

Department of Health

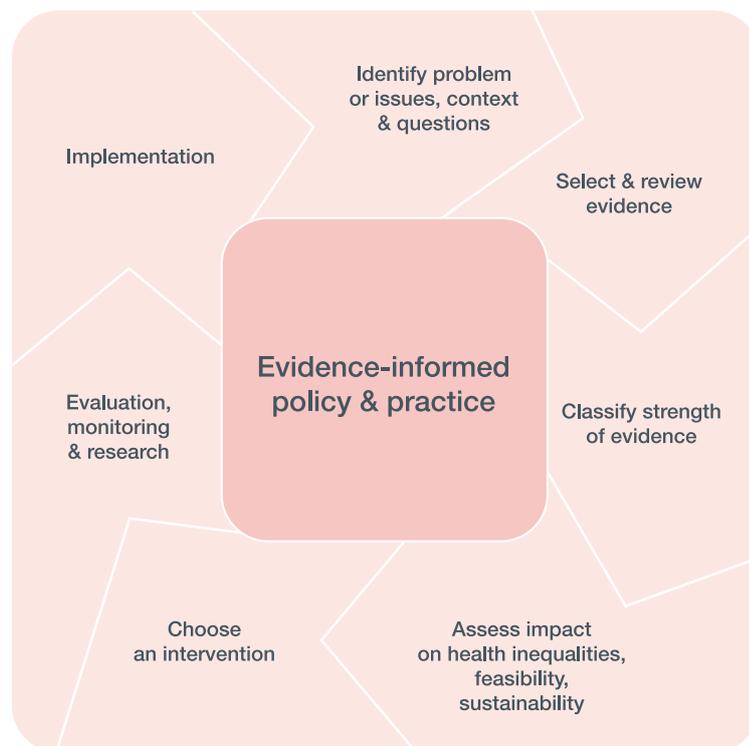
health

Making decisions about interventions

A guide for evidence-informed
policy and practice

Making decisions about interventions

A guide for evidence-informed policy and practice



If you would like to receive this publication in an accessible format, please phone +61 3 9096 0393 using the National Relay Service 13 3677 if required, or email: evidence.evaluation@health.vic.gov.au.

This document is also available in PDF format on the internet at:
www.health.vic.gov.au/healthpromotion/evidence_evaluation/cdp_tools.htm

ISBN 978 0 9807670 2 5

Published by the Prevention and Population Health Branch, Victorian Government
Department of Health, Melbourne, Victoria

© Copyright, State of Victoria, Department of Health, 2010

This publication is copyright, no part may be reproduced by any process except
in accordance with the provisions of the *Copyright Act 1968*.

Authorised by the State Government of Victoria, 50 Lonsdale Street, Melbourne.
Printed on sustainable paper by PMI Corporation, 400 George St, Fitzroy 3065.
December 2010 (1010025)

Suggested citation: Haby M and Bowen S 2010, *Making decisions about interventions. A guide for evidence-informed policy and practice*, Prevention and Population Health Branch, Victorian Government Department of Health, Melbourne.

Contents

Introduction	1
How to use this guide	1
Step 1. What is the issue?	3
Define the issue	3
Identify the determinants of the issue	3
Step 2. What is your decision-making context?	4
Step 3. Clarify your research question and inclusion criteria	5
Determine which study types to include	5
Step 4. Specify your search strategy and compile the evidence	6
If quantitative research evidence is absent, go to Step 5	6
If you find quantitative research evidence, go directly to Step 6	6
Step 5. Use program theory, program logic, expert opinion and/or qualitative research	6
Definitions	6
Step 6. Review the evidence	7
Evidence quality	7
Generalisability	7
Step 7. Classify the strength of the evidence	8
Research design as indicator of evidence strength	8
Strength of evidence of intervention effectiveness	8
Step 8. Assess the likely impacts on health inequalities, feasibility, acceptability and sustainability of the interventions	10
Other issues for consideration (also known as second-stage filter criteria)	11
Step 9. Choose interventions	12
Step 10. Link to monitoring, evaluation and research	12
The need for continual improvement	12

Step 11. Consider how the interventions should be implemented	13
Fidelity	13
A framework for implementation	13
Implementation guides	14
Put it all together	15
Some guiding principles	15
References	16
Other Health Development Unit tools	16

Introduction

Part of making our health promotion and disease prevention strategies more effective involves acquiring skills in using evidence to guide decisions about interventions. Incorporating evidence can mean that the intervention is more likely to achieve a health benefit, as well as attract funding. This guide outlines techniques for the health promotion and disease prevention workforce to make better use of evidence in both policy and practice.

The guide refers primarily to evaluation and research evidence on the effectiveness and cost-effectiveness of interventions, to help answer questions like ‘What interventions work?’ and ‘Is the intervention cost-effective?’ Research evidence also has an important role in making other types of decisions, such as ‘What is the issue?’ and ‘How should an intervention be implemented?’

Deciding what interventions to invest in requires other types of information, including contextual information (for example, current government policy, plans and budget) and consideration of other issues, such as the impact on health inequalities, feasibility, sustainability and acceptability to stakeholders.

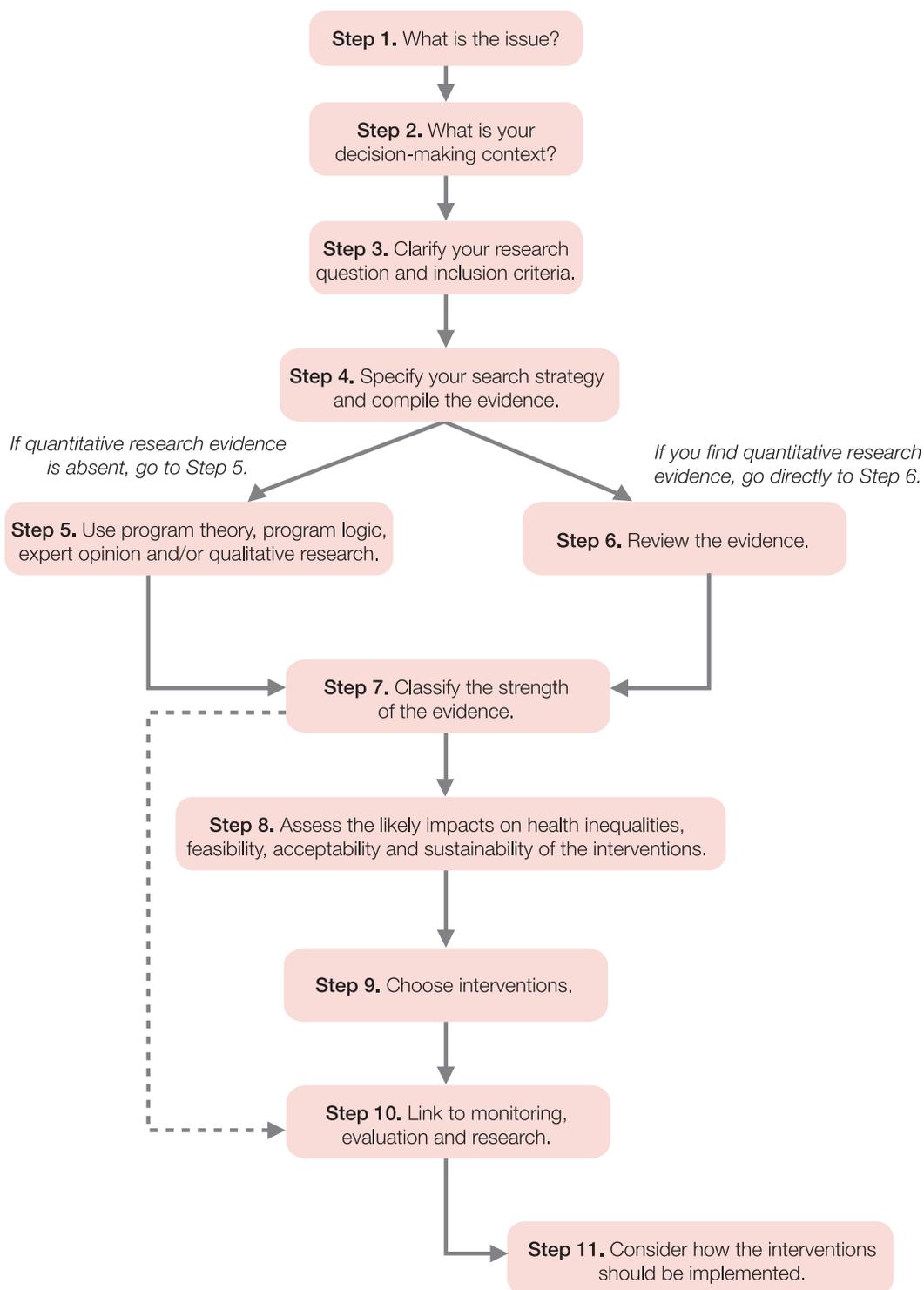
This guide brings these issues together in the context of making decisions about interventions.

How to use this guide

Follow Steps 1–11, as presented in Figure 1:

- Step 1.** What is the issue?
- Step 2.** What is your decision-making context?
- Step 3.** Clarify your research question and inclusion criteria.
- Step 4.** Specify your search strategy and compile the evidence.
 - If quantitative research evidence is absent, go to Step 5.
 - If you find quantitative research evidence, go directly to Step 6.
- Step 5.** Use program theory, program logic, expert opinion and/or qualitative research.
- Step 6.** Review the evidence.
- Step 7.** Classify the strength of the evidence.
- Step 8.** Assess the likely impacts on health inequalities, feasibility, acceptability and sustainability of the interventions.
- Step 9.** Choose interventions.
- Step 10.** Link to monitoring, evaluation and research.
- Step 11.** Consider how the interventions should be implemented.

Figure 1 Steps to making decisions about interventions for policy and practice



Step 1. What is the issue?

Define the issue

The first step is to define the issue at hand. For example, you may have to deal with the high prevalence of a condition, such as Type 2 diabetes; or a risk factor, such as physical inactivity. You may also think about this in terms of outcomes, rather than as a problem to be overcome (for example, an increase in healthy eating). You should also consider whether you need to focus on a particular target group, such as children, adolescents or people with disabilities. Determining whether inequalities exist will also help identify the target group (for example, Aboriginal populations which have lower levels of physical activity). Research evidence can help clarify the issue, and includes prevalence studies, surveillance and monitoring data.

The Health Intelligence Unit, Prevention and Population Health Branch can help with surveillance and monitoring data for adult Victorians at the Health status of Victorians website <www.health.vic.gov.au/healthstatus/index.htm>.

Data on children and adolescents is available from the Outcomes for Victoria's Children website <www.education.vic.gov.au/about/directions/children/default.htm>.

Identify the determinants of the issue

To help identify potential solutions, you may also contemplate the determinants of the health outcome (for example, social isolation, unemployment and so on). Defining these determinants requires evidence of a causal relationship with the health outcome, which in turn requires a range of data and research evidence, such as cohort or longitudinal and experimental studies (Hill 1965). Qualitative research evidence can also improve your understanding of why and how causal relationships exist from the perspective of the individual.

For more information on how to use qualitative research evidence, refer to *How to use qualitative research evidence when making decisions about interventions* (Holt 2009).

Apart from examining the research evidence, you may also consider seeking input from other relevant stakeholders in determining the issue or the outcome sought.

Example answers to the question 'What is the issue?'

The following statements are possible responses:

- Low levels of physical activity in the whole population, but even lower in groups with low socio-economic status (SES) and among adolescent females.
- Rising levels of obesity in children and adolescents in the whole population, but particularly in some cultural groups and those with low SES.
- Barriers to healthy eating in Aboriginal communities.

Step 2. What is your decision-making context?

Getting the context clear helps to focus your literature search and strategy, and ensure your work meets the needs of stakeholders.

Table 1 Contextual considerations

Consideration	Examples
Relevant policy frameworks	<i>A Fairer Victoria, National Reform Agenda, Go For Your Life Strategic Plan 2006–2010, National Partnership Agreement on Preventive Health, the grey literature¹ (for example, government reports such as <i>Promoting Better Health Through Healthy Eating and Physical Activity</i>), government plans and budget commitments</i>
The level of decision making	multi-program, discrete program, individual intervention, state, region and local government area
The scope of interventions needed	to select a range of interventions that cover all health promotion action areas to address a risk factor by focusing on its determinants, rather than on individual behaviour change
The reason for choosing interventions	future planning, current crisis, need to find best interventions for a specific policy commitment
What is likely to be funded or has political interest	interventions that help close the gap by improving the health of Indigenous Australians only low-cost interventions will be considered at times of budgetary constraint

Example problem

Low levels of physical activity in the whole population, but even lower in groups with low SES and among adolescent females.

Considerations

Relevant policy frameworks may include:

- *Go For Your Life Strategic Plan 2006–2010*
- *A Fairer Victoria*
- *Health promotion priorities*
- *National Partnership Agreement on Preventive Health.*

The level of decision making is state and local government area.

Health promotion approaches that consider possible action by all relevant government departments; an approach that covers the main health promotion action areas.

The reason for the decision involves future planning.

Limitations on the interventions include the budget, or that regulation will not be considered at this time.

A program logic model may help to clarify how the issue and proposed solution (interventions/program/policy) fit together and are expected to lead to a particular health outcome.

Guidance on using program logic is available from the Evidence and evaluation for health promotion and disease prevention website: <www.health.vic.gov.au/healthpromotion/evidence_evaluation/cdp_tools.htm>. See also Step 5, below, for further discussion on program logic in the event of a lack of research evidence.

¹ 'Grey literature' refers to publications issued by government, academia, business and industry, but is not controlled by commercial publishing interests, for example, reports, working papers, government documents and newsletters.

Step 3. Clarify your research question and inclusion criteria

This section assumes that you are looking for research evidence of what interventions work (their efficacy or effectiveness) and whether they are cost-effective. However, to go further, you need to clarify your questions by specifying your inclusion criteria, including:

- the populations to which your issue relates
- intervention types
- comparisons (for example, no intervention, other programs, treatment programs)
- outcomes
- study types (for example, systematic reviews, controlled trials, economic evaluations).

You may have more than one question; therefore, you may need to specify these details for each question.

Example problem

Low levels of physical activity in the whole population, but even lower in groups with low SES and among adolescent females.

Inclusion criteria

You may use inclusion criteria such as these when deciding whether to keep and use any research evidence you find. They should also help you to specify your review question.

- Populations: whole population, low SES or adolescent females.
- Interventions: health promotion, disease prevention or primary prevention.
- Comparisons: no intervention, current practice or lower intensity intervention.
- Outcomes: physical activity or obesity.
- Study types: systematic reviews or economic evaluations.

For this example, suitable review questions may be:

- What primary prevention interventions are effective (or cost-effective) in increasing physical activity levels in adolescent females?
- What primary prevention interventions are effective (or cost-effective) in increasing physical activity levels in low SES groups?

For more help with this see *How to search for evidence of intervention effectiveness and cost-effectiveness* <www.health.vic.gov.au/healthpromotion/downloads/search_evidence_effectiveness.pdf>. Note that your answers to Steps 1 and 2 will also help you with this question.

Determine which study types to include

Start with systematic reviews and cost-effectiveness analyses, and then go down the strength of evidence categories (see Step 7, below) as necessary. If you don't find any quantitative evidence for effectiveness, but need to formulate a suitable intervention, consider making an argument based on expert knowledge and opinion, theoretical rationale, program logic and/or parallel evidence (see Step 5, below).

Qualitative research can provide a detailed understanding of how, in what circumstances, in what ways and for which types of people a proposed intervention might work. Include qualitative research when you need new approaches (innovation). However, if the intervention is implemented, you must undertake an appropriate evaluation, so that you can make adjustments or change course if necessary, and add to the evidence base.

Step 4. Specify your search strategy and compile the evidence

How you formulate your search strategy depends on the review questions or inclusion criteria you specified. Electronic databases for systematic reviews, controlled trials and economic evaluations are listed in *How to search for evidence of intervention effectiveness and cost-effectiveness* and on the Evidence and evaluation for health promotion and disease prevention website.² If you need to go further, or need help specifying a search strategy, seek the help of a researcher and/or information specialist in your institution's library.

Other helpful documents include syntheses of evidence, such as evidence summaries, rapid reviews, evidence-based practitioner resources and policy briefs that have already been undertaken by other groups (for example, NSW Centre for Overweight and Obesity, Sax Institute). Good syntheses relating to your review questions will minimise the amount of extra searching you need to do.

For syntheses and links to external sources of evidence, see the *Evidence and evaluation for health promotion and disease prevention* <www.health.vic.gov.au/healthpromotion/evidence_evaluation/cdp_sources_evidence.htm>.

If quantitative research evidence is absent, go to Step 5.

If you find quantitative research evidence, go directly to Step 6.

Step 5. Use program theory, program logic, expert opinion and/or qualitative research

You may be confronted with a lack of quantitative research evidence, but nevertheless need to recommend an action (innovation). In such cases, use program theory, program logic and/or expert opinion to formulate an intervention.

Qualitative research provides some understanding of how and why an intervention may or may not be successful. Parallel evidence also allows you to draw on what has worked for other health issues. When you bring it all together, you can also draw on these other issues (see Step 9, below) to make your case for the intervention and ensure strong public support.

Definitions

The term 'program logic' is frequently used interchangeably with the terms 'program theory' and 'logic model'.

- Program theory: a formal description of the program's concept and design. It breaks down the components of the program and shows anticipated short - and long-term effects (see also Program evaluation at Wikipedia).
- Program logic: in its simplest form a program logic model is a picture of how a program is expected to work—a flow chart: 'This model provides a road map of your program, highlighting how it is expected to work, what activities need to come before others, and how desired outcomes are achieved' (W.K. Kellogg Foundation 2004).

² Some databases are free (for example, PubMed); whereas others require institutional subscription (for example, Medline).

Step 6. Review the evidence

Evidence quality

Assessing intervention-level research evidence should encompass quality of study methods, validity, applicability and transferability of findings, strength of the research evidence and interpretation of study results (Rychetnik et al. 2002).

The quality of research evidence varies, and this should be considered when using research evidence. Guides developed by the Critical Appraisal Skills Program (CASP) can be used to help with the process of critically appraising various types of research (including qualitative research). Access to skills in epidemiology or research will help with this.

For help with this see Appraisal Tools at the UK's NHS website <www.sph.nhs.uk/what-we-do/public-health-workforce/resources/critical-appraisals-skills-programme>.

The advantage of using systematic reviews from Cochrane or from the Database of Abstracts of Reviews of Effects (DARE) is that they are quality assured and limitations are highlighted. Similarly economic evaluations on the NHS Economic Evaluation Database (NHS EED) include an appraisal by an independent researcher with skills in the area.

See:

- Cochrane Library at: <www.thecochranelibrary.com/view/0/index.html>
- DARE at: <www.crd.york.ac.uk/crdweb/Home.aspx?DB=DARE>
- NHS EED at: <www.crd.york.ac.uk/crdweb/Home.aspx?DB=NHS%20EED>

See an example at: **Economic evaluation of a community-based obesity prevention program in children: the APPLE project** <<http://www.crd.york.ac.uk/CRDWeb/ShowRecord.asp?ID=22010000750>>

Generalisability

You must consider whether research evidence is generalisable to your population or context. This requires a judgment based on what you know about the population in which the research was conducted, and about your population. Consider whether they differ in ways that may affect how or if the intervention will work, for example, cultural beliefs, gender or health systems.

Step 7. Classify the strength of the evidence

Research design as indicator of evidence strength

One way of assessing the quality of the research evidence is to look at the strength of evidence based on research design. These levels of evidence are relevant to assessing evidence of intervention effectiveness, but many other types of research evidence use different hierarchies of study design, for example, qualitative research and diagnostic tests.

Strength of evidence of intervention effectiveness

We recommended that you use the categories outlined in Table 2 Strength of evaluation and research evidence for intervention effectiveness. These are based on NHMRC levels of evidence (National Health and Medical Research Council 1999) plus experience from other public health projects (Department of Human Services 2007, Haby et al. 2006). These categories consider the quantity and quality of research. We do not currently advocate using the categories 'emerging evidence' or 'promising practice', because there is no clear and consistent definition for these.

The size of effect is also important, because if the impact of an intervention is large in a lower-level study design, you can have more confidence that the impact would remain positive with a more rigorous study design (though it may be smaller).

If you have come to this step via Step 5, the evidence for the proposed intervention will likely fit into strength of evidence Category 6 Table 2, that is, no evidence of effectiveness. However, if the proposed intervention is supported by indirect, parallel or modelling evidence as well as sound theoretical rationale and program logic, you may be able to make the case that it fits into strength of evidence Category 3.

Table 2 Strength of evaluation and research evidence for intervention effectiveness

Category	Strength	Description	NHMRC designation of levels of evidence
1	Strong evidence of effectiveness	One systematic review or meta-analysis of comparative studies; or several good quality randomised controlled trials or comparative studies.	Levels I–III
2	Sufficient evidence of effectiveness	One randomised controlled trial; one comparative study of high quality; or several comparative studies of lower quality.	Levels II–III
3	Some evidence of effectiveness	Impact evaluation (internal or external) with pre- and post-testing; or indirect, parallel or modelling evidence with sound theoretical rationale and program logic for the intervention.	Level IV
4	Weak evidence of effectiveness	Impact evaluation conducted but limited by pre- or post-testing only; or only indirect, parallel or modelling evidence of effectiveness.	Level IV
5	Inconclusive evidence of effectiveness	No position could be reached because existing research/evaluations give conflicting results; or available studies are of poor quality or have very small sample sizes.	
6	No evidence of effectiveness	No position could be reached because no evidence of impact/outcome available.	
7	Evidence of ineffectiveness	Good evaluations (high quality comparative studies) show no effect or a negative effect.	Levels I–III

If you use qualitative research, you can also refer to Daly et al. (2007).

Step 8. Assess the likely impacts on health inequalities, feasibility, acceptability and sustainability of the interventions

In this stage you will assess the likely impact of each of the possible interventions on health inequalities. Assess which health inequality category the intervention fits into (see the list of health inequalities categories below). This assessment addresses the capacity of the intervention to affect inequity in the distribution of the health condition or risk factor. The special needs groups considered include those with a lower SES, people of non-English speaking backgrounds, Aboriginal and Torres Straight Islanders or those in a rural/remote residence (Haby et al. 2004). In addition to the categorisation below, it may also be useful to descriptively highlight issues that may affect access to, or utilisation of, the intervention.

If your assessment reveals the likelihood of a negative effect of the intervention on health inequalities (that is, in Category e, in Table 3 Health inequalities categories, below), you should either reject the intervention or consider how it could be modified to give it a more positive impact on health inequalities. However, we recommend caution because, depending on the modifications you make, this may impact on its effectiveness. You must document the changes made and conduct suitable evaluation.

If you modify an intervention:

- document what you are doing
- evaluate rigorously.

If the impact on health inequalities is unknown, you need to ensure that this is measured if implemented.

Table 3 Health inequalities categories

Category	Definition
a	Intervention targeted for potential health improvement at population level, with an increasing rate of improvement with each step down the socio-economic gradient
b	Some health improvement at population level, with greater rate of improvement for the most disadvantaged groups
c	Likely health improvement for all groups
d	Likely health improvement for the most disadvantaged groups only
e	Greater rate of health improvement likely for advantaged groups, increasing the gap
f	Unknown impact on health inequalities

Other issues that you might consider when choosing among interventions and/or to guide implementation are listed below, along with definitions. These require a judgment and are not usually based on quantitative data. Qualitative research can help here.

Definitions are based on those developed for the Assessing Cost-Effectiveness (ACE) projects and the catalogue of evidence-based interventions for children (Carter et al. 2009, Department of Human Services 2007, Haby et al. 2004).

Other issues for consideration (also known as second-stage filter criteria)

Feasibility

This criterion concerns the ease of implementing the intervention, considering factors such as:

- the availability of appropriate expertise/workforce to implement the intervention on a national or statewide scale
- the potential size of the financial commitment
- the ease of implementation
- the timescale for implementation.

Acceptability to stakeholders

This criterion refers to the anticipated acceptability of the proposed interventions to the various stakeholders affected by the intervention.

Stakeholders include:

- children and adolescents
- parents and carers
- teachers
- the general community
- third-party funders
- health service providers
- government and not-for-profit organisations
- the private sector.

Sustainability

This criterion refers to the durability of the intervention considering factors such as:

- the level of ongoing funding support required
- the community empowerment and capacity building required and level of policy support likely to be achieved
- the likelihood of required changes in behaviours, practices and attitudes being achieved on an ongoing basis.

Potential for side-effects

This criterion refers to both positive and negative side-effects arising from an intervention but which are not already considered or quantified in the research. These might include impacts such as:

- other health consequences (for example, anxiety/depression stemming from stigmatisation)
- environmental consequences (for example, less pollution/congestion around schools)
- social capital (for example, from empowered communities or improved social networks)
- increased household costs
- other economic consequences (for example, impact on industry).

Cultural reach

This criterion refers to whether the program has been trialled with people in disadvantaged communities, Indigenous people or people from culturally and linguistically diverse backgrounds. Whether it was trialled in Australia compared to overseas could also be important.

Ethics

This criterion refers to any ethical considerations and impact on human rights.

Ideally, you should also have information on total health benefit, total cost of the program and cost-effectiveness to guide your decision, but this is rarely available. If cost-effectiveness information is available this should have been found through Steps 3 and 4.

Step 9. Choose interventions

Choosing an intervention involves considering the issues raised in points 1–8 above.

Balancing these concerns may be difficult.

In health promotion and disease prevention, we rarely have the luxury of deciding between several interventions based on good quality research evidence. Interventions are even less likely to satisfy all of the filters, issues and considerations mentioned here.

Step 10. Link to monitoring, evaluation and research

The need for continual improvement

To ensure a continual improvement in the evidence base for health promotion and disease prevention, you should consider carefully whether monitoring, evaluation or further research is needed for your choice of intervention. The categories from the strength of evidence filter (Table 2 Strength of evaluation and research evidence for intervention effectiveness, above) should guide this process.

For Categories 5, 6 and 7

There is a research gap regarding effective interventions and further research may be required to determine alternative interventions. Use this identified research gap to inform future research priority-setting undertaken by your organisation (or others). Alternatively, if it is necessary to act, ensure that the action undertaken is well evaluated—and preferably implemented on a small scale (for example, as a pilot) until the results of the evaluation are known.

For Categories 3 and 4

If the intervention is implemented, it should be well evaluated; that is, an impact evaluation should be undertaken with a comparison group.

For Categories 1 or 2

Measuring of impacts through monitoring of impact/outcomes only may be sufficient. However, if this is a new context or population, or the intervention has particular implementation issues, a good evaluation may be necessary.

For more information on evaluating interventions see: *Evaluation framework for health promotion and disease prevention initiatives* <www.health.vic.gov.au/healthpromotion/downloads/evaluation_framework_hp_disease_prevention_programs.pdf>.

Step 11. Consider how the interventions should be implemented

Fidelity

Once you have chosen an effective and appropriate intervention, consider how it can be implemented to ensure maximum effectiveness. This requires work to ensure that the fidelity³ of the intervention is maintained while maximising transferability to different settings. This will be most successful if performed collaboratively by people who:

- understand the research (and/or with the input of the researchers)
- will be implementing the intervention in their setting or organisation
- support the intervention (for example, the sponsoring organisation).

Once established, quality assurance processes should be introduced to monitor fidelity over the longer term.

A framework for implementation

The implementation framework developed and applied by the US Centers for Disease Control and Prevention (CDC): Replicating Effective Programs (REP) is a helpful resource (Kilbourne et al. 2007).

Although developed for health services interventions, the principles and processes may also be applicable to health promotion interventions.

REP consists of four phases:

1. pre-conditions (for example, identifying need, target population, and suitable intervention)
2. pre-implementation (for example, intervention packaging and community input)
3. implementation (for example, package dissemination, training, technical assistance, and evaluation)
4. maintenance and evolution (for example, preparing the intervention for sustainability).

³ Implementation fidelity, sometimes called adherence or integrity, is a determination of how well a program is implemented, compared with the original program design. Fidelity is important because changes to the original program design may reduce the effectiveness of the program.

The process involves researchers, intervention developers, a community working group and organisations participating in implementation.

See: Implementing evidence-based interventions in health care: application of the replicating effective programs framework <www.implementationscience.com/content/2/1/42>.

*Some examples of action guides that achieve replication are available from *The Community Health Promotion Handbook—Action Guides to Improve Community Health* <www.prevent.org/Action-Guides/The-Community-Health-Promotion-Handbook.aspx>.*

Work may be needed though to ensure that they are appropriate for your particular setting and population.

Implementation guides

If you work in government, the two implementation guides published by the Australian Government Department of the Prime Minister and Cabinet will be useful (see *Implementation Plans Guidelines*). An implementation plan is a detailed project management tool for a specific policy measure or package of measures designed to assist agencies to manage and monitor implementation effectively. *The Better Practice Guide (Implementation of Programme and Policy Initiatives—Making implementation matter)* is an excellent resource that considers issues such as governance, risk management, planning, procurement and contract management, stakeholder management, resources, communication, and monitoring and review, and is intended for public sector executives and senior officers responsible for overseeing implementation of an initiative. *The Guide to Preparing Implementation Plans* outlines Australian Government requirements for plans and includes similar elements to the *Better Practice Guide*, but is more applied.

Both the *Implementation of Programme and Policy Initiatives—Making implementation matter* <www.anao.gov.au/uploads/documents/Implementation_of_Programme_and_Policy_Initiatives.pdf> and the *Guide to Preparing Implementation Plans* <www.dpmc.gov.au/implementation/docs/implementation_guidelines.pdf> are available from *Implementation Plans Guidelines* <www.dpmc.gov.au/implementation/implementation_guide.cfm>.

Put it all together

How you put this information together depends on what type of document you need to write, for example, policy proposal, evidence case, action plan, policy brief or practitioner resource.

Some guiding principles

- Good writing skills are essential. Good writing tells a story, links ideas and is concise as possible.
- Most people do not read beyond the executive summary, so this should contain the main messages.
- Tables and figures are helpful.

Making decisions that are informed by evidence is rarely easy, but is very important, because these decisions are more likely to produce better health and wellbeing outcomes for the population. As skills in evidence and evaluation increase and the evidence base improves the task should become a little easier.

References

- Carter R, Moodie M, Markwick A, Magnus A, Vos T, Swinburn B and Haby MM 2009, Assessing cost-effectiveness in obesity (ACE-Obesity): an overview of the ACE approach, economic methods and cost results, *BMC Public Health*, vol. 9, p. 419, <<http://www.biomedcentral.com/1471-2458/9/419>>.
- Daly J, Willis K, Small R, Green J, Welch N, Kealy M and Hughes E 2007, A hierarchy of evidence for assessing qualitative health research, *Journal of Clinical Epidemiology*, vol. 60, pp. 43-49.
- Department of Human Services 2007, *Strategies for improving outcomes for children*. A catalogue of evidence-based interventions, Melbourne, Victorian Government Department of Human Services, viewed 20 October 2010, <<http://www.education.vic.gov.au/healthwellbeing/childyouth/catalogue/updates.htm>>.
- Haby MM, Carter R, Mihalopoulos C, Magnus A, Sanderson K, Andrews G and Vos T 2004, Assessing Cost-Effectiveness – Mental Health: introduction to the study and methods, *Australian and New Zealand Journal of Psychiatry*, vol. 38, pp. 569-578, <<http://onlinelibrary.wiley.com/doi/10.1111/j.1440-1614.2004.01420.x/pdf>>.
- Haby MM, Vos T, Carter R, Moodie M, Markwick A, Magnus A, Tay-Teo K & Swinburn B. 2006, A new approach to assessing the health benefit from obesity interventions in children and adolescents: the assessing cost-effectiveness in obesity project, *International Journal of Obesity*, vol. 30, pp. 1463-1475.
- Hill AB 1965, The Environment and Disease: Association or Causation?, *Proceedings of the Royal Society of Medicine*, vol. 58, pp. 295-300, <<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1898525/?tool=pubmed>>.
- Holt L 2009, *How to use qualitative research evidence when making decisions about interventions*, Melbourne, Health Development Unit, Victorian Government Department of Health, viewed 20 October 2010, <http://www.health.vic.gov.au/healthpromotion/evidence_evaluation/cdp_tools.htm>.
- Kilbourne AM, Neumann MS, Pincus HA, Bauer MS and Stall R 2007, Implementing evidence-based interventions in health care: application of the replicating effective programs framework, *Implementation Science*, vol. 2, p. 42, viewed 20 July 2010, <<http://www.implementationscience.com/content/2/1/42>>.
- National Health and Medical Research Council 1999, *A guide to the development, implementation and evaluation of clinical practice guidelines*, NHMRC, Canberra, viewed 20 October 2010, <<http://www.nhmrc.gov.au/publications/synopses/cp30syn.htm>>.
- Rychetnik L, Frommer M, Hawe P and Shiell A 2002, Criteria for evaluating evidence on public health interventions, *Journal of Epidemiology and Community Health*, vol. 56, pp. 119-127, <<http://jech.bmj.com/content/56/2/119.full.pdf+html>>.
- W.K. Kellogg Foundation 2004, *Logic model development guide*, East Battle Creek, Michigan, viewed 20 July 2010, <<http://www.wkkf.org/knowledge-center/resources/2010/Logic-Model-Development-Guide.aspx>>.

Other Health Development Unit tools

Guideline for evidence summaries for health promotion and disease prevention interventions.

How to search for evidence of intervention effectiveness and cost-effectiveness.

How to use qualitative research evidence when making decisions about interventions.

Evaluation framework for health promotion and disease prevention initiatives.

Impact and outcome indicators for nutrition, physical activity and obesity programs.

Evaluation tools for nutrition, physical activity and obesity programs.

Understanding program logic.

All tools are available from the Victorian Government Health Promotion website:

www.health.vic.gov.au/healthpromotion/evidence_evaluation/cdp_tools.htm

