the program is, and what evidence is available that demonstrates these factors. These considerations are also an important part in the planning stage of program development to help promote a strong focus on intended outcomes.

Utilising a **program logic model** in both program planning and research evaluation projects is a useful framework to articulate what the proposed outcomes of a program are; and in evaluating its effectiveness in meeting its objectives. A program logic framework can also be useful in explaining the translational pathway of a research project, as it provides a logical narrative of how research objectives intend to be met.

This Guide aims to provide a better understanding of program logic and how you can use this framework to assist in planning and evaluating programs and interventions within your organisation, as well as applying a program logic framework to translational research projects.

What is a program logic?

You may be aware of program logic through the many commonly used terms used to describe its function, such as program theory, logic model, theory of change, results chain, and intervention logic².

A program logic model serves as a framework for bridging the gap between where you are in a project and where you want to be. It can provide a better understanding of what a project intends to do, why a project is in place, and how a project intends to influence change.

A definition of a program logic could be that:

It is a visual, systematic map to easily understand the relationships between the program inputs, the activities that take place, the resources utilised, and the expected outputs and outcomes that are a result of a program².

A program logic model outlines the resources and activities that make up a program or project, and the changes that are expected to result from them³.

These components of the program logic are explained in more detail [below](#).

A program logic is an evolving plan that should be regularly reviewed throughout the life of a program or project to ensure that it continues to accurately represent the aims, inputs, and outputs of the project and should be evaluated and updated as necessary. This is particularly important in the mental health and AOD sectors, as the dynamic environment and complexities in which researchers and programs operate can derail the linear nature of the program logic model.

While commonly used in program planning or program evaluation, a program logic can also be developed for application to an existing program or research project. Applying a program logic model onto an existing project can help bring clarity to what the project is delivering and enable stakeholders to consider whether the outputs and impacts identified through the program logic match the project objectives². Furthermore, a program logic can be useful for evaluation and reporting, particularly when preparing funding applications and when conveying the outcomes of a program or project to funding bodies in reports. .

In a community-managed organisation (CMO) context, a program logic can represent a valuable framework for engaging staff and stakeholders in planning and evaluation processes; and clearly communicating with stakeholders about project objectives and necessary inputs.

A CMO program logic model co-designed with key stakeholders and project staff can facilitate common language about the project and build a shared understanding of how it will work². Stakeholders in any such endeavour should include people with lived experience and their formal and informal carers and support persons, clinicians, networks, Local Health Districts (LHDs), Primary Health Networks (PHNs), other human service agencies, peak bodies, community members and policy leaders¹. Engaging as many stakeholders as possible in the development of a program logic can increase the likelihood of success of a service program or research project as it will best represent the needs of the project's targeted population and provide a more comprehensive assessment of the assumptions made about the project and what its outcomes may be from both a consumer, carer, and service perspective.

The components of a program logic

Program logic models can visually vary according to the project and its complexity, but generally are made up of several core components, detailed following:

Problem statement – identify and articulate the underlying issue(s) that you are trying to address.

The problem statement should be targeted and specific, but not simply state the need for your research project or service intervention³. An important consideration is to include the “so-what” in your statement, the impact of the issue on the target population to clearly indicate the purpose of the project. Your organisation may have completed a needs assessment which would dictate the direction of your problem statement. If there is no ‘needs assessment’ to base your problem statement upon, it is important to use an evidence-based approach (i.e., examining existing literature) to consider what the underlying causes of the issue are, who is affected by the identified issue, and the different ways an issue is experienced in the community.

Example problem statement: *Young people aged 14-16 years in South Coast NSW are experiencing high rates of co-occurring mental health conditions and substance use which is impacting their cognitive and emotional development. Young people who do not have their mental health or substance use supported can be at risk of educational and employment challenges, risk early engagement with the justice system, and at risk of experiencing acute mental illness*

Project objective – a clear indication of what your project is trying to achieve.

You should be able to clearly identify a link between your project objective and the other elements of your program logic, i.e., how your activities will contribute to meeting your objective. Your aims are not your research hypothesis, your objectives can be aspirational.

Example program objective: *“To support young people in South Coast NSW to have their co-occurring mental health and substance use needs appropriately met”*

Inputs – Inputs are the resources utilised to address the problem identified in your problem statement.

It is beneficial to consider both the tangible resources (e.g., funding, physical spaces, skilled staff) and the non-material resources (e.g., staff capacity, knowledge and skills, research evidence, relationships with other stakeholders)³.

Outputs: Participation – who will be reached and affected by your project?

Clearly define your targeted participants and ensure this is consistent with the group identified in the problem statement. Distinct identification of your target population will help the project to effectively impact the people in need and will assist in prioritising resources which best aligns with the needs of the target group. Participants may include service users, practitioners, researchers, policy makers, or people from communities, the sector, or from government.

Outputs: Activities – the actions undertaken by the project to achieve the desired outcomes.

Activities are all the things you will need to do to execute your research project and achieve your objectives. Activities could include applying for ethics approval, training research assistants, recruiting participants, delivering interventions, conducting interviews, collecting data, and disseminating findings

It is also important to consider the key translational activities to connect your research findings to reach the targeted participants. This step helps researchers to maximise the impact of their project. Translational activities may include developing promotional resources to be shared via social media, creating media releases, or engaging directly with policy makers and stakeholders.

Outcomes – the changes that occur because of an intervention which show progress toward the objectives of a project.

Outcomes are realistic desired changes and are defined as **short, medium, and long term**. You should also have research evidence which demonstrates how the short and medium-term outcomes contribute to achieving the long-term outcomes.

Outcomes help answer: what difference is the intervention making?¹



Short-term outcomes are the easiest to measure, and the timeframe will usually be the length of your program. Short-term outcomes are most often reflected in development and growth in skills, confidence, or knowledge³.



Medium-term outcomes are what you would expect to follow on from the identified short-term outcomes. For example, if you have observed an increase in staff knowledge as a short-term outcome, the medium-term outcome is likely to be the application of that knowledge, for example a change in behaviour or increase in capacity³. Medium-term outcomes may be observable in improved relationships, or people actively accessing support services when necessary.



Long-term outcomes should resolve the issue identified in your problem statement and should fit with your program objective. Long-term outcomes are sometimes called 'impact outcomes'. These outcomes usually take a significant amount of time to be observed and will often be influenced by factors which are outside of your control, as they usually occur after the completion of a program and are influenced by time and other contextual factors³. Long-term outcomes are dependent on the program objective, but may involve reduced mental health or substance use related admissions to hospitals, or reported improvements in social and emotional wellbeing by young people

External factors - This element of a program logic requires consideration of the context in which your program is being delivered and how this may influence the outcomes your program aims to achieve. Economic, political, cultural, historical, and social contexts all impact the way your program is delivered, and the outcomes that can be achieved. For example, a change in the demographics of an area may mean reconsideration of the target group of a program, or significant media coverage of an issue may increase the demand of a service in the community³. Political contexts which may impact program delivery or the ability to conduct research may be the access to government funding based on the party in power's priorities in their budgets.

Assumptions - Making assumptions clear in your program logic document is an integral part of the logic model. Assumptions are the beliefs we have about our program, the people involved, and how the program will meet the intended outcomes. Unexamined assumptions present a big risk to program success. Some examples of common assumptions may be that people will attend the specific program, that the stakeholders will be highly engaged, funding will be secure, staff will be appropriately skilled, and there will be low staff turnover. It is important to carefully consider and question these assumptions so that any unintended or unforeseen consequences can be anticipated.

An effective program logic model should present a clear causal model that explains how the project's inputs influence the impacts and outcomes, and the path to expected change is clearly depicted⁴. This causal model is often expressed as a series of "if-then" relationships, i.e., *if X, then Y; if Y, then Z*.

More specifically:

- **If** you have certain resources in place,
- **then** you will be able to deliver planned activities or provide services for targeted individuals or groups.
- **If** you reach those people,
- **then** they will benefit in specific ways in the short term.
- **If** the short-term benefits are achieved to the extent expected,
- **then** the medium-term benefits can be accomplished.
- **If** the medium-term benefits for participants are achieved to the extent expected,
- **then** you would expect the longer-term improvements and program objective to be achieved⁵

A helpful tip in developing a program logic is once you have identified your problem statement, you can work backwards through the different components which make up the logic model.

Ask yourself:

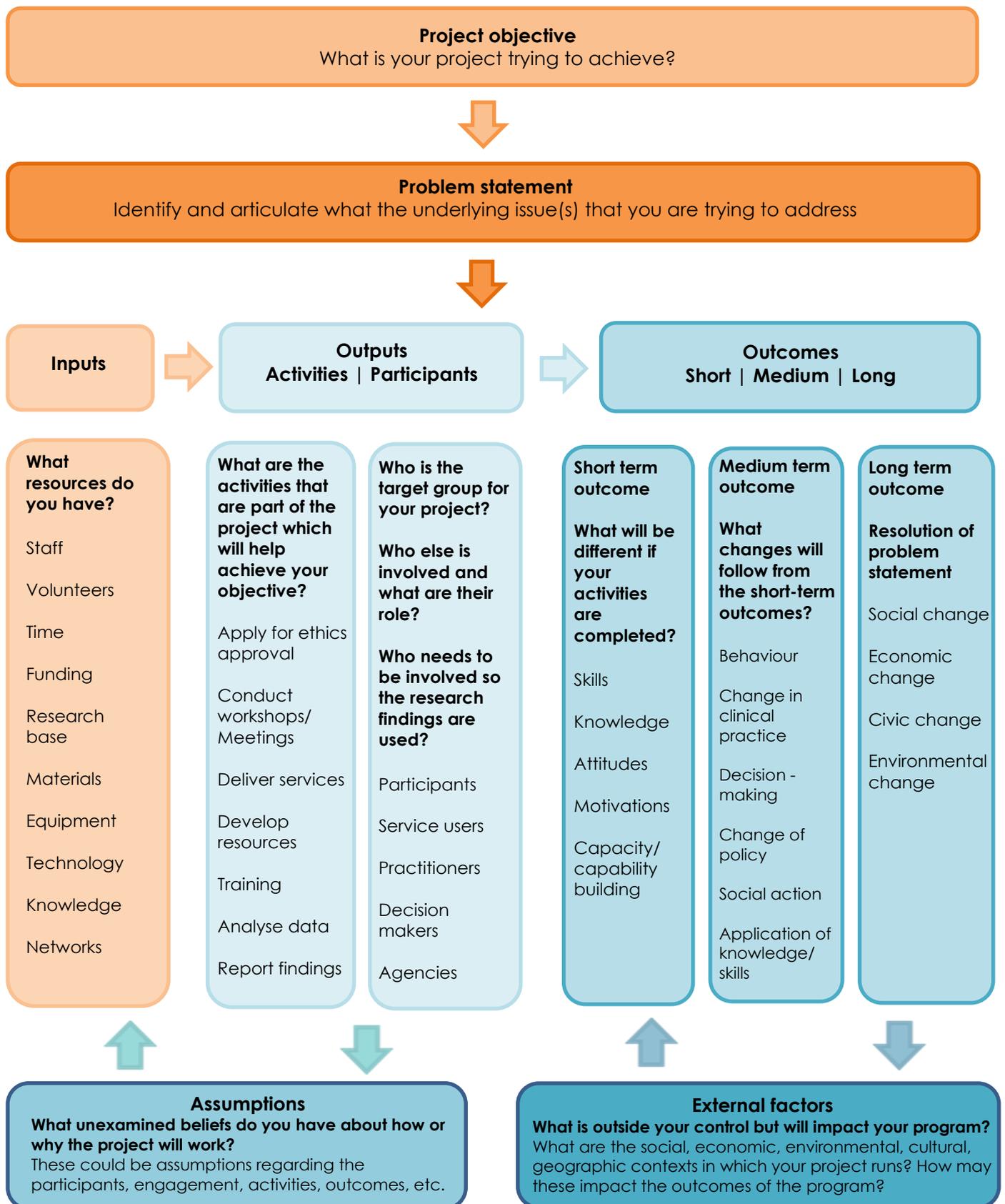
- What is the overall long-term goal for this project or intervention?
- Then, which intermediate and short-term achievements will assist in attaining that long term goal?
- Then, what activities should be put in place to meet these outcomes and who needs to participate?
- Then, what resources are required to deliver these activities?

Another helpful tip in developing your program logic, is that it is useful to be specific about who you want to be impacted by the small, medium- and long-term outcomes – e.g., improved *staff* knowledge and skills or increase in *young people's* engagement in workshops.

There is no set template for building your program logic. An outline example is provided [below](#), or you may be able to find a template online which better suits the needs of your organisation and proposed research project. You will note that the [narrative example](#) utilises a different template and some of the terminology used is different – this highlights that program logic models vary across organisations and can be malleable to best meet the needs of your objectives.

Developing a program logic doesn't need to be an onerous task especially when working collaboratively with teams and stakeholders, your framework can be completed quite quickly in a brainstorming session or workshop.

Example program logic framework template



Template adapted from Centre for Epidemiology and Evidence 2017 *Developing and Using Program Logic: A Guide*. Evidence and Evaluation Guidance Series, Population and Public Health Division. Sydney, NSW Ministry of Health.

Narrative example

Partners in Recovery: an early phase evaluation of an Australian mental health initiative using program logic and thematic analysis (Trankle & Reath, 2019).⁶

Researchers conducted an early evaluation of the Partners in Recovery program in the Nepean Blue Mountains using a program logic model to frame the evaluation and complemented this with an additional thematic analysis. The use of program logic model effectively mapped the program, including its processes and resources, and was a useful framework providing a baseline for future evaluations.

The aim of the research was to conduct an early evaluation of the Nepean Blue Mountains Primary Health Network (PHN) Partners in Recovery program, 2 years from commencement of funding. The Partners in Recovery program aims to better support people with severe and persistent mental illness and their carers, through coordination and integration of services and support across sectors. The key **objectives** of the Nepean Blue Mountains Partners in Recovery program were focused on:

- Partnerships and governance
- Service coordination; and
- System change

The researchers worked with a Reference Group of key stakeholder representatives from the Nepean Blue Mountains PHN to advise on the planning and implementation of the evaluation. After reviewing the literature, the researchers consulted with the Reference Group and other key stakeholders (e.g., consumer groups and service providers) to develop a program logic model of the Nepean Blue Mountains Partners in Recovery program, and assigned indicators for the program's **inputs, activities, outputs, outcomes** and **impacts**. The evaluation aimed to measure achievement against each of the assigned indicators.

The researchers used an initial deductive approach using the program logic model as a theoretical framework for data analysis. In the framework analysis, the researchers mapped their data sources against each element of the program logic model. In analysing the data collected, the researchers used a descriptive approach to report responses to closed survey questions, and integrated qualitative information from free text responses and interviews, as well as data from the review of policy, operational and reporting documents of the Partners in Recovery program. The data collection activities are detailed below:

Survey – the survey included both Likert-based questions and open-ended questions aligned to the program logic model indicators

Interviews – a semi-structured interview guide was developed to further assess the program logic model indicators. This provided in-depth responses to those issues canvassed in the survey (such as whether the Partners in Recovery program was meeting local community demands in the Nepean Blue Mountains), and an opportunity to explore perceptions particular to the individual.

Document review - review of policy, operational and reporting documents of the Nepean Blue Mountains Partners in Recovery program.

In the analysis, the researchers describe how the documents, survey and interview responses address each of the program logic model indicators in terms of program **inputs**, **activities**, and **outputs** and, in a more limited way, **outcomes** and **impacts**. Findings related to the longer-term program effects required later evaluation.

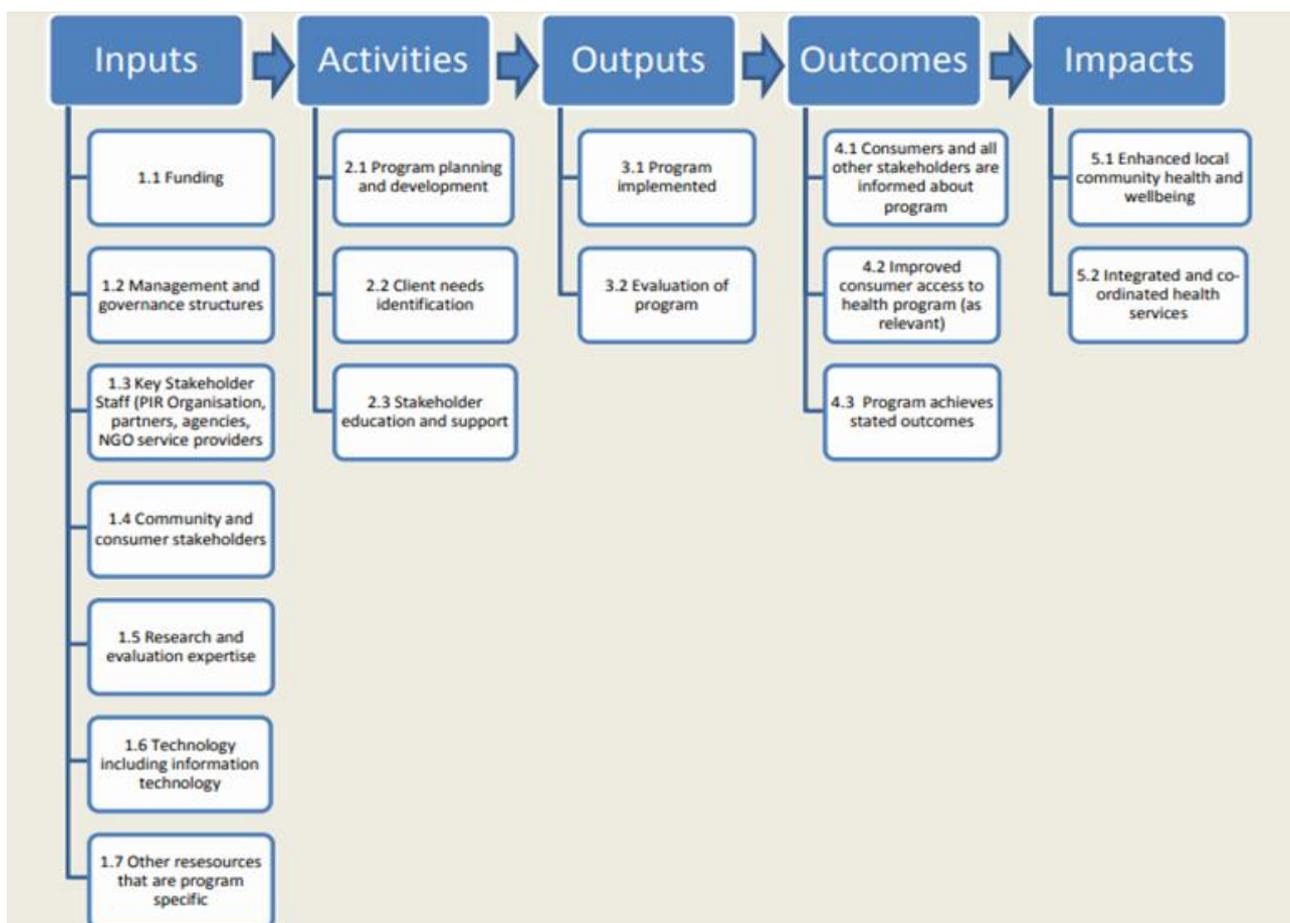


Image: Trankle & Reath 2019⁶

Inputs

Key inputs identified in the Nepean Blue Mountains Partners in Recovery program logic model were funding, management and governance structures, staffing, community and consumer stakeholders, and information technology.

Activities

Performance indicators in the program logic model were related to program planning and development, client needs identification, and stakeholder education and support.

- Program planning and development was attended through establishment of a commonly understood framework of language; consultation with service providers, community and researchers to inform ongoing program implementation; development of subprograms; and implementation of strategies to inform stakeholders of the program.
- Client needs identification attended to through establishment of assessment tools, and development of support coordination.
- Stakeholder education and support attended to through development of recovery education plan for providers, training and working group for support facilitators

Outputs

The researchers of this project define outputs as the direct products of activities and may include new resources and/or types, levels and targets of services and programs delivered. Performance indicators in the program logic model related to how the program was implemented and operating, including staff orientation and support, client intake, referral pathways, stakeholder engagement and satisfaction, and perceived efficiency of Partners in Recovery operations, and evaluation of the program.

Outcomes

Although this was an early evaluation of Partners in Recovery, some outcomes were described in accordance with program logic model indicators:

Short-term outcomes:

- Service provider staff and other relevant stakeholder awareness of program
- Consumers seek information on program
- Consumers access Partners in Recovery services
- Improvement in provider and staff knowledge, skills and level of functioning

Medium-term outcomes:

- People with severe, persistent mental illness and complex needs are supported through Partners in Recovery as an effective coordination model
- Improvement in consumer health status and level of functioning - includes reduced burden and increased well-being for carers.

Impacts (or long-term outcomes)

The indicators described for this domain related to improved community health and well-being, and better integration and coordination of health services. At the time of evaluation, the researchers did not expect to find evidence of impacts. However, survey and interview data suggested some early and potential program impacts.

The researchers state that mapping the program using a program logic model was helpful in ensuring all elements of this complex program were considered. The researchers state that understanding was enhanced through collection of data through document review, surveys and interviews and later thematic analysis.

The researchers concluded that the program logic model approach was a useful way of mapping the intended impacts of Nepean Blue Mountain Partners in Recovery program and the processes and resources required to achieve these. It also provided a useful framework for the evaluation which provides a baseline for future evaluations conducted by Nepean Blue Mountains Partners in Recovery.

Summary

In summary, a program logic model serves as a framework for demonstrating where you are in a project and where you want to be. It can systematically provide a narrative for how a research project or program intends to influence change. A program logic model also outlines the resources and activities that are required to effectively conduct a project, and the outcomes that are expected to result from them⁵.

Helpful resources:

- [NSW Health 'Exploring Program Logic' video](#)
- [Australian Institute of Family Studies 'How to develop a program logic for planning and evaluation'](#)
- [NSW Health 'Overview of the FAIT framework and guidance on developing a program logic' video](#)
- [Better Evaluation 'Creating program logic models'](#)

References

- ¹ Agency for Clinical Innovation 2013, *Understanding Program Evaluation – an ACI Framework*, Sydney, Australia. Available: https://aci.health.nsw.gov.au/__data/assets/pdf_file/0008/192437/Framework-Program-Evaluation.pdf
- ² Centre for Epidemiology and Evidence 2017, *Developing and Using Program Logic: A Guide. Evidence and Evaluation Guidance Series*, Population and Public Health Division. Sydney, NSW Ministry of Health.
- ³ Australian Institute of Family Studies 2021, *How to develop a program logic for planning and evaluation*. Available: <https://aifs.gov.au/cfca/expert-panel-project/program-planning-evaluation-guide/plan-your-program-or-service/how-develop-program-logic-planning-and-evaluation>
- ⁴ Taylor-Powell, E., Jones, L. & Henert, E 2003, *Enhancing program performance with logic models*, University of Wisconsin-Extension, USA. Retrieved from: <http://www.uwex.edu/ces/lmcourse/>
- ⁵ Taylor-Powell, E., Henert, E 2008, *Developing a logic model: Teaching and training guide February 2008*. Madison, Wisconsin: University of Wisconsin-Extension. Retrieved from: <http://www.uwex.edu/ces/lmcourse/>
- ⁶ Trankle, S.A., Reath, J. 2019, *Partners in Recovery: an early phase evaluation of an Australian mental health initiative using program logic and thematic analysis*. BMC Health Serv Res 19, 524. <https://doi.org/10.1186/s12913-019-4360-2>



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