

Fact sheet 12: Logic modelling and an outcomes based approach

This fact sheet aims to give you information to help you to understand:

- What logic modelling is and why we use logic models;
- An outcomes based approach and how a logic model is useful;
- How we use logic models and
- How logic modelling can help with evaluation and monitoring.

It will also provide links to other useful fact sheets and documents that relate to evidence.

1. What is logic modelling?

At a simple level, a logic model is a graphical depiction of a programme, project or work stream. A logic model displays the sequence of actions that describe what the program is and what it will do, i.e. how investments in a service link to the results of that service. It explains in more detail the logic of how an intervention contributes to intended or observed results. A logic model shows the relationships between what is put into a programme (e.g. money, resources and manpower), your activities and the impact or changes that result from the programme. It can be as complex as mapping the strategy and work plan for a whole department, or as simple as looking at the impacts and effects of one training programme.

2. Why use logic modelling?

Within commercial organisations, profit is often used to measure success, performance and outcomes. In public and third sector organisations it is often more difficult to understand what is meant by 'success' and an 'effective' programme or piece of work. A logic model will help you *plan with the end in mind* and ensure you are not just focusing on the resources of a programme or the activities and tasks to be performed, but also the overall impact of that service and results of your efforts. Creating a logic model clarifies what we want a programme or project to achieve. By focusing on the desired impact or results we can *plan backwards* and ensure that steps are taken at every stage to lead to the desired effect. A logic model can also help you make sense of a complex programme which is made up of many interacting and overlapping activities and ensure you know which parts are supposed to have what kind of impact or result. A logic model can also help you to understand where you will need public engagement and patient voice.

3. What is an Outcomes Based Approach?

Logic modelling is particularly useful when following an Outcomes Based Approach. An outcomes based approach is a shift from measuring processes to measuring outcomes. An outcomes based approach encourages us to focus on the difference we will make, not just the process and inputs provided by a service. It is about focusing on what is to be achieved rather than how we will get there. Success is about impact, about tangible improvements in the things that matter to the people using the service. An outcomes based approach means

focusing activity and spend on achieving real and lasting benefits for people and demonstrating the impact of services in terms of service user outcomes. E.g. a person is assisted to budget and prepare a good value meal for a family. The 'output' is the meal itself, but the 'outcome' is the acquisition of a skill that will continue to benefit the whole family, an improved sense of resilience for the user, greater self-esteem, confidence and better financial management.

4. How does a logic model help with evaluation and monitoring?

It is important to monitor and evaluate your project or service. You will need to monitor the performance and reach of your project, for example, to ensure the correct group are being targeted or demand is being met. You will need to evaluate in order that you can see if it is working as it should, it is effective and what could be improved.

When planning a new programme, designing a logic model at the outset will help you to think about the monitoring and evaluation you need to put in place and will help you to decide what information and data you need to collect. When you look at the links between your inputs, outputs and outcomes, you can start to examine the evidence in the links. For example, some causal links are definite (e.g. all the evidence says that quitting smoking increases life expectancy), but you may notice that you are guessing in other areas (e.g. referral to a weight management course reduces body mass index). Evaluation seeks to test out each of these links. It seeks to demonstrate whether what seems logical is actually happening and then explain why. The logic model will show the areas where you are unsure of the evidence that you will therefore need to focus your evaluation and monitoring activity.

Alternatively, if you have not factored in evaluation at the start of your project, creating a logic model of an existing programme is a good place to start when you want to evaluate it. It will help you to identify and confirm what the programme is aiming to deliver, what you need to assess and where you need more information.

5. How do I create a logic model?

A logic model is best developed in collaboration with key stakeholders, for example commissioners, providers, clinical staff etc. To make a logic model you need to understand the three main sections: inputs, outputs and outcomes. It is often best to start identifying your outcomes first, then add all your outputs and inputs, then try to draw lines between them and see how they link. The lines between the boxes show the causal links.

Inputs

This is what you put in to make the service go ahead. These are the activities undertaken during the operation of your service, the investment provided and the resources utilised. These include physical and non-physical items as;

- Equipment
- Stationary
- Drugs/prescription costs
- Staff costs
- Building overheads etc.

Outputs

This is what comes out of/what is produced by your service. These are the resulting, measurable components of the service that you deliver, that you can count and quantify. They are not an actual measure of impact, but are the specific aspects that result from the activities and inputs you put in to the service for the target audience. Examples include:

- Sessions held per week
- Attendees at an education session
- Number of booklets produced
- Items distributed

These, in themselves, are not the intended outcome of your work; just because you had 20 people attending your clinic it does not mean those 20 people are now cured.

By helping you differentiate between your activities and your impacts you can understand where improvements can be made and energy should be focused.

Outcomes

This is the impact of your service. These are the effects of your activities and resulting outputs. What effect do your outputs have? What are the consequences, behaviour changes or benefits of the service?

It is often useful to start by identifying the outcomes of our programme. What is your overall aim? Why are you doing this work? Outcomes are your overall aims and the results you would like to see. Think about how you would like things to look in a years' time. Is your aim to reduce teenage pregnancy? It might be to increase the number of young people accessing training services? Or is it to reduce unemployment? You do not deliver sessions or provide services for the sake of it; you do so so that people change their behaviour or live healthier and happier lives.

You may want to look at outcomes divided into long, medium and short term. Examples of outcomes include:

Short term:

- A greater uptake of specific drugs
- Increased breast screening rates
- Increased confidence in participants
- Increased knowledge and skills

Medium term:

- Reduction in hospital admissions
- Reduced unemployment
- Healthier eating behaviour
- Increased levels of physical activity

Long term:

- Increased life expectancy
- Reduced health inequalities
- Reduction in crime

Below are two examples of a simple logic models. The first uses the analogy of baking a cake to give an example. You do not bake a cake for the sake of it, the cake is just the output. The desired effect is happy people who enjoy the delicious cake. The second example uses a very basic example of a teenage pregnancy programme. In example two, the areas where the evidence is weak and evaluation may be needed are highlighted by dashed orange lines.



More on this topic and further reading

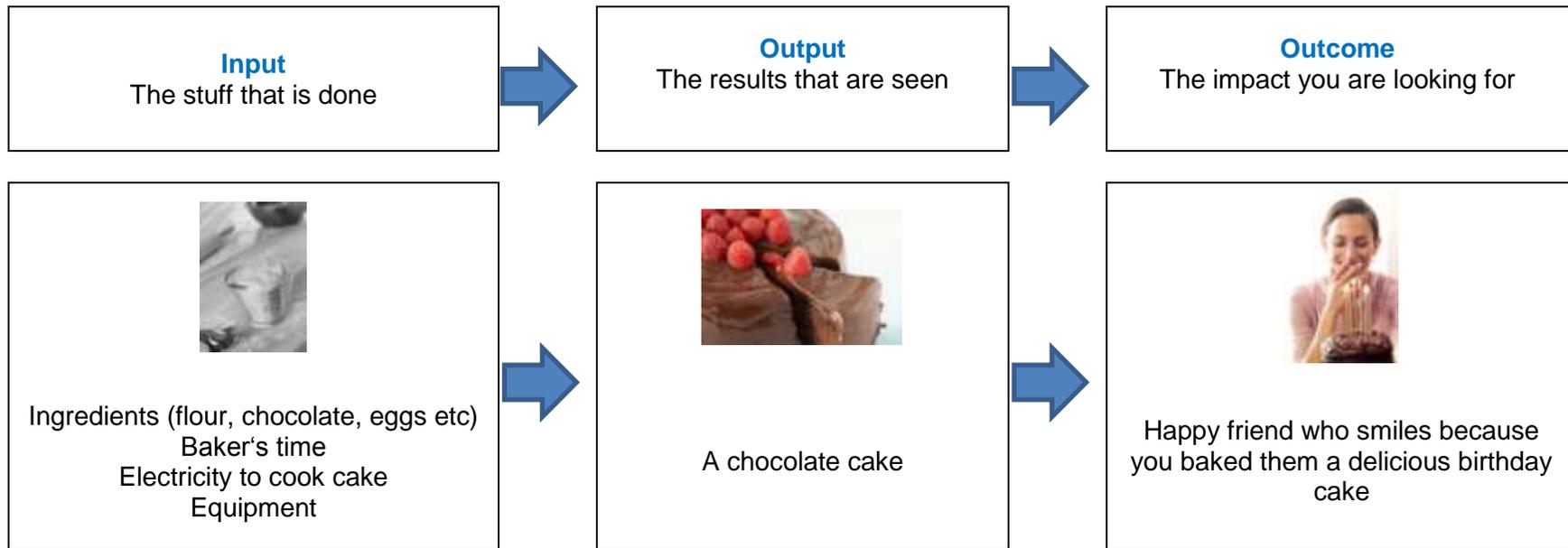
For more detailed information and some other approaches to logic modelling please refer to the further reading below.

Evaluation Support Scotland (2012) Evaluation Support guide 1.2: Developing a Logic Model. Available at <http://www.evaluationsupportscotland.org.uk/resources/127/>

Innovation Network. Logic Model Workbook. Available at www.innonet.org

McCawley. PF (2002) The logic model for program planning and evaluation. Available from <https://cyfernetsearch.org/sites/default/files/McCawley,2002.pdf>

Example 1: Birthday Cake



Example 2: very simple teenage pregnancy prevention programme

Dashed orange lines highlight areas where evaluation may be needed.

N.b this is given as an example and may not be an accurate representation of the evidence.

