Evidence-Informed Policy and Practice (EIPP) for Rural Ageing Well

A Guide to Critical Thinking for Policy, Practice and Program Developers

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Exercises in this Guide

Exercise 1 – page 21:
Using Template 1, model the basic intervention logic of one or more of your current policy, practice or program development projects. That is, how are you aiming to ‘make the world a better place’? These models form the basis of the remaining exercises in this guide.

Formulate preliminary (‘off the top of your head’) answers to the three questions on page 20.

Exercise 2 – page 27:
Working with a current policy or program in development, ask your team members and key stakeholders to produce a short statement (less than 10 words, preferably shorter) of their vision for a world in which the problem or issue that is the focus of the initiative is no longer an issue or problem. If working alone, use your knowledge of absent team members and/or key stakeholders to attempt to ‘put yourself in their shoes’.

Using Template 2, arrange or group these statements in terms of possible areas of action and rank them in order from concrete, detailed and ‘do-able’ to abstract, ‘big picture’ and aspirational.

We will be returning to this model later in the process.

Exercise 3 – page 33:
Identify a key term or phrase that is associated with a current policy or practice development process (e.g. from Exercise 1) that you are currently involved in or one that crops up regularly in your professional practice. Preferably choose a term that has a history of generally uncritical taken-for-granted usage.

Unpack that term by brainstorming all of the factors that you (or your team or stakeholders) associate with that term. Who? What? Why? How?

Exercise 4 – page 38:
Examine any models produced in Exercise 3 and identify two or three relationships or factors that offer the most potential and feasibility as intervention pathways.
Exercise 5 – page 41:
Using Template 3, review a policy or practice decision you have made recently and:
- Unpack the various factors that consciously, or perhaps unconsciously, shaped that decision.
- Identify which of those decisions were ultimately most important in that final decision.

You might also select one of the pathways that you selected as promising and feasible, and using Template 3, explore the reasons you have made that choice.

Exercise 6 – page 44:
Using Template 4, choose one of the cause-effect models identified in Exercise 5 and ask –
What do we know or what can we find out about:
- The problematic state we are seeking to change?
- The factor we have identified as a potential contributor to our problematic state?
- How much and by what processes that factor contributes to that problematic state?
Introduction

Background

This guide arose out of a joint Monash University and University of Tasmania research project funded under a National Health and Medical Research Council Partnership Grant.

The project – *Aged Support and Aged Care: program and policy structures to support ageing well in rural and regional Australia* – sought to distil available research evidence around the rural ageing experience in general, and ageing well policy and practice interventions in particular, in order to develop a tool to support evidence-informed rural ageing well policy and practice.

**TIP:** You may now like to watch the companion video for this section – “Video 1: Introduction”. Refer to the box on page 7 for the hyperlinks to our online videos.

Two factors were instrumental in our decision to shift the project’s focus from its narrow and highly specific original aim to the production of this generic guide to critical thinking for policy and practice developers.

Firstly, we realised that in light of the available evidence, producing the sort of tool we had envisaged was infeasible. As we explored the literature, it soon became apparent that there was little in the way of directly relevant evidence. Although there is a large body of related evidence which could potentially inform policy and practice, it is widely distributed across...
different research literatures and disciplines, making it impractical to organise into one simple tool.

Secondly, policy makers and practitioners in the Project Team advised us that if practitioners identify something they need to do their work better, they will seek it out. If it doesn’t help them to do their work better, they won’t be interested. Only when practitioners identify a need for evidence – that is, they have questions that require evidence-informed answers – will they pay attention to the evidence, even if it is very high quality evidence. We realised we needed to pay more attention to the demand side of the ‘evidence in policy’ equation.

Electronic Resources:

The Project Team has produced five companion videos in which we work through each of the four steps of the critical thinking process outlined in this guide.

The Guide to Critical Thinking, blank templates and companion videos are available for viewing on webpages hosted by Monash University and the University of Tasmania:


OR:

http://www.utas.edu.au/rural-clinical-school/research/research-projects-partnerships

and then select “Ageing well – research on ageing in regional and rural communities”

A Guide to Critical Thinking: Elements and Principles

This guide is organised around five basic elements and principles.

Critical Thinking

Just as practitioners are unlikely to seek out evidence or change the way they do things, if they don’t have questions that need answers, they are unlikely to have questions unless there is a high level of critical thinking going on within the policy and practice development process. Critical thinking or critical reflection refers to the practice of being conscious of the knowledge and assumptions we are working with and always being prepared to question
and test them. This questioning and testing will drive practitioners’ interest in and demand for evidence.

**Decision-making in Policy and Practice Development**

Once the decision has been made to initiate policy or practice action to address a social issue or problem, the policy and practice developer is faced with the task of turning what is generally a broad-brush, relatively abstract, aspiration into detailed, concrete, achievable and effective actions. This process will generally entail multiple steps, each presenting the practitioner with choices between alternative feasible and/or promising pathways. These choices will generally involve weighing up complex social questions using incomplete, ambiguous, and at times, contradictory information and factors. While scientific evidence can be an important aid in making those choices, it will only be one factor among many. This guide recognises that policy makers and practitioners work in a complex socio-political environment and need to weigh any scientific evidence against other less scientific but none-the-less persuasive sources of knowledge and information, such as professional expertise and experience, anecdote, established or ‘promising’ new practices, as well as any compelling socio-political and pragmatic factors.

This guide is less concerned with the amount or quality of scientific evidence, although both are important, but rather with the overall level of conscious, objective, critical reflection that goes into the process of decision-making which entails identifying and weighing the elements which need to be taken into account, whatever they may be.

**Modelling**

The guide makes extensive use of simple two-dimensional modelling techniques. While these models might seem simplistic, redundant or simply not worth the effort, we argue that they are key to making the guide work and justify the effort taken to construct them. They have at least two major advantages which stem from the fact that they give clear, concrete and easily readable form to the thinking or ‘logic’ that underlies the process. Having our thinking in this form is beneficial because:
• **It prompts and supports critical thinking.** At each stage of the process, our operating logic and the assumptions that underlie it are explicitly set out in front of us and **opened up to critical reflection, questioning and testing.**

• **It provides a record or map** of how our thinking has evolved over the development process. If, as invariably happens, we lose our way or things become complicated, then we can retrace our steps through the chain of models which provide anchoring or orienting points on the journey.

**A Case Study Approach**

Because real world examples make things easier to follow, throughout this guide we use a ‘rural ageing well’ case study to work through the process and to demonstrate the use of the various tools and techniques. The choice of case study simply reflects our original project aim and concerns: ‘An initiative to develop policies, practices and/or programs to address social isolation among rural older people’.

**Finding Evidence**

This guide is concerned with prompting evidence seeking or demand among policy and practice developers. It is not designed as a research literacy tutorial. However, with the advent of the Internet and Google Scholar, peer reviewed scientific evidence is more accessible to policy and practice developers than ever before. See Appendix A for more on evidence-informed practice.
Using Modelling to Support Critical Thinking in Policy and Practice Development

The basic premise of this guide is that if we want to increase the role of evidence in policy and practice development, we need to increase evidence seeking – that is, demand for evidence – among policy makers and practitioners. If we are to increase evidence seeking, we need to increase the level of critical thinking that occurs within the development process.

In this section, we set out to:

- Explore the nature of critical thinking using Kahneman’s idea of fast and slow thinking.
- Introduce the concept of social modelling as a critical thinking tool.
- Model the basic logic behind policies and programs as social interventions.
- Introduce a repeating four step evidence-informed critical thinking protocol designed to turn an initial intervention aspiration into detailed, concrete and effective policies, practices and programs.

**TIP:** You may now like to watch the companion video for this section – “Video 2: Critical Thinking in Policy and Practice Development”. Refer to page 7 of this guide for the web addresses for the videos.
Fast and Slow Thinking

One way of understanding critical thinking is through Daniel Kahneman’s concepts of ‘fast’ and ‘slow’ thinking.¹

Fast Thinking

In order to function in a complicated and fast-paced world, we become adept at a form of thinking that uses well-established mental models that we have built up over time, and whatever information is most easily at hand, in order to make rapid, instinctive decisions. Most of the time, this ‘fast’ thinking works perfectly adequately, especially where we need to respond quickly, or we are dealing with already familiar scenarios. As long as our established mental models continue to work for us, we are unlikely to question them too closely, other than to make small incremental adjustments. Such ways of thinking fit well with the pressured, output oriented policy and practice development environment. Many of our daily actions and reactions are guided by routinised and relatively unthinking patterns developed over time and experience.

Slow Thinking

Kahneman argues that we only move (reluctantly) to a more considered, critically reflective ‘slow’ mode of thinking when fast thinking lets us down; when our established mental models prove faulty or inadequate. Prompted by the failure to get the outcomes we have come to expect, we become more mindful of our mental models and more prepared to take the time and trouble to question and test them against a wider and more systematically gathered range of information. Some situations produce unexpected outcomes, which force us to re-examine our habituated ways of acting or reacting.

Fast and Slow Thinking within Policy and Practice

As far back as 1959, Lindblom recognised that policy and practice development proceeded through a process of incremental learning by doing.² We work with largely established and relatively successful ways of doing things but incrementally adjust these in response to

experience in operation – what might more accurately be called ‘learning by getting it wrong’. This approach closely matches Kahneman’s thesis; fast thinking modes dominate and we only shift to slow thinking when prompted by unexpected or unplanned outcomes.

The difference between this and the current ideal of evidence-informed policy and practice (EIPP) is one of degree. EIPP seeks to limit the ‘learning by getting it wrong’ in policy and practice by tapping into the experience of others, especially when that experience takes the form of rigorously validated ‘evidence’. It aims to increase the element of slow or critical thinking in all phases of the process, not simply as a reaction to the failure of fast thinking. The challenge is to find a way to support critical or slow thinking within the pressured, output focussed policy and practice environment. In this guide, we present the case for modelling as a way of integrating more slow or critical thinking into the process.

**Models and Modelling**

All social policy and practice involves dealing with relationships: personal relationships, and most importantly, cause-effect relationships. For instance, if we are seeking to formulate policy or practice initiatives to address rising rates of obesity, we will be concerned with understanding the factors related to obesity that we might be able to influence, such as lack of exercise. At the more macro level, governments concerned with a sluggish economy might be interested in whether manipulating interest rates might affect economic activity. There is an established convention in the social sciences to represent these possible or known relationships diagrammatically as linked objects – to model them.

**Figure 1: Modelling Relationships**

![Figure 1: Modelling Relationships]

The linking lines in the two models above simply indicates that there is some form of relationship between the two factors, such that changes in one are reflected in changes in the other. However, the lines say nothing about the direction of the relationship.

If we add an arrow head to that linking line, we are giving direction to the relationship, as follows.
The arrowed line above indicates that it is known or thought that low rates of exercise contribute to obesity.

The arrowed line above indicates that it is known or thought that obesity contributes to low rates of exercise.

The arrowed line above indicates that it is known or thought that the relationship works in both directions, with each contributing to the other.

Despite their simplicity, these models can act as powerful aids for giving structure to our thinking and reasoning, and for revealing thoughts and assumptions that may require testing and validation against the evidence.

**Policies, Practices and Programs as Interventions**

It is critical for working with this guide to recognise policies and practices for what they are: planned social interventions or attempts to make the world a better place.

All policy and program initiatives are about intervening in the world to bring about some predetermined and desired outcome – that is, they are strategic interventions. They are driven by concern that some current state is less than desirable, or at least is under threat of becoming less desirable (*the problem or the issue*); plus a belief that it is possible, with appropriate, well-designed policy or program actions (*the intervention*), to steer what is currently happening in a more desirable direction (*the resolution of the problem*).
**The Intervention Logic Model**

The **thinking, reasoning or logic** behind policy, practice or program interventions can be represented diagrammatically or modelled, as shown in Figure 2.

**Figure 2: Policy and Practice as Intervention**

Throughout the guide, we refer to such models as ‘**intervention logic models**’. While such models may appear simplistic and/or unnecessary, they can actually be very powerful if properly used. As such, they constitute the backbone of the guide.

The primary advantage of spelling out our reasoning in this way is that it brings transparency to our thinking and allows us to be conscious of that reasoning and question the assumptions that lie behind it. We can ask the following questions:

- What is the **problem** or issue, and how did it come to be a problem?
- What might a **resolution** – when the problem is no longer a problem – look like?
- How is our **intervention** going to ‘work’ in moving us towards that resolution?

The quality of these understandings will be critical in determining whether or not and how well our eventual policy or practice works.
Turning Ideas into Policies, Practices and/or Programs – Four Step Protocol

Most policy, practice and/or program development processes start with a reasonably high-level and broadly-framed aspiration to solve a problem or issue. It can be a major task to turn these broad aspirations into concrete, detailed and effective policies, practices and programs.

Multiple and Complex Causality

- Few social problems or issues have one single, simple cause or contributing factor that we might ‘fix’ and thereby solve the problem – it is more likely that there are multiple factors all contributing to the problem in different ways and to different extents.

- There are likely to be many factors involved which will interact in complex ways.

- Every causal or contributory factor is the result of other factors – that is, they lie at the end of a chain of causes and effects.

- Together these add up to multiple complex potential intervention pathways for achieving a resolution of our problem.

Practical and Resource Limitations

- There will rarely be sufficient resources – funds and skills – available to fully explore all the possible intervention pathways, let alone implement them all.

- Most of what we perceive as social problems or issues are unlikely to be ‘fixable’ in an absolute sense. Our policy, practice and/or programs are more likely to be aimed at managing or partially addressing the problem or issue, or some important aspects of it, rather than resolving it completely.

Making Choices

- The process of policy development involves making a series of choices about which are the most promising and feasible pathways to pursue in addressing our social problem or issue by means of our interventions.
Given that we are dealing with pathways – linked chains of causes and effects – this will involve a series of choices or decisions as we move from broad and general aspirations to narrow and specifically targeted policies, practices and/or programs.

A Protocol – From Broad Aspiration to Detailed Policy, Practice and/or Program

At each link in the causal chain, we are faced with decisions about which are the most promising and feasible intervention pathways to pursue. That is, which causal or contributory factors are most likely:

- To effect the change we seek?
- To be amenable to intervention?
- To be achievable or feasible given our environment and resources?

In this guide, we approach this task by undertaking the serial repetition of four steps, with each repetition moving us to a higher level of concreteness, focus and detail.

The foundation of this process is the Intervention Logic Model shown in Figure 3 on the following page. It proceeds in four steps:

**Step 1:** Construct, explore and test an intervention logic model for our proposed intervention to address an identified problem or issue.

**Step 2:** Explore our vision(s) for a resolution of our problem or issue.

**Step 3:** Develop a deeper understanding of our problem and its causal or contributory factors.

**Step 4:** Identify the most feasible and promising ‘next step’ intervention pathways.

We repeat this cycle, with each subsequent logic model moving us closer to a concrete and detailed policy, practice or program design.
For example, our case study begins with a broad aspiration ‘to develop policies, practices and/or programs to address social isolation among rural older people’. While the intent is clear, deciding which of the possible and feasible ways to work towards reducing the risk of social isolation will involve multiple steps, each of which require decisions about alternate pathways. This is the journey we take in this guide. In the following Figures, the bolded lines represent the ‘feasible and possible’ intervention pathway chosen for these exercises – but other contexts might result in a quite different set of choices.
**Figure 4: Social Isolation Intervention Pathways**

**PROBLEM**

Social isolation among rural older people

- Is at least partially the result of
  - Transport and mobility difficulties

- Is at least partially the result of
  - Decline in community social activity

- Is at least partially the result of
  - Changing demographics?

Transport and mobility difficulties

- Are at least partially the result of
  - Loss of intimates who provide transport
- Are at least partially the result of
  - Loss of licence
- Are at least partially the result of
  - Dispersed activities
- Are at least partially the result of
  - Poor public transport
- Are at least partially the result of
  - Inadequate community transport

Decline in community social activity

- Are at least partially the result of
  - Loss of physical capacity

Inadequate community transport

- Are at least partially the result of
  - Poor coordination

Inappropriate use

- Is at least partially the result of
  - Insufficient vehicles

Lack of volunteer drivers

- Is at least partially the result of
  - Loss of licence

Working through the Protocol

The remainder of this guide works through the steps of this protocol, primarily using our case study as an example. At each step, readers are encouraged to undertake the provided exercises using examples from their own work. To assist in completing the exercises, we have included blank templates that readers are free to duplicate as needed. Copies of the templates are available for download from the webpages detailed on page 7 of this guide.
Step 1: Policies and Programs as Interventions – the Intervention Logic Model

As outlined in the previous section, all policy, practice and program initiatives signal an intent to intervene to change an existing problematic state – or one thought likely to become problematic without intervention – into a different more acceptable, less problematic one.

**TIP:** You may now like to watch the companion video for this section – “Video 3: Logic Modelling as Policy and Practice Development Tool”. Refer to page 7 of this guide for the web addresses for the videos.

The basic reasoning behind any such intervention might be called an ‘if we – then’ logic. While the act of representing these logics diagrammatically might seem simplistic and unnecessary, we argue that such models represent a powerful tool for developing effective policies, practices and programs. Making our reasoning or logic fully conscious, open and transparent encourages and facilitates us to ask important questions about the knowledge, understandings and assumptions that underlie that logic and that will determine how well our eventual intervention will work.

For example, the ‘if we-then’ or intervention logic underlying our case study example – an initiative to develop policies, practices and/or programs to address social isolation among rural older people – might be modelled as per Figure 5 below.

**Figure 5: Rural Social Isolation Intervention Logic Model**

<table>
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<tr>
<th>THE PROBLEM</th>
<th>THE INTERVENTION</th>
<th>THE RESOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>High rates of social isolation among rural older people</td>
<td>Policies, practices and/or programs to increase social inclusion</td>
<td>Lower rates of social isolation among rural older people</td>
</tr>
</tbody>
</table>

If we put in place... Then we will bring about...

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Whether or not our intended intervention works will depend on how well worked-out or how sound our intervention logic is.

The soundness of our logic model depends on three factors:

- Is there actually a problem to be addressed? Is it the problem we think it is?
- Do we have a clear idea of what a resolution of that problem would look like? How we would know that we had achieved our objective?
- Are there feasible policy or program options that we could implement to achieve our desired resolution?

Figure 6: Questioning our Intervention Logic Model

Asking such questions is simply the first step in interrogating or exploring our intervention logic model. However, they do confirm that the logic is basically sound, that we are ‘on the right track’ and it is worth pursuing further – which we will do in the next step.
Exercise 1:

Using Template 1, model the basic intervention logic of one or more of your current policy, practice or program development projects. That is, how are you aiming to ‘make the world a better place’? These models form the basis of the remaining exercises in this guide.

Formulate preliminary (‘off the top of your head’) answers to the three questions on page 20.
Step 2: Exploring our Vision for a Resolution

It is as important to understand our vision for a resolution of our problem as it is to understand the problem itself – because the resolution represents the end-point of our journey and measures whether or not our policy, practice or program has ‘worked’.

Two main issues arise around resolutions:

- When we define our intervention in terms of solving a particular problem rather than achieving a desired resolved state, we narrow down our range of possible intervention strategies.
- While all stakeholders may agree on what the problem is, they are likely to have very different ideas about what a resolution might look like. If these differences are left unspoken and unresolved, they can complicate or even derail the process.

A Resolution Focus

Overwhelmingly, policy and practice interventions start with the identification of an issue or problem that needs addressing; a current or potential future undesirable situation that requires a policy or practice intervention. In fact, most such initiatives are actually framed in terms of the problem they are designed to tackle.

While such problem focussed statements are perfectly workable vehicles for a critical evidence informed approach to policy and practice development, there are advantages in moving to a more resolution focussed statement of intent.

By this we mean: defining the policy in terms of the desired solution – what the situation would look like should the policy/program work as intended to produce a situation where the problem no longer exists.

This move from a problem focus to a resolution focus requires a quite subtle but powerful shift in emphasis, which provides two advantages:
It facilitates a more critical approach to understanding the complex origins of the problem.

It opens up a range of possible routes to our envisaged future – which may or may not require directly addressing the original problem.

If we frame solutions narrowly around fixing a problem, we tend to see that problem in isolation and focus on actions that specifically target that problem – rather than achieving a desired outcome in which the problem no longer exists. We are unlikely to see or consider alternate pathways for actions that address wider issues surrounding the problem, due to coming at our problem from ‘left of centre’.

For example, the initial statement of our case study example – ‘An initiative to develop policies and programs to address social isolation amongst rural older people’ – is clearly problem-focused; we assert that social isolation is a particular problem for older rural people. This statement carries within it the implication that being older and living rurally increases the risk of social isolation over and above being young or living nearer to cities. The focus is on the problem and on the individuals that have that problem; hence, any policy or program ‘fix’ is targeted at those individuals.

If we look beyond the problem – social isolation among older rural people – to imagine or envisage a landscape in which everyone whether young or old, has the same opportunities for social connection and engagement, we open up much wider policy and program possibilities. To this end, we might shift our focus to thinking about what a rural future would look like if the problem was no longer a problem and restate the initiative in terms of: ‘creating a rural environment in which people’s level of social inclusion and engagement are not determined by their age or level of infirmity’. Such a re-statement does a couple of things:

- The problem is no longer an individual issue and solutions are no longer specifically targeted at those individuals. Instead, it acknowledges that there are multiple intertwined factors involved which are related to individuals, the

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3 Bacchi, C. 2009. Analysing Policy: What’s the problem represented to be?, Pearson Australia: Frenchs Forest NSW.
environment, rurality and age-related changes. Therefore, it opens up multiple intervention pathways that address these issues in various combinations.

- It is non-prescriptive – by moving from a condition people have or haven’t got (social isolation) to a process that people are involved with in different ways and at differing levels (social inclusion/exclusion). It is not a matter of making judgements of what constitutes ‘social inclusion/exclusion’ for any given individual at any particular age, but rather looking at how everyone, regardless of age and physical state, might be able to live their lives as far as possible in the manner of their choosing.

- At the same time it highlights some of the issues that need to be considered: rurality, mechanisms of social inclusion/exclusion, the ageing process and the particular but highly individual challenges and changes it can bring.

**Resolutions: A Diversity of Views**

Even where there is a widely shared understanding of the problem among stakeholders who are developing a policy, practice or program, the simple act of asking individuals to provide a simple statement on what they see as a resolution will likely reveal a diversity of ideas, agendas and visions.

These differences are likely to vary across three dimensions:

- The particular issue of concern – reflecting differences in professional expertise and focus.

- The level of abstraction or generalisation at which these are expressed.

- The variety of different approaches taken to setting priorities.

*For example*, when we ask people to write down their visions for a resolution to the problem of social isolation among rural older people, we might end up with a list something like that shown in Figure 7.

At first glance, this model suggests a wide diversity of visions and may raise fears of extended disagreement or paralysis of actions while these differences are negotiated.
However, if we extend our exercise to look for ways to bring some two-dimensional order to our model, we find that much of the difference lies in the different ways that the vision is expressed, especially in the level of concreteness and strategic detail. If we reorder the elements in our model in terms of how concrete and detailed or abstract and big picture they are, then the model starts to come together at the ‘big picture’ or aspirational level. There is now broad agreement on the sort of ‘new world’ we aspire to create, as shown in Figure 8 below.
Differences in envisioned resolutions will not always be amenable to such neat solutions. However, a model such as this is useful in a number of ways because it:

- **Reveals how much of the vision is shared**, even when different views are held on how to achieve that vision.
- Allows us to develop a policy or program vision statement that is sufficiently ‘big picture’, abstract and aspirational to include the different approaches and details of team members and/or stakeholders. **We can find a level where everyone is pretty much on the ‘same page’**.
- Highlights the levels at which team members and stakeholders are not ‘on the same’ page, providing a basis for discussing and dealing with those differences.
- **Expands the palate of possible areas of actions** and specific actions from which to choose.
- Continually **reminds us of ‘what we are about’** when we get bogged down in detail and/or in negotiating difference.

**Exercise 2:**

Working with a current policy or program in development, ask your team members and key stakeholders to produce a short statement (less than 10 words, preferably shorter) of their vision for a world in which the problem or issue that is the focus of the initiative is no longer an issue or problem. If working alone, use your knowledge of absent team members and/or key stakeholders to attempt to ‘put yourself in their shoes’.

Using Template 2, arrange or group these statements in terms of possible areas of action and rank them in order from concrete, detailed and ‘do-able’ to abstract, ‘big picture’ and aspirational.

We will be returning to this model later in the process.

This is a worthwhile exercise because it:

- Prompts everyone to **think carefully and critically** about their values, agendas and aspirations.
- Brings a degree of **transparency** to the process and allows for **open discussion** about points of difference and agreement.
- **Opens up** a range of possible, feasible ‘next steps’.
Step 3: A Deeper Understanding of our Problem and its Causal Pathways

If we are to intervene appropriately and effectively to resolve our issue or problem we need to understand two things:

- **The exact nature and dimensions of the problem or issue.**
- **The factors that cause or contribute to the problem in the first place** – it is these factors, and the pathways through which they act, that represent the pathways through which we might intervene to address our problem.

**TIP:** You may now like to watch the companion video for this section – “Video 4: Using Modelling to Support Evidence-Informed Decision-Making”. Refer to page 7 of this guide for the web addresses for the videos.

The Nature and Dimensions of our Problem

Having established that we do indeed have problem or issue, there are a number of further questions we can ask.

**Figure 9: Understanding our Problem**
For example, there is ample evidence that social isolation – as opposed to being solitary by choice – has negative impacts on health and well-being at any age and is associated with higher morbidity and mortality among older people. However, social isolation is a highly subjective concept, and while there are validated instruments to measure loneliness, anyone seeking scientific evidence of increased social isolation among older rural people is likely to find ‘slim pickings’ and will probably fall back on noting the presence of acknowledged risk factors for social isolation in rural areas.

Exploring Causal or Contributory Factors

How we go about intervening to change an existing problematic state will depend on what we understand about the factors that cause or contribute to that problem. That ‘causal’ logic is an important element of our intervention logic model.

Figure 10: An Expanded Intervention Logic

![Diagram of intervention logic]

Of course, all problems or issues have multiple contributors or causes. However, if we are to intervene successfully, we need to have a clear understanding of which of the causal or contributory factors we can best address – our ‘next steps’ for turning our general intent into detailed concrete policies, practices and/or programs.

When we embark on the process of developing a policy, practice or program intervention, we generally have some (more or less informed) ideas about what is causing or at least contributing to the problem. However, a more systematic, critically reflective, evidence-
informed approach allows us to identify, explore and weigh up a wide range of possible intervention pathways. We can do this using a technique that we call ‘unpacking’.

Identifying Possible Next Steps: Unpacking

We have already used an unpacking technique to explore our envisioned resolutions. This technique is also valuable for exploring possible intervention pathways – our next steps.

Best-practice policy and program development processes often starts with defining key terms so that everyone is ‘on the same page’ in relation to the important concepts. The technique of unpacking is almost the reverse of this because it seeks to uncover – to bring out into the open for consideration and discussion – the diverse range of meanings, understanding, values and agendas associated with our key terms and concepts. It is particularly useful for trying to understand our options in terms of intervention pathways.

Unpacking the Options for our Next Step(s)

As we have said above, the problem we are seeking to address rarely, if ever, has one single uncomplicated cause. Our problem or issue generally results from complex action and interaction of a range of factors, each of which are part of a long chain of causes and effects. If we are to address and resolve our problem, we need to understand which of these causal relationships offer the most promising and feasible pathways for intervention. Our first step is to lay out as many of these causal or contributory relationships as we can, so that we can weigh them against each other in terms of their intervention potential.

Unpacking and critical analysis are essentially the act of continual questioning – taking the time and effort to critically examine the key statements, terms and phrases that define a policy and practice initiative, in order to explore the ideas, assumptions and understandings that lie behind them. Unpacking asks:

- What do we actually mean – what are we thinking – when we make this or that statement or use this or that term or phrase?
- What do we actually know or understand about the thing we are talking about? What do or don’t we know about its nature and current state? What do or don’t we know about its relationship to other key elements in the process?
The technique has strong similarities to brainstorming: its primary intent is a free-ranging exploration of thoughts, meaning, knowledge and understandings around a particular concept, rather than a focussed search for resolved strategies and solutions.

While there are multiple ways of approaching the task of unpacking, taking a two-dimensional modelling approach has a number of advantages. It constructs a visual reference for the elements identified in an unpacking exercise and the relationships between them. Such a visual reference provides not only a good working tool but a secure and easily accessible reference point when, as usually happens, things get complicated and messy.

**Unpacking Key Terms and Phrases**

The purpose of unpacking is to allow for the initial generation and recording of thoughts and ideas by a process of free association without censure or critique. Don’t question it, just get it down. The process involves posing the most basic questions: What? Who? Why? Where? How?

*For example*, we can unpack the key terms related to our case study, in which we seek ‘to create a rural environment in which people’s level of social inclusion and engagement are not determined by their age or level of infirmity’.

The statement of intent in our case study contains a number of terms which we need to explore in some depth if we are to formulate effective policy responses. Unpacking these terms and exploring the range of relationships will highlight any untested assumptions and unanswered questions that require an evidence-informed response. There are at least four terms that relate to key elements of this initiative. At one level, each can be seen as unproblematic, with easily accessible and seemingly obvious meanings. At another level, they can be recognised as hiding some important questions.

*For example:*

- *Social Inclusion/exclusion*
  - What exactly is social inclusion/exclusion? How can we recognise and measure it?
  - Who are the socially isolated? Are rural people more likely to be socially isolated?
- Why do people become socially isolated?
- How does social isolation relate to other areas of people’s lives including their personalities, environments and personal situations?

**Rural**
- What is rural? How do we determine rurality? What distinguishes rural from urban?
- Who are ‘rural people’? In what ways are they different to non-rural people?
- Why do we think that rural people are at greater risk of social isolation?
- How does rurality impact on levels of social isolation?

**Age**
- What is ‘older’? What are the factors or measures that define ‘older’?
- Who are ‘older people’? What are they like? What is their lived experience?
- Why do we think that rural older people are at greater risk of social isolation?
- How might older age impact on levels of social isolation?

**Infirmity**
- What infirmities are associated with ageing?
- Who is most likely to be effected by these infirmities or for whom will infirmity have significant social inclusion implications?
- Which infirmities are likely to impact on social inclusion and in what ways?

These questions could be answered simply as lists of text but they become more accessible when laid out in a two-dimensional model. In the first step of unpacking these terms or phrases, we are exploring what these terms ‘bring to mind’ – the various meanings, understandings, values and issues that we associate with a given term. Figure 11 on the following page unpacks some possible meanings associated with the term ‘social inclusion/exclusion’.
Figure 11: Unpacking Social Inclusion/Exclusion

Exercise 3:

Identify a key term or phrase that is associated with a current policy or practice development process (e.g. from Exercise 1) that you are currently involved in or that crops up regularly in your professional practice. Preferably choose a term that has a history of generally uncritical taken-for-granted usage.

Unpack that term by brainstorming all of the factors that you (or your team or stakeholders) associate with that term. Who? What? Why? How?
Factors and Relationships

The list of factors identified during an unpacking exercise such as that shown in Figure 11 reflects our understanding that these factors are in some way related to the term we are unpacking.

Understanding those relationships, particularly in relation to the most important terms, is a critical next step in designing effective interventions. This can be accomplished using the technique of cause-effect modelling which is covered in Step 4.

Before we proceed to that step, we need to make some choices or decisions about which one of the many factors and potential relationships uncovered in Figure 11 we should explore in greater depth using cause-effect modelling. It is likely to be impractical and unproductive to conduct an in-depth critical exploration of all of these factors – even if we had the time and resources to do so, some of the factors will not be amenable to intervention and the impact of others might be too modest to justify the effort.
Step 4: Identifying the Most Promising and Feasible Next Steps

The major advantage of critical or slow thinking is that it ‘opens up’ issues for consideration and discussion. Sooner or later, however, we need to make some decisions about narrowing down our focus to those factors that appear to offer the most promise as possible pathways for addressing our problem or issue.

The policy and program development process always comes down to making a series of choices.

Unpacking our key concepts inevitably presents us with a range of possible factors and relationships that may represent possible intervention pathways, or in other words, factors that we may choose to target to bring about desired change. Figure 11 contains 16 of these potential points of intervention.

In an ideal world – which certainly doesn’t describe the policy making and practice environment – we would systematically and scientifically investigate and weigh each of these before coming to a decision. In the real world, with its tight timeframes and limited resources, we need to narrow down the field so that we can focus our efforts on detailed analysis and testing of the most promising and feasible pathways. To do this, we need to:

- Explore in more detail the causal pathways revealed in our unpacking.
- Weigh up the factors that might affect the feasibility of a particular approach.

Exploring Possible Intervention (Cause-Effect) Pathways

All of the factors identified in our unpacking of key terms and concepts are assumed to have a causal or contributory relationship with our problem. We need to explore these in more detail in order to understand which of them might constitute feasible intervention pathways.

For example, in Figure 11 we identified a large number of factors that are in some way related to social inclusion/exclusion which is the focus of our policy or practice initiative. It is
important to note that this model only suggests that there is potentially a ‘cause-effect’ relationship between these factors. It says very little about the nature of that relationship in terms of its direction, magnitude or mechanisms. We need to understand these if we are to intervene via any of the pathways to bring about our desired change.

We have already indicated a belief that there is a significant relationship between older age and social exclusion by including it (along with rurality) in our original statement of intent. This relationship warrants further exploration.

Figure 12: Extract from Figure 11

Or more simply:

The direction of the causal arrow is a reasonable assumption but only an assumption – it needs exploring and testing. It is entirely possible that the causal arrow might also run in the opposite direction; there is good evidence that social exclusion can accelerate the ageing process. However, we will focus for now on modelling and exploring the model shown in Figure 11.

If we are to intervene to bring about change, older age itself does not appear to offer much promise as an intervention pathway, if by older age we mean years of life rather than the
physical/physiological markers of ageing. It is also clear that any impact older age will have on social inclusion will be largely indirect via other factors such as the physiological changes associated with ageing.

Spending a little time on Figure 12, we are able to identify a range of relationships that might explain an overall relationship between older age and social inclusion/exclusion and offer potential for intervention. A small number of examples are shown below in Figure 13, all of which have ‘older age’ as their starting point.

Figure 13: Some Possible Cause-Effect Pathways Contributing to Social Exclusion
In Figure 13e, we argue that older age contributes to social inclusion in a range of ways, including directly through increasing disability, and indirectly through the effects of disability on transport and mobility. In addition, the effect may be exacerbated directly and indirectly by rurality. In addition, rurality is likely to make the effect worse by contributing to increasing transport and mobility difficulties (via lack of public transport or poor walking infrastructure).

There are a huge number of potentially identifiable cause-effect pathways in a model such as that presented in Figure 12. However, these will vary widely in terms of how feasible and promising they are as potential intervention pathways. Because of the free-flowing nature of an unpacking exercise, many of the relationships mapped in Figure 12 will be based on a mixture of assumption, informal practice knowledge and experience, and most likely limited and incomplete scientific evidence. The task is to initially select those pathways or relationships which appear to offer the most feasibility and promise, and therefore justify us taking the time and trouble to explore them in more detail.

Exercise 4:
Examine any models produced in Exercise 3 and identify two or three relationships or factors that offer the most potential and feasibility as intervention pathways.

Weighing up Choices

In the real world, the decision about where to focus our efforts are not, and never can be, completely driven by scientific evidence. This is not the way policy is done or even the way it should be done. Although scientific or formal and high quality evidence may have a role at this point, it might be outweighed by a range of other, more powerful factors at any particular time, place or set of circumstances. There is little point in expending precious resources on a rigorous, critical, evidence based analysis of possible intervention pathways that we anticipate will be subsequently ruled out on the grounds of feasibility, acceptability or timing. This first culling is likely to make use of more informal knowledge and ‘lower

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quality’ evidence, and take account of factors unrelated to the evidence base, saving the rigorous critical analysis for later, when we explore the more promising and/or feasible intervention pathways.

However, it is important to maintain a rigorous, open and critical approach to this decision-making process. **What distinguishes critically informed policy and practice development is not so much the amount or quality of evidence or information involved in decision-making but the level of critical awareness and transparency achieved in the decision-making process itself.** It is more important to identify which factors informed a decision and why, than to assess the inherent evidential quality of any of those factors. Figure 14 on the following page is a model of some of the possible factors which might need to be considered in such decisions. However, every setting will present a unique set of factors, with its own unique set of values and weightings that can only be determined at that particular time and place.
Figure 14: Unpacking the Decision-Making Process

Policy or practice decision:
- Target an issue or problem for intervention
- Choose a goal or vision to pursue
- Choose a particular cause-effect pathway in which to intervene
- Select a particular intervention model or approach
Note that many of these factors can be elicited by asking three questions:

- What 'big P' and 'small p' **political issues** do we need to take into account? Are there factors within the political, stakeholder and/or bureaucratic environment that might favour adopting one issue or approach over another?

- What **evidence or information** do we have that might suggest we will get better outcomes – more impactful, effective and efficient – by choosing one course of action over others? **Much of that information and evidence will have come from our earlier exploration of our intervention logic model.**

- Is there a current **window of opportunity** for addressing a particular issue or adopting a particular approach?

**Exercise 5:**
Using Template 3, review a policy or practice decision you have made recently and:
- Unpack the various factors that consciously, or perhaps unconsciously, shaped that decision.
- Identify which of those decisions were ultimately most important in that final decision.

You might also select one of the pathways that you selected as promising and feasible, and using Template 3, explore the reasons you have made that choice.

As you work through this exercise, you will notice a number of things about the factors you have identified:

- At least some of them will appear to push or pull your decisions or choices in opposing directions.

- The factors vary in importance or weight in terms of how they impact your decision. Some you may ignore at your peril, while others merely add a little additional weight to your decision.

Any list of possible influencing factors will always be incomplete and any weighting will necessarily be imprecise and indicative. **The heart of the process remains the critical thinking and discussion; the modelling provides a way to structure and anchor that thinking and discussion.**
Note that in Figure 14, we do not take a value position on the importance or value of one set of factors over another. In particular, we do not assert that formal evidence should always outweigh other factors such as political considerations. Such judgements can only be made and justified by those involved in the actual process. The important thing is that any decision is the product of critical thinking which is based on a systematic, informed and open process of identifying and weighing all relevant factors.

**Testing and Exploring a Pathway Forward – Repeating the Protocol**

Having identified one or more promising and feasible pathways in Figure 12, we now need to return to and repeat our four-step protocol. This allows us to test its feasibility and explore possibilities for moving to the next level of formulating detailed targeted policies, practices or programs. The four-step protocol asks us to:

**Step 1:** Construct and intervention logic for that new potential pathway.

**Step 2:** Explore our vision for a resolution of the new potential problem/issue.

**Step 3:** Seek a deeper understanding of our problem and its causal or contributory factors.

**Step 4:** Identify feasible ‘next step’ intervention pathways.

*For example,* after examining the available evidence and information, and weighing up the socio-political and practical issues of one or more of the promising and feasible pathways for addressing social isolation among rural people, we may decide that the best intervention pathway is addressing ‘transport and mobility difficulties’. We argue that the risk of social isolation can be reduced by introducing policies, practices and/or programs to address transport and mobility difficulties.

As we repeat Step 1, we are now able to **expand out logic model to include the cause-effect logic which underpins our overall intervention logic.**
Ordinarily, we would now proceed to Step 2 to explore our vision for a resolution to ‘transport and mobility issues’ but so we don’t complicate matters, we will skip this step and move on to Step 3.

**Repeating Step 3**

In order to work out how we might go about addressing the problem of ‘transport and mobility issues’, we need to develop and deepen our understanding of the nature and extent and causal and contributing pathways associated with that problem.
Some of the questions asked in Figure 16 can be answered from existing knowledge (knowns) but others will require gathering evidence from published sources or from your own research (unknowns).

**Exercise 6:**

Using Template 4, choose one of the cause-effect models identified in Exercise 5 and ask –

What do we know or can we find out about:
- The problematic state we are seeking to change?
- The factor we have identified as a potential contributor to our problematic state?
- How much and by what processes that factor contributes to that problematic state?
Making Use of the Evidence

The answers to the questions posed in cause-effect models such as that in Figure 16 allow us to:

- More fully understand the nature of the problem and the resolution we are seeking to achieve.

- Confirm or refute our initial notion that the factor/s and relationships we singled out from our initial unpacking model (Figure 5) are important contributors to the problem we are seeking to address. *For example*, transport and mobility difficulties do or do not contribute substantively to increasing social exclusion among older rural people.

- Build our understanding of how, or in what ways, these factors contribute to our problem. *For example*, they help us uncover and understand the mechanisms by which transport and mobility difficulties act to reduce social inclusion or increase social exclusion.

This knowledge and understanding is critical to decisions about where and how to intervene effectively.

Repeating Step 4 – Identifying Possible and Promising Next Steps

We have established that our new intervention logic is sound and then built an evidence-informed understanding of the extent and nature of the problem and its causal or contributory factors. We can now use unpacking techniques to explore how we might go about addressing this problem.

*For example*, once we have a good evidence-informed understanding that transport and mobility difficulties are substantial contributors to social exclusion for rural older people and how they contribute to this, we can return to our critical thinking sequence. This time we are more narrowly focussed on unpacking and modelling this particular cause and effect relationship.
The following example is designed to illustrate a hypothetical development process related to our case study ‘problem’, involving three repetitions of the protocol. It is therefore only a partially developed snapshot of the possible process you could undertake.

**Unpacking the key concept** – In Figure 17 below, we unpack the key concept of ‘transport and mobility difficulties’, in order to identify contributing factors and relationships.

**Figure 17: Unpacking the Key Concept**

In this figure, we have identified ‘inadequate and/or inefficient community transport options’ as the most promising intervention pathway for the following reasons:

- We have good information and some evidence that community transport is not being as efficiently utilised as it could be.
- A community transport review has just been started.
- For many of the other factors, intervention is either not feasible or extremely difficult to address (e.g. musculo-skeletal problems, neighbourliness).
- Council budgets which fund infrastructure improvements are extremely stretched but community transport is nationally funded.
Return to Step 1 – A New (Even More Focussed) Intervention Logic

We have now extended our intervention logic model back another step along the causal chain.

Figure 18: An Expanded Program Logic Model

Interrogating the model in Figure 16 for knowns and unknowns, we might establish through a combination of local professional knowledge, available administrative data and a small amount of formal research, that:

- Older rural people do identify problems obtaining community transport for anything but medical appointments.
- Older rural people say ‘they have been told’ community transport can only be used for medical appointments.
- Local coordinators cite restrictive regulation, a shortage of volunteer drivers and a lack of consumer demand for this situation.
- Managers identify a local lack of coordination and innovative flexibility rather than a shortage of transport.
The available evidence and information suggest that educational and administrative interventions to improve the flexible coordination of existing community transport hold promise for contributing to both our detailed immediate plan and longer-term broader vision. As shown in Figure 19, we can trace our development process step-by-critically-informed-step from our initial aspiration to address social exclusion among older rural people to a targeted and detailed strategy to improve the coordination of community transport.

Figure 19: From Vision to Strategy

The number of cycles of unpacking, modelling and choosing we will need to do depends on the breadth and complexity of the policy or program vision.

The ultimate aim of the process is to develop a concrete and detailed intervention model of a policy or practice intervention which is informed by a rigorous process of evidence-informed critical reflection. In this model, the important questions have been identified, made visible and addressed.
It would nice to believe that if a policy or program is evidence-informed, then we are most of the way towards putting in place an effective and efficient intervention. However, social systems are way too complex to safely make that assumption. It is vital that critical thinking and discussion do not cease at the point of implementation but are carried through to support ongoing monitoring and evaluation during implementation.
Evaluation

It’s Evidence-informed, So Why Evaluate?

Much of the heightened interest in evidence-informed policy and practice (EIPP) in recent years is based on an assumption that the stronger the evidence base for a policy or program, the greater the likelihood that the policy or program will ‘work’ – in other words, it will produce the desired outcomes and only the desired outcomes, and will do so effectively and efficiently.

Social interventions are complex systems operating within complex systems. There are very many variables at play; too many for all of them to be realistically predictable, measureable or controllable. Every social situation is unique and this means that every new implementation of an intervention model or approach, no matter how well it has been shown to work in another context, is an experiment to some extent.

This complexity also means that it is rare for an intervention to ‘work’ in the sense that it produces the expected outcomes – and only the expected outcomes – for all of the targeted population, at all times, across all contexts. It is more likely that a policy or program will work as intended for some people, some of the time, in some contexts, and in other ways for other people in other times and contexts. Social programs almost inevitably produce some unintended and unexpected consequences, whether these work towards or against the original vision. Regardless of the quality of evidence we bring to a social policy and practice intervention, we cannot expect to transplant an intervention from one context to another and achieve exactly the same outcomes. Instead, evidence-informed policy and practice (EIPP) is about building some generalised understandings about what might work, for whom, in what settings and in what circumstances.⁵

⁵ For a more detailed discussion, see:

Ongoing monitoring, evaluation and continuous quality improvement is an essential element of EIPP.

Such processes have at least two vital functions, as they acknowledge that:

- Regardless of how well established or researched an intervention model is, the context in which it is implemented will always be novel and unique and it will always require at least some adjustment to the local context to work as intended.
- There is always a need to strengthen our knowledge and understanding of the factors and relationships in which we seek to intervene. One of the more effective ways to increase that knowledge and understanding is to ‘learn by doing’ through ongoing monitoring and evaluation.

*TIP:* You may now like to watch the companion video for this section – “Video 5: Using Critical Modelling for Evaluation”. Refer to page 7 of this guide for the web addresses for the videos.

**Learning about Evaluation**


**A Logic Model Approach to Evaluation**

Like many evaluation texts, the Kellogg Guide uses an approach based on what is called the program logic model, as shown in Figure 20 below.

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A logic model spells out the cause-effect logic underlying an intervention. If we compare this model with those developed in Figures 2 and 15, we see that we are already familiar with this sort of model, although in evaluation texts these models usually do not explicitly state the ‘problem’ element, unlike the model shown in Figure 21 below.

The real-world implementation of a policy or practice model also adds another element – context. The internal and external environments in which the model is implemented will inevitably inform how it works, especially since these environments will undergo change while the policy or program is operating.

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7 Ibid, p.1
Logic/Cause-Effect Models as an Evaluation Tool

Unpacking and cause-effect models are valuable tools for developing evidence-informed policies or practices. They are equally useful for evaluating and refining the same policies and programs in operation.

No matter how much critical thought and discussion, and evidence and information, is employed to guide the development process, real-world operation is always an experiment and will inevitably reveal gaps, errors and limitations in all of these. It is rare for a policy to work exactly as planned and produce exactly the outcomes expected. Our logic/cause-effect models provide excellent reference points in our efforts to critically examine:

- How is the policy or program operating?
- What is working and not working, for whom, and in what circumstances or contexts? Why?
- How might the policy or program be improved?

In this guide, we have developed an evidence-informed transport and mobility intervention as part of an overall strategy for reducing barriers to social inclusion among rural older people. An expanded logic/cause-effect modelling of that intervention is shown in Figure 22. This model helps us to identify the multiple points at which the completeness and quality of our knowledge and understanding is critical in shaping how well our carefully developed strategies actually work out in practice.
If things don’t go completely according to plan, these are the points at which our intervention strategies might be unravelling or derailing, and are therefore the points at which we need to apply our critical thinking skills and tools.

*For example*, referring back to Figure 22, we can ask:

1. How well do we understand the overall nature of the problem?
   - How well do we understand various aspects of the problem – especially how it varies across different individuals, groups, places and times?
   - How well do we understand the root causes of the problem?

2. How well are our planned interventions matched to the problem?
   - Are the interventions appropriate and feasible for the full range of individuals, groups and context we are dealing with?

3. Even if these are appropriate intervention for this problem, how ‘do-able’ are they in this particular time and context, with these particular organisations and groups?
   - Are there particular (unforeseen) barriers or risks we need to deal with?
4. Do we have all the (adequate and appropriate) resources we need to do this properly in terms of funds, skills and support?
   - Are these resources being appropriately applied to the task?

5. Are the planned activities actually happening? Are they happening in the way they were originally designed?
   - Are they appropriate for the groups and contexts in which they are being conducted?

6. How well are the planned interventions matched to our vision for a less problematic situation?
   - How well do we understand what that vision is?

7. Have we identified outputs that are measurable or have we found ways to measure the outputs we are expecting?  
   - To what extent are our planned policy or practice actions producing the outputs we expected?
     - Are the outputs more or less than we expected?
     - Are the outputs different to what we expected?

8. Are those outputs resulting in the sorts of short and medium term changes we expected?
   - How well are we identifying and measure these changes?

9. To what extent are our outputs, outcomes and impacts helping realise our vision for a less problematic situation?
   - How well are we able to measure the changes we sought to effect?
   - How well do we understand the relationship between the outputs, outcomes and impacts and the situation we are seeking to change?

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8 Outputs are more immediate and concrete; impacts are long-term, broad and more abstract; and outcomes are in the middle. For example, our model might produce an output of a coordination plan, an outcome of better coordination and an impact of less community transport difficulties for rural older people.
How well do we understand the vision we are working towards?
- What it would look like if it was achieved?
- How might we recognise or measure its achievement?

How well do we understand the factors and processes that gave rise to that problematic state in the first place?

How well do we understand the environment in which we are implementing our intervention?
- How stable is that environment?
  - What is changing, or likely to change, over the course of implementation?
  - How do those changes impact on the value of our original intervention model?

A Concluding Remark

This guide finishes as it begins – by asserting that the essential means for effective and efficient policy and practice development is not evidence per se, but continuous and continuing critical questioning, thinking and discussion that prompts the ongoing quest for, and use of, information of all sorts – including evidence.
Appendix A: Evidence in the Policy/Practice Process

This Appendix looks at the place and role of evidence in the policy process.

The use of evidence is just one tool – albeit a very important one – that can be mobilised to support critical thinking for policy development.

The Place of Evidence in the Policy Process

The application of evidence, in the strict natural science sense of finding the answer to the problem and applying it, is rarely workable in policy settings because:

- Things are rarely as clear cut or compelling as they are in the natural sciences in relation to: the exact nature of the ‘problem’, the imagined ‘solution(s)’ to that problem and the evidence provided by research.

- The process of policy formulation is socio-politically complex and ‘the evidence’ will only play one role in the process.

- The process is more about seeking ‘consensus around the acceptable rather than convergence on a loosely defined research “truth”’. ¹¹

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• This process is about seeking: 12
  
  o  To make policy decisions that are ‘evidence informed’ rather than ‘evidence-based’.

  What does this mean in practice?
  In policy, evidence isn’t the ‘be all and end all’ but simply one component or tool in good policy practice. It can be useful for informing discussion and decision-making processes – but not for dictating it.

  o  Conceptual enlightenment or generalised understanding rather than instrumental solutions or models.

  What does this mean in practice?
  Evidence for policy making, no matter how rigorous it is, rarely provides neatly packaged solutions that are entirely transferrable between contexts. However, it can be:
  - An important source of good policy ideas.
  - A good guide to what sorts of things might, and might not, work in the local contexts.
  - A good starting point for designing and testing local solutions.

  A way of thinking and a catalyst for debate rather than a shutting down of thinking and diversion around disagreement.

  What does this mean in practice?
  In policy making, evidence should be used to open up and inform the debate, not to shut it down.

12 Adapted from Lomas & Brown 2009 op cit.
Judging Evidence Quality in the Policy Process

Almost any faithfully recorded empirical data may be classed as both useful and ‘evidence’ within the policy process. However, not all evidence is equal and we need to make a judgement about both the utility and quality of evidence used to inform this process.

Judging the quality of evidence is a complex scientific undertaking, especially when dealing with different types of evidence: qualitative (text) and quantitative (numbers), drawn from both the natural sciences and social sciences. For the policy developer, addressing just two questions will go a long way towards sifting out the poorer quality evidence:

- How believable is it?
- How useful is it?

**Believability**

Believability can be broken down into concerns about validity, reliability and bias control. However, considerable confidence can be drawn from a small number of quite simple measures. While none of these necessarily guarantee or rule out believability, when applied together they do provide a sound guide.

- How reliable is the source from which the evidence comes? How reputable is the individual organisation from which the evidence emanates? Evidence emanating from reputable organisations such as universities, government, quasi-government organisations or professional bodies is much more likely to be rigorously produced.

- Do the research results, even if they are surprising, on reflection seem **valid and intuitive**? Research findings that simply ‘don’t seem to add up’ may still be valid but should be approached with caution and looked at critically. A variation of this is:
  - Can you triangulate the evidence? Does evidence from a range of different sources all support the same conclusions?
  - To what extent does it fit in with current understandings and debates?

- Has the evidence been **tested by experts**?
  - Has it been subject to some form of peer review process before publication?
  - Is there a meta-analysis or review available – a professional review or weighing up of the evidence around a particular issue?
What level of transparency and detail is there about how the evidence was gathered and analysed? It is difficult to judge the process by which evidence was obtained if it is not openly documented.

**Utility/Fitness for Purpose**

Evidence not only needs to be believable but it also needs to be useful in informing the policy process. The critical judgement is generalisability – the degree to which the research evidence can be translated to contexts beyond the one in which it has been generated. Two issues bear most strongly on generalisability: sampling and variable control.

**Sampling**

The sample refers to the sub-group of people who participated in the study. Researchers use techniques of random sampling or structured sampling to maximise the extent to which that sample or sub-group is representative of the wider population to which they want to generalise their results. The greater the similarity between the two groups, the greater the degree to which that evidence is likely to be generalisable.

The questions to ask are:

- How closely does the sample used in the research reflect the population to whom this policy will apply?
- To what extent are findings based on this sample likely be applicable to the population to whom this policy will apply?

**Variable control**

Social systems are very complex, with lots of factors or variables impacting on outcomes. In order to manage this complexity and make findings more clear-cut, researchers seek to minimise the number of variables they are dealing with by eliminating variables or controlling for any extraneous or potentially intervening variables. However, policies are designed to operate within complex real world contexts comprised of multiple interacting variables.
It is important to reflect on how the introduction or re-introduction of previously controlled variables may impact on the utility and transferability of evidence into the complex real-world policy environment. We can ask:

- How well is this evidence likely to hold up in the messy environment in which this policy is going to operate?
- What factors might work against the evidence holding up?

**Generalised Understandings versus Answers**

We have already established that the major function of evidence in social policy is to generate understandings and inform the process rather than to provide ‘the answer’. Any evidence that is believable and informs the process can be ‘quality’ evidence, as long its use is not pushed beyond its limits in terms of generalisability. Bear in mind, given the complex uncertainties of the policy environment, that:

- There is no guarantee that even the most robust evidence will turn out to be translatable to the local policy context.
- It is possible that the weakest or slightest of evidence can provide insights that are highly informative in the local policy context.
- The theoretical content of research evidence is likely to be more translatable across contexts than the instrumental content. **Generalised understandings or general theoretical principles that are applicable across contexts are more likely to be translatable than instrumental models.**

**Searching for Evidence**

The majority of policy developers are unlikely to have either the time or the skill-set necessary to undertake a major search and review of the research literature for evidence. Therefore, wherever possible, that task is better undertaken by specialist researchers. This is in line with the evidence-based policy and practice literature which suggests that the most
productive route to evidence-based policy lies in the nurturing of working partnerships between policy makers and researchers. However:

- In such partnerships, it is up to the policy developers to identify and communicate their evidence needs and to guide researchers through the complexity of the policy development process. The bureaucratic role requires as much in the way of critical thinking as the researcher role.
- For many policy purposes, the evidence requirement is quite narrowly focussed and can be met with quite simple and carefully targeted research.

Literature searches and reviews are seen as a high-level research skill in formal research applications. However, the advent of the Internet, the progressive digitisation of the research literature especially academic journals and government/quasi-government reports, and developments in web browsers, in particular the scholarly search engine Google Scholar® (http://scholar.google.com.au), has opened up literature searching to a more general audience and to policy makers in particular.

**Searching with Google and Google Scholar**

Google Scholar is a freely available search engine accessing primarily ‘scholarly’ publications. **Scholarly literature** refers primarily to publications in the academic or scientific literature. Much of this literature is peer reviewed and therefore generally can be seen as presenting higher evidence quality than other web sources.

In contrast, the ‘grey’ literature refers to publications from reputable bodies such as government, quasi-government and peak bodies. Such literature needs to be searched for using a standard search engine such as Google. While such material carries a greater requirement for us to make informed judgements about the credibility of its source and evidential quality, it can be a highly fruitful source of evidence to inform policy. Sometimes, it may be the only source of available evidence, given the scarcity of practice-based evaluative research in the scholarly literature.

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The biggest challenge in literature searching is finding the right **key words or phrases**:

- Start with the obvious – it provides a starting point and you can narrow down from there.
- Try to find just one paper that looks like it’s in the ballpark as this can often provide the vital entry point.
- Download a few articles or reports that look like they are in the ballpark – you may only be able to access abstracts and reference list but this will suffice.
- Check out the reference lists to identify:
  - The key words and phrases that tend to be used most often – debates and discourse usually settle around particular terminology.
  - Authors or organisations who are working in the area you are interested in.
  - Sources that contain the sort of material you are interested in.
  - Don’t be afraid to try something out of left field – there is nothing to lose.
- Combine phrases:
  - Enclosing words in inverted commas means they are searched as an exact phrase.
  - In some databases you can cut down the number of responses by joining words with AND, OR, and NOT
    - ‘Loneliness OR age’ yields references that contain either ‘age’ or ‘loneliness’
    - ‘Loneliness AND age’ yields references that contain both ‘age’ and ‘loneliness’
    - ‘Loneliness NOT youth’ screens out any ‘loneliness’ references that concern youthful loneliness.
- Follow the suggestions provided by the database such as ‘other publications on this subject’ or ‘other papers by this author’.
- Look for review articles and reports – someone has already done most of the work for you.
Appendix B: Contributors to the Project

This guide and its companion videos were produced as part of the NHMRC Partnership Project – *Aged Support and Aged Care: Program and policy structures to support ageing well in rural and regional Australia, 2012-15*. The contributors to the project are listed below.

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