Public Health Nutrition: Identifying Models and Effective Approaches to Workforce Development

by

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for

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About the SA Community Health Research Unit

SACHRU provides advice on research and evaluation to a range of groups including community health services, community organisations and primary health care projects. In addition the Unit conducts research and evaluation projects that are either funded from its core budget from the Department of Human Services, or from external sources. SACHRU runs training seminars on topics such as Needs Assessment, Program Planning, Questionnaire Design, Report Writing and Evaluation. Other activities include writing peer reviewed articles, and disseminating information to the community through publication.

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We have been buoyed by the enthusiasm and encouragement of the Reference Group and sincerely thank each of the members for contributing their time and skills to ensure the literature review is relevant to diverse workforces in both metropolitan and country South Australia.

We also wish to thank our colleagues at SACHRU. Megan Kyriacou undertook the extensive literature search of library databases and assisted in the identification and retrieval of the ‘grey’ literature that informed this report. Helma Hooper desktop published the final report.
**Abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AHPA</td>
<td>Australian Health Promotion Association</td>
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<td>AHW</td>
<td>Aboriginal Health Worker</td>
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<td>ATSI</td>
<td>Aboriginal and Torres Strait Islander</td>
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<td>DAA</td>
<td>Dietitians Association of Australia</td>
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<td>DHS</td>
<td>Department of Human Services (SA)</td>
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<td>EWA</td>
<td>Eat Well Australia</td>
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<td>EWSA</td>
<td>Eat Well South Australia</td>
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<td>GHR</td>
<td>Generational Health Review</td>
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<tr>
<td>NATSINAP</td>
<td>National Aboriginal and Torres Strait Islander Nutrition Strategy and Action Plan</td>
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<tr>
<td>NCETA</td>
<td>National Centre for Education and Training on Addiction</td>
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<td>NHMRC</td>
<td>National Health &amp; Medical Research Council</td>
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<td>NOOSR</td>
<td>National Office of Overseas Skills Recognition</td>
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<td>NPHP</td>
<td>National Public Health Partnership</td>
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<td>PHAA</td>
<td>Public Health Association of Australia</td>
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<td>PHC</td>
<td>Primary Health Care</td>
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<td>PHSWOW</td>
<td>Public Health Schools Without Walls</td>
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<td>SACHRU</td>
<td>South Australian Community Health Research Unit</td>
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<td>SIGNAL</td>
<td>Strategic Inter-Governmental Nutrition Alliance</td>
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<td>WHO</td>
<td>World Health Organisation</td>
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1. Executive Summary

The Nutrition Workforce Development for Primary Health Care project was initiated as part of implementing Eat Well South Australia, a strategy to improve nutrition for South Australians. An important theme of the strategy is the need to engage a broad range of organisations from both health and non-health sectors in achieving change. This is reflected throughout the strategy by a focus on partnerships and workforce development.

Overall, the Nutrition Workforce Development for Primary Health Care project is envisaged as containing the following three phases:

1. Identifying effective approaches to workforce development for the primary health care and other relevant non-health sector workforces
2. Establishing strategies, in conjunction with key groups, to enhance workforce capacity to contribute to addressing Eat Well South Australia priorities.
3. Implementing and evaluating workforce development approaches to improving population health via improved nutrition.

This literature review Public Health Nutrition: Identifying Models and Effective Approaches to Workforce Development is concerned with the first of these phases. The review has drawn on published literature, reports and expert knowledge to identify models and effective approaches to workforce development for the nutrition, primary health care and other relevant non-health sector workforces.

Three main approaches to workforce development were identified: action research, capacity building and competencies. None of these approaches appears to have been evaluated systematically, in terms of their contribution to workforce development.

The action research approach, which here includes action learning, focuses on generic skills and abilities, building autonomy and professional knowledge and developing practice wisdom. The approach can be applied at individual worker, team or organisational level. Concepts such as community partnerships, intersectoral work and consideration of equity can be explored and developed. This makes it ideally suited as a method to reorientate the workforce and services to a primary health care approach.
and to increase individual and organisational capacity to undertake primary health care.

Capacity building aims to increase the range of people, organisations and communities who are able to address health problems. It is an approach that encourages partnerships, critical problem solving and leadership. Capacity building builds on existing structures and capacities within individuals, groups, organisations and systems. It is explicitly focused on the sustainability of health promotion initiatives following the initial investment phase.

The competencies approach tends to be discipline specific, and focuses on technical expertise, standards and accreditation, and safety and quality of services. Competencies are assessed and applied at individual worker level and can be standardised across services or (inter-) nationally. The competency of workers may be assessed in terms of their knowledge, or by observing the results of their actions. Increasingly, the competency approach is also being used to assess generic skills (for example, advocacy, partnership development, planning and evaluation).

The review next illustrates the three approaches to workforce development using case study examples and discusses the lessons for public health nutrition workforce development. There appears to have been little documented use or evaluation of the action research model in this setting. The health sector has instead taken on a capacity building model as first developed in NSW. These case studies demonstrate the importance of organisational, community and environmental support. This support might be realised as ‘champions’ within an organisation, supportive policies and practices, and the availability of on-site workforce development opportunities and support to take advantage of these. Workforce development needs to be planned, comprehensive and integrated with the goals of the organisation. In a primary health care context the notion of ‘workforce’ may be extended to include the wider community of stakeholders. A partnership or multidisciplinary approach to workforce development facilitates exchange of skills and knowledge but this requires trust and good working relationships in order to be successful.
Some barriers and challenges were identified in the action research and capacity building approaches. Information provision on its own is insufficient to bring about change in behaviour. A strength of action research and capacity building approaches is that there is a focus on transferring new knowledge and skills into practice. This is more likely to occur when there is reflection and action at system, organisational and individual levels. A barrier to taking up workforce development opportunities is the financial and time constraints on workers in most primary health care organisations. This again stresses the need for organisational and system support.

An action research/capacity building approach starts from the premise that improving population health outcomes related to nutrition is a complex goal that needs a primary health care approach which encapsulates community participation, a focus on the socio-economic determinants of nutritional health, a partnership approach, healthy public policy, intersectoral collaboration, and a comprehensive range of strategies. Effective implementation of a primary health care approach requires a range of skills and (re)orientation of health services and the health workforce. Workforce development incorporates, for example, a focus on developing skills in advocacy, community participation and partnership approaches across a broad range of disciplines.

The competency model has been developed over the last 10 – 15 years, mainly by professional associations and/or in consultation with the relevant workforce. The main benefits are consistency of skills and knowledge, portability of qualifications and quality assurance. Other than the use of accreditation to meet quality assurance indicators, there appears to have been little evaluation of the effectiveness of this model for workforce development in the public health nutrition sector. A question that arose in one case study concerned the cost of training and education towards accreditation, and the additional costs of employing accredited workers. This is part of a broader question about who should pay for quality assurance within an organisation.

A competency approach to improving population health outcomes related to nutrition focuses on the available evidence to support specific interventions and the skills that are required to implement these. The development of competencies facilitates assessment, accreditation and standardisation of skill sets.
In order to draw on the strengths of each approach, a model that uses action research, capacity building and competencies is proposed. Figure 1.1 illustrates a workforce development model that encompasses evidence-based practice in the development of policies and programs and the use of action research to identify what workforce development is needed to implement these. Workforce development strategies are then implemented using competencies or capacity building approaches as appropriate, giving consideration to the context and target population. Reflection and evaluation occurs at each step and feeds back to policy or program development.

Figure 1.1  A Model for Workforce Development
In summary, the review findings are that:

- there does not appear to be a body of evidence on workforce development methodologies in the peer-reviewed literature or the grey literature reviewed
- there appears to be little evaluation of workforce development models and programs for the primary health care, including specialist nutrition, workforces
- there are acknowledged limitations of current education/training in supporting the primary health care workforce to incorporate change
- the focus on workforce alone is not sufficient – workforce development approaches tend to be individualistic, rather than environmental
- there is a need to integrate workforce development into the broader context of the organisation and public health policy
- capacity building and competency-based approaches both have a place and show promise
- transfer of new evidence into practice is key and needs organisational support as well as support for the primary health care workforce.

**What do we need to know in order to take the next step?**

A number of questions arise that need to be considered in establishing strategies and implementing workforce development. Some questions are relatively simple, others will require broad engagement by policy makers and the primary health care sector.

1. What are the future needs and directions in health services and public health nutrition (eg policies, structures, programs) to address South Australia’s nutrition priorities?
2. What are the implications of these for workforce development – at health service, regional and state levels and across government departments?
3. Which are the workforces with potential to contribute to making improvements in nutrition-related health outcomes in priority populations or around priority issues?
4. Who should be the initial target for workforce development – nutritionists/dietitians or the broader primary health care workforce, or both?
5. What are the characteristics – number, roles and positions – of the specialist nutrition workforce and other primary health care workforces whose work encompasses addressing nutrition issues?
6. What current education and training is available in SA in food and nutrition issues for public health and primary health care, including specialist nutrition, workforces?

7. What theories of behaviour change are most appropriate for workforce development?

8. What approaches to workforce development are most effective and for whom?

9. What resources are needed to support workforce development and where might they be found?
2. Introduction

The Nutrition Workforce Development for Primary Health Care project was initiated as part of implementing Eat Well South Australia, a strategy to improve nutrition for South Australians. An important theme of the strategy is the need to engage a broad range of organisations from both health and non-health sectors in achieving change. This is reflected throughout the strategy by a focus on partnerships and workforce development.

2.1 Why develop the public health nutrition workforce?

Good nutrition is fundamental to good health throughout life. It underpins healthy growth and development (from before birth), contributes to general health and wellbeing, positive mental health and quality of life and plays a key role in preventing disease and disability.

There is strong evidence for the benefits to individuals and the social and economic wellbeing of society in improving nutrition through healthy eating throughout life. Breastfeeding and eating a diet consistent with the NHMRC dietary guidelines and the Australian Guide to Healthy Eating — along with physical activity and not smoking — has the potential to prevent a significant amount of chronic disease (NPHP 2001).

The evidence regarding the relationships between diet, nutrition and disease is well summarised in a critical report just released by the World Health Organisation: http://www.who.int/hpr/nutrition/ExpertConsultationGE.htm; accessed 16/4/2003

2.2 About the literature review

Overall, the Nutrition Workforce Development for Primary Health Care project is envisaged as containing the following three phases:

1. Identifying effective approaches to workforce development for the primary health care and other relevant non-health sector workforces
2. Establishing strategies, in conjunction with key groups, to enhance workforce capacity to contribute to addressing Eat Well South Australia priorities.
3. Implementing and evaluating workforce development approaches to improving population health via improved nutrition.
This literature review Public Health Nutrition: Identifying Models and Effective Approaches to Workforce Development is concerned with the first of these phases.

In July 2002, the South Australian Community Health Research Unit (SACHRU) was contracted by Health Promotion SA to undertake a literature review on models and effective approaches to workforce development for the primary health care and other relevant non-health sector workforces.

Review Aim
To identify models and effective approaches to workforce development for the primary health care and other relevant non-health sector workforces.

Review Objective
To undertake a literature review on the theoretical and methodological approaches to workforce development in the primary health care sector, with a focus on action research methods, and approaches to improving nutrition.¹

Review Strategies
1. Search existing literature (both peer reviewed and ‘grey’ literature) for models of workforce development which have used a primary health care approach eg action research, and address improving nutrition
2. Describe theoretical frameworks used for models of primary health care workforce development in different settings
3. Examine methods and strategies used for workforce development in primary health care approaches and report on their effectiveness.

This report presents the findings from the review. Firstly, three approaches to workforce development are described: action research, capacity building and competencies. Secondly, some models of workforce development in primary health care settings are illustrated by examination of case studies. Thirdly, the review attempts to assess the effectiveness of workforce development strategies, although little theoretical underpinning or evaluation of workforce development methods was

¹ The New South Wales capacity building framework definition of workforce development and NCETA work on workforce development for Drug and Alcohol workers provide examples of the approach taken in the project. For the purposes of this project ‘primary health care’ also includes relevant non-health sector workforces such as those in local government, community services, and industry. The particular workforces will depend on the particular issue being addressed.
found. Finally, the report presents some conclusions and discusses the next steps for public health nutrition workforce development.

The Appendices contain more detailed information. Appendix A describes the background and context to the work and outlines the implementation process for the review. Appendix B describes the primary health care workforce development context in Australia and South Australia. Appendix C provides a description of the public health nutrition workforce and Appendix D discusses public health nutrition workforce development issues.
3. Approaches to workforce development

Three main approaches to workforce development were identified from the literature on workforce development methods: i) action research or action learning; ii) capacity building; and iii) competencies. This section of the review describes the three approaches, their strengths and weaknesses and examines their relevance for the primary health care and nutrition contexts.

3.1 Action research and action learning

Definition of action research

Action research as a concept is not easy to define. There are a multitude of definitions, approaches and uses, with no consensus on core characteristics (Hart 1996). The term is often used interchangeably with action learning and participatory action research.

However, most commentators identify two key aims of action research: to improve practice and to increase knowledge. Elliot (1991) places a firm emphasis on the improvement of practice and argues that the production and utilisation of knowledge is subordinate to this. Others describe the dual aims in terms of i) implementing change and improving practice (Greenwood 1994; Gregory 1994) and ii) generating theory (Greenwood 1994), increasing knowledge and understanding (Malterud 1995), and as a technique in education (Gregory 1994). In terms of nursing, Hart (1996) argues that action research reflects recognition, on behalf of the nursing research community, that nursing is a social practice, the central purpose of which is to bring about positive change in the health status of individuals and communities.

Action research is regarded as a problem-solving methodology, requiring a cycle of action and reflection. The cycle of action is described thus:

- problem identification
- summarise previous experience
- determine the aims of the intervention
- plan and develop the intervention method
- design and articulate intervention strategy
- implement the action
- redefine the problem (Malterud 1995).
Pyett (2002) places action research on a continuum by degree of political intent. At one end is advocacy research, with no claim to researcher control, the purpose is to serve disadvantaged groups. Next is participatory action research, where subjects participate in the entire process from setting the research agenda, collecting and analysing data, to controlling the use of outcomes. Next is action research that involves research and a high level of community participation and action to improve the situation (Pyett 2002). What is intended is that the participants, through using theory to illuminate or describe the actions they have taken, will be equipped with power to reflect and experiment on the outcomes of a project (Gregory 1994).

**Strengths**
Two main benefits of action research for workforce development are that it develops professional knowledge that is more appropriate to practice, and it empowers practitioners to think critically and analytically in order to increase their autonomy to use professional judgment (Hart 1996). Since action research focuses on real-life problems, it may also facilitate collaboration between professionals and the individuals and groups with whom they work.

*Professional and practice wisdom*
Action research improves practice by developing practitioners’ capacity for discrimination and judgment in complex human situations. It therefore informs professional judgment and develops so-called ‘practice wisdom’ (Elliott 1991). Practice wisdom may be understood as the ability to comprehend, analyse and respond to practical problems in situ. It is a key characteristic of advanced level practice.

*Empowerment*
Another benefit of action research is described in terms of empowerment for the practitioner/researcher. It enhances the potential for increases in autonomy in using professional judgment. Hart (1996) describes the empowering benefit of action research as a

*means of improving quality of care by narrowing the gap between research and doing, theory and practice, defines individuals as active partners and not as passive subjects, directed towards change and improvement, non exploitive, collaborative and through reflective practice offers possibility of autonomous practice* (Hart 1996).
It is developmental for practitioners involved to the extent that it can be emancipatory (Greenwood 1994).

Action research underpins professionalism and leads to empowerment by employing methods and procedures based on theoretical research and knowledge for improving practice; establishing sound rationale for what professionals are doing and building confidence and resolution to change things. Adopting a thinking, critical attitude towards practice and testing findings, the professional becomes a catalyst for change and rises above the merely technical to make autonomous and independent judgments within a professional sphere (Gregory 1994).

**Weaknesses**
Pyett (2002) argues that the term ‘action research’ has become too broad – largely because of its use in workplace and industrial settings, where workplace harmony and improved productivity are the goals of the research rather than empowering the workers. There is also a risk of focusing on individual practice rather than collaborative action to challenge the status quo (Hart 1996).

**Relevance to primary health care workforce development**
Action research is part of an approach to professional development which may transform the ‘professional culture into one which supports collaborative reflection about practice and takes the experiences and perceptions of clients into account in the process’ (Elliot quoted in Hart 1996 p 5). It is therefore highly relevant for multi-disciplinary, multisectoral and participatory approaches to service delivery. Practice wisdom is particularly important in a field like primary health care where evidence-based practice (as identified by the randomised controlled trial) is often very difficult to demonstrate. Action research develops the capacity of professionals to make judgments in complex environments such as community-based health promotion settings. Action research brings together theory and practice and so helps to make research relevant and useful to policy and practice. This, in turn, increases the likelihood of uptake of research findings in the workplace. Practitioners involved in action research can act as ‘catalysts of change’ so are useful in reorientation services to a primary health care approach.
At a practical level, Gregory (1994) maintains that action research is a relevant way to build on postgraduate qualifications and professional experience, it presents academic challenges as well as being directly related to work, and that the approach works well with diversity (for example, part time study) and can respond to needs and changes in the circumstances of the participant.

3.2 Capacity building

Definition of capacity building
Capacity building is defined as an approach to ‘the development of sustainable skills, structures, resources and commitment to health improvement in health and other sectors to prolong and multiply health gains many times over’ (Hawe, King et al. 2000). Capacity building has been described as the ‘invisible’ work of health promotion (Hawe, King et al. 1998). It encompasses a range of ‘behind the scenes’ efforts and activities directed toward sustainability of health promotion initiatives. Examples include:

- developing and maintaining genuine partnerships with other stakeholders
- lobbying to get an issue ‘on the agenda’ across a range of organisations and sectors
- working with management to develop organisational policy or change practice.

Capacity building efforts may be directed towards individuals, groups, organisations, coalitions or communities. The following table demonstrates how capacity building efforts may be directed at a number of levels, concurrently.

Table 3.1 Levels of capacity building

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<th>Level</th>
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<tr>
<td>Individual worker</td>
<td>Develop health promotion planning skills</td>
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<tr>
<td>Management</td>
<td>Negotiate allocation of resources</td>
</tr>
<tr>
<td>Project team</td>
<td>Identify opportunities to integrate program into routine work practice</td>
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<tr>
<td>Other sectors</td>
<td>Cultivate project champions and identify potential partners</td>
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(Adapted from NSW Health Department 2001)
The NSW Capacity Building Model

The NSW Capacity Building model (refer Figure 3.1) comprises five key areas for strategy development and links these to the three dimensions of capacity building identified by Hawe, King and colleagues in 1998. The three dimensions describe the intent of capacity building activity, which is to enhance independence in health promotion.

1. Health infrastructure refers to the capacity to deliver particular program responses to particular health problems – it includes the structures, organisations, skills and resources for effective program delivery.

2. Sustainability refers to the capacity to continue to deliver a particular program through a network of agencies, in addition to, or instead of, the agency that initiated the program.

3. Problem solving refers to the capacity, of a more generic kind, to identify health issues and develop appropriate mechanisms to address them (Hawe, King et al. 2000).

In addition, the NSW model highlights the importance of the ‘context’ within which capacity building occurs. Context refers to the physical, economic, political, organisational and cultural environments. It is dynamic and multi-faceted and may enhance, or act as a barrier to, a health promotion initiative. A practical example might be the range of legislative, industry, media, political and social factors that influence smoking behaviour in public places.

Figure 3.1 Capacity Building Framework (NSW Health Department 2001)
Within health departments and agencies, much of the energy has been directed towards the sustainability of specific health promotion programs and broader community capacity building initiatives. In the foreword to the oft-cited NSW publication ‘A Framework for Building Capacity to Improve Health’ (NSW Health Department 2001), the Director General challenges health practitioners and administrators to consider also, the importance of system level capacity.

…it is paramount that when thinking about building capacity within programs, or within the community, that we are also focused on building the capacity of the system to support change (NSW Health Department 2001).

**Strengths**

Some of the identified strengths of a capacity building approach include:

- links local people with content and context expertise with health promotion practitioners with technical and capacity building expertise
- explicit intent of enhancing independence in promoting health
- encourages a progression from ‘hands-on’ development to ‘hands-off’ consultative or facilitative relationships
- focuses on the processes that support change within and between organisations
- encourages partnerships, critical problem solving and leadership
- increases the range of people, organisations and communities who are able to address health problems
- identified as a key ingredient in redressing social exclusion, inequality and vulnerability (Fitzgerald 1999 cited in NSW Health Department 2001)
- works with existing structures, avoids duplication
- evidence that programs that are integrated into existing structures, roles and accountability processes are more likely to be sustained (Bossert 1990 cited in NSW Health Department 2001).

**Weaknesses**

Capacity building is conceptualised by different organisations and sectors in quite different ways. It has been criticised as a ‘top down’ approach that is often linked to a government’s agenda for change. The language of capacity building has similarly been described as paternalistic.

The proponents of the capacity building approach have identified several challenges that lie ahead. These include the need:
for further evidence of how capacity building contributes to health outcomes
➢ to strengthen links between theory and practice
➢ for further application of the approach to designated health priority issues such as physical activity, nutrition and injury prevention (NSW Health Department 2001).

Relevance to workforce development
Proponents of capacity building recognise that the size and scale of action required to improve the health of the population is beyond that which the current workforce can achieve (King and Wise 2000). Similarly, Eat Well Australia and SIGNAL recognise that the specialist nutrition workforce can’t achieve population health outcomes in nutrition-related areas on its own.

Capacity building aims to increase the range of people, organisations and communities who are able to address health problems. This is congruent with the public health nutrition goals advanced by Eat Well Australia and SIGNAL.

3.3 Competencies

Definition of competencies
A definition of competency in a workforce context is given by Heywood, Gonczi et al. (1992) as 'the ability to perform the activities within an occupation or function to the standard expected in employment'. Competencies are:

➢ based on discrete, atomized, pre-determined and identifiable elements
➢ derived from management science of prediction and control
➢ concrete, tangible, measurable
➢ unchanging, not culturally or socially constructed (Elliott 1991).

Competency standards arose from industry led training systems. As the Generational Health Review points out:

Industry, as the key driver, determines what it needs as outcomes from training rather than training providers telling industry what they could have as a product (GHR 2002).

The competency approach assumes that there are defined common tasks to be undertaken by the workforce group. Once core functions have been identified, competency-based approaches to workforce development tend to follow.
Heywood, Gonczi et al. (1992) provide a conceptual basis for competency standards. Competence is an intangible construct and therefore personal attributes that underlie professional competence are assessed. Since competence cannot be observed directly, indirect evidence from which competence may be inferred is needed. Attribute-based inference involves definition of personal attributes believed to underlie competence, and testing to see if they are present. This approach is often used in relation to knowledge and tested by written examination. It assumes that the attribute will translate into competent performance in the workplace. Other attributes such as analytical capacity, experience of judgment, problem solving, empathy etc are difficult to assess and test so may be ignored in assessment of competence.

Performance based inference involves observation of performance in the workplace. Competence is demonstrated by doing something competently, as defined by pre-set standards. Actual results are assessed rather than potential competence. While some attributes are not readily observable eg problem solving, the performance and the results are, so competence can be inferred. It is hard to assess transferability to other settings, so the context needs to be identified. Heywood, Gonczi et al. (1992) note that professionals need to be competent in a range of contexts and suggests combining the two approaches to obtain the benefits of both and overcome the limitations of each.

**Strengths**

The strengths of the competency approach are:

- consistent recognition across States and Territories
- accreditation by all States and Territories for applicants who meet the standards (whether trained in Australia or overseas)
- open and equitable assessment of those with overseas education and work experience against agreed, public standards of performance
- articulated training and progression within industries
- recognized articulations with related occupations (Heywood, Gonczi et al. 1992)².

The Generational Health Review also notes the advantage of training and development being accredited and articulated into further qualifications (GHR 2002).

² The emphasis on overseas qualifications and need for portability across states reflects NOOSR priorities.
**Weaknesses**

Elliot (1991) suggests that the competency approach denies professional judgment and reduces the workforce to technical operatives. The competency approach only delivers ‘habitual skill knowledge’ but the professional needs ‘intelligent skill knowledge’ that allows situational understanding. Intelligent skill knowledge includes discernment, discrimination and intelligent action; that is, practice wisdom.

**Relevance to primary health care workforce development**

The competencies approach facilitates the development of an accredited and standardised workforce. This is likely to encourage flexibility between different areas of work and articulated training, rather than the ad hoc approach often experienced. This could be an advantage in the primary health care context, where many workers are not trained in a specific discipline or profession. However, competencies are developed to deliver a workforce with the specific skills that an industry needs. This focus on industry needs may be in conflict with professional views and expectations of workforce development and broader educational goals.

**3.4 Summary and conclusion**

Three main approaches: action research, capacity building and competencies have been described. The action research approach, which here includes action learning, focuses on generic skills and abilities, building autonomy and professional knowledge and developing practice wisdom. The approach can be applied at individual worker, team or organisational level. Concepts such as community partnerships, intersectoral work and consideration of equity can be explored and developed. This makes it ideally suited as a method to reorientate the workforce and services to a primary health care approach and to increase individual and organisational capacity to undertake primary health care.

A more recently developed approach – capacity building – has been enthusiastically promulgated within the Australian health promotion and primary health care workforces. Capacity building aims to increase the range of people, organisations and communities who are able to address health problems. Like action research, it is an approach that encourages partnerships, critical problem solving and leadership. Capacity building builds on existing structures and capacities within individuals, groups, organisations and systems. It is explicitly focused on the sustainability of
health promotion programs and initiatives following the initial investment phase. Workforce development is identified as one of the core strategies of a capacity building approach, along with organisational development and resource allocation. In this context, workforce development largely refers to training and education initiatives. The crucial factor, however, is that a capacity building approach views education and training as just one of the strategies that are required to sustain health promotion initiatives and outcomes.

The competencies approach tends to be more discipline specific, and focuses on technical expertise, standards and accreditation, and safety and quality of services. Competencies are assessed and applied at individual worker level and can be standardised across services or (inter-) nationally. The competence of workers may be assessed in terms of their knowledge, or by observing the results of their actions. Increasingly, the competency approach is also being used to assess generic skills (for example, advocacy, partnership development, planning and evaluation).

None of these approaches appears to have been evaluated systematically, in terms of their contribution to workforce development.

Although presented here as exclusive streams it would seem sensible to take the best from each approach depending on the specific goal of the workforce development. For example, a community nutritionist might need competencies around diagnosing and responding to specific dietary needs and advocacy skills to work with local media to promote healthy foods. A school canteen manager would need safe food handling knowledge and skills but also the confidence and ability to work with teachers, parents, students and local communities in establishing a healthy eating policy at school.

If the focus of the workforce development is to produce a workforce capable of driving and responding to a reorientation to primary health care, then an approach that reflects primary health care values is an important criterion.
4. Models, Methods and Strategies

This section of the review describes and assesses models of workforce development in a range of primary health care settings. There is also discussion of the effectiveness of the approaches, where such evidence has been identified. The models have been classified under one of the three approaches described in Section 3. It should be noted that the classifications overlap and are not intended to be definitive.

The following models, methods and strategies for workforce development are discussed:

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4.1 Action research models

Only one documented workforce development example of action research in a primary health care setting was found. This probably reflects the educational background of the action research methodology.

Public Health Schools Without Walls

Public Health Schools Without Walls (PHSWOW) is a 2-year postgraduate course conducted by the Division of International Health, Centers for Disease Control, Atlanta. The PHSWOW course is undertaken as a collaborative venture between a sponsoring university and the ministry of health (or other sponsor). The program aims to provide students with tools in epidemiology, management, behavioural science, communications and economics that will help them to assess priorities and develop
effective public health interventions. Ghana, Uganda, Zimbabwe and Vietnam have been involved in PHSWOW collaborations. Examples of PHSWOW initiatives include evaluating programs for HIV/AIDS and other diseases, and studying epidemics of diseases such as cholera.

The PHSWOW approach has a strong action research focus, acknowledging the socio-economic determinants of health and the political and cultural enablers and barriers to effective solutions. It aims to assist students to:

- identify priority problems
- learn to ask the right questions
- retrieve and synthesise relevant information
- develop habits of reflection and critical appraisal
- base decisions on an analysis of available evidence
- recognise gaps and inconsistencies in knowledge
- balance accepted knowledge against observed reality, and
- accept viable solutions, even when they are less than ideal

(Centers for Disease Control and Prevention 2002).


Evidence of effectiveness
The Centers for Disease Control website provides a brief description of PHSWOW collaborations in Ghana, Uganda, Zimbabwe and Vietnam, including the number of graduates from each country. However, no evaluation of PHSWOW initiatives could be found so it is not possible to provide an assessment of effectiveness.

4.2 Capacity building models
Many health services and systems in Australia have adopted the language of capacity building, and workforce development is a key component of this approach.

Moving the Focus: Health Promotion in Domiciliary Care – Port Augusta
The Port Augusta Domiciliary Care Team comprises 50 workers and is one of four teams in the Flinders and Far North Community Health Service. In 2000 – 2002, the Service was engaged in a project to develop an organisational culture that was team oriented and cognisant of a primary health care approach. A strategic plan was developed that focused upon implementing changes to service delivery informed by a
philosophy of cultural diversity, primary health care, continuous quality improvement, community partnerships, participation and improved accessibility.

Project funding from Health Promotion SA supported the employment of a project officer to implement the strategic plan. The project utilised a set of established capacity building strategies – the NSW Capacity Building Framework (NSW Health Department 2001) – that were both adapted to suit the region and expanded to include the development of the health promoting capacity of consumers and other stakeholders.

The project had three objectives and was evaluated in terms of how well it met each of them. The objectives were:

1. Develop the skills and knowledge of key people within the Health Unit, local organisations and community groups
2. Strengthen organisational support for health promotion action
3. Develop and implement resources to conduct continuing primary health care and health promotion activities and projects (Lawler 2002).

Evidence of effectiveness
The evaluation was supported by the South Australian Community Health Research Unit (SACHRU) and utilised a questionnaire survey and interviews to gather feedback from allied health and home care staff and members of the consumer reference group. The evaluation demonstrated that the project had improved health promotion knowledge and practice in the rural domiciliary care setting. It found that the project had developed an effective consumer participation model that had gained strong community and organisational support. The evaluation also identified a number of factors that were crucial to project sustainability and success. These included the presence of the health promotion project officer as part of the Domiciliary Care Team over a 15-month period and who was able to provide on-site support and workforce development opportunities. The role of community health managers as ‘champions’ of the change process and in developing organisational supports for health promotion (by writing health promotion into job descriptions, for example) was also crucial.
**Eat Well SA project**

The Eat Well SA (EWSA) project was a multi-pronged, multi-sectoral strategy aimed at increasing the consumption of healthy food by young families in South Australia. The project used a settings approach based on Ottawa Charter strategies rather than the traditional nutrition education model. The activities and achievements of the project from 1997 to 2000 were evaluated and reported in 2001 (Laris, Jolley et al. 2001).

One of the objectives of EWSA for this period was to promote healthy eating by preschool-aged children. The strategy involved establishing a SA Child Care Nutrition Partnership that undertook a number of workforce development activities. Partnership members included child care associations, the Department of Education, Training and Development, TAFE, Gowrie Training Centre, SA Dental Service, Australian Nutrition Foundation, cooks working in child care, nutritionists, Eat Well SA, Anti-Cancer Foundation, National Heart Foundation, Community Health Services and the Department of Human Services. Main activities were production of a newsletter, workshops for nutritionists, two conferences for child care centre cooks, input to TAFE training course, contributions to the SA Child Care Centre Regulations Handbook and conference presentations.

**Evidence of effectiveness**

Competency standards and workplace assessment tools were developed for a stream of the Community Food Services Certificate for childcare centre cooks. Respondents to the evaluation saw this as a positive step, however there were some concerns about the financial burden to centres in terms of trained cooks being more expensive to employ. The newsletter received a mixed reception – it was considered a reliable source of information but often workers did not have time to read it carefully. The newsletter was considered useful in disseminating ideas and raising awareness of food and nutrition issues. The conferences were also considered to raise awareness about food and nutrition in cooks but there was some indication that those who attended were already interested in, and committed to providing, healthy food. Financial and time constraints were mentioned as barriers to attending these activities, particularly for rural child care centre staff.
Overall, the Partnership acted as a strategy to raise awareness and share knowledge and skills. Once trust was established, good working relationships enabled the sharing of advice and support.

The evaluation suggested that a mix of strategies is more likely to be effective in achieving wide coverage of the target population for workforce development. While the dissemination of credible and reliable information is important, it is insufficient on its own. Workshops and conferences facilitate increased awareness and uptake of new ideas but it is important to find ways to engage those members of the workforce who do not, or cannot, choose to participate. System or organisational support and encouragement are likely to be needed. Multi-sectoral groups can be very effective in driving change in training and policy, provided time is allowed for building trust.

Such partnerships also facilitate exchange of skills, knowledge and ideas and can act to support members in developing their capacity to work in a way consistent with primary health care principles.

**NCETA: workforce development for the Alcohol and Other Drugs field**

In May 2001, the National Centre for Education and Training on Addiction (NCETA) held a three-day Symposium on Workforce Development for the Alcohol and Other Drugs field. The meeting identified the following challenges:

- significant expansion in the AOD knowledge base in recent years
- growing emphasis on evidence-based practice
- information technology explosion (Roche and McDonald 2001).

NCETA aims to re-orient workforce development from a narrow focus on education and training toward a broader approach that is inclusive of systems and settings approaches. ‘Newer’ approaches to workforce development include lifelong learning, organisational change and systems approaches. Roche notes:

*The strategies required to develop an adequate workforce response to alcohol and drug problems extend well beyond the narrow traditional notion of “training”. Systemic and sustainable changes within key organisations and agencies are also essential. A major paradigm shift is required to refocus our thinking away from an exclusive orientation on training to one which encapsulates factors such as organisational development, change management, evidence-based knowledge transfer and skill development.*
To date, these areas have received relatively little attention in the AOD field, and yet remain crucial to the successful implementation of services, programs and policy responses. Encouraging reflection and action at a systems level, rather than exclusively at an individual level, is pivotal to achieving sustainable improvement and change (Roche and McDonald 2001).

Conceptually, workforce development necessitates a broad, comprehensive and multi-faceted approach. It involves systems, settings and people. To facilitate and sustain new practices in the workplace requires a range of strategies that can be grouped as:

- education and training – which address knowledge, attitudes and skills
- support for skills and knowledge (eg information systems)
- workplace structure and policy (eg resource allocation, management support and priorities).

For the alcohol and other drugs field, workforce development is primarily concerned with the process of translating research to practice. Research in this context is broadly defined to encompass not only the ‘evidence base’ for specific interventions but also the ‘program logic’ of contemporary approaches to complex social phenomena such as substance misuse and addiction.

Evidence of effectiveness

Much of what has been written about workforce development in the alcohol and other drugs field ‘makes sense’ for nutrition. The critical issue, or challenge, would appear to be how to do education and training to facilitate transformation and the uptake of new knowledge into practice. This is where action research would seem to have much to offer. Effective and sustainable workforce development requires reflection and action at the systems level, as well as at the individual and workgroup levels.

Preparing the Ground for Healthy Communities: workforce development in rural SA

The ‘Preparing the Ground for Healthy Communities Manual’ describes:

one approach to making the shift towards working in a primary health care way. It is an approach which focuses on using workforce planning and development as a strategy for change. In this approach, the workforce includes community members and involves them as full participating and contributing partners. This approach to workforce development has grown out of the experience of a rural area in SA (May, Crawford et al. 1997).
May, Crawford et al. (1997) identify the integration of a primary health care approach across human services as a key driver of the change process in rural SA. The authors argue that implementation of a primary health care approach across human services challenges individuals, organisations and systems to change and that workforce development is one of the tools that can facilitate effective primary health care practice.

May and Crawford et al. (1997) provide the following description of system, organisational and individual change:

- **System level change** occurs when policy changes or new structures are introduced. Examples include the regionalisation of health services and the adoption of a primary health care policy at State level.

- **Organisational level change** occurs in response to system level change or as a result of rethinking within an organisation, sometimes led by one or more key individuals.

- **Personal level change** occurs when an individual is exposed to new and different ways of approaching an issue or a new way of thinking which challenges their traditional or usual ways of thinking or doing things.

‘Traditional’ approaches to workforce development have focused primarily on training workers without considering other changes in the workplace or health system. Some of the limitations of past approaches include:

- limited coordination and planning
- ongoing demand for ad hoc training for individuals
- limited structures and processes to support workplace change
- lack of management support
- limited opportunities for workers and managers from different sectors, disciplines and the community to train and work together in primary health care
- driven by, and reliant on, city based training providers

(May, Crawford et al. 1997).
Evidence of effectiveness

The challenge of integrating primary health care across human services was seen to require a more comprehensive approach to workforce development, one that included human service organisations and systems. May and Crawford et al describe nine key features of their model and rank them in order of priority. The key features are:

1. A planned approach
2. Integrated into a broader change framework for primary health care
3. Collaborative
4. Multidisciplinary
5. Intersectoral
6. Involves the community
7. Regionally and locally relevant
8. Sustainable
9. Integrated into all workforce development activities in the region.

May and colleagues acknowledge the importance of a supportive environment, both in terms of resources and the workplace infrastructure/culture, for example through role legitimization:

[The Manual] can assist a region or community to achieve their vision for a healthy community...by developing a workforce and a community which can work from a primary health care perspective and is supported by infrastructures and a framework for PHC.

The critical factor in this approach is working with key people so they have a:

- common vision for the health of their community
- common understanding of PHC
- supportive framework within which they can practise primary health care effectively (May, Crawford et al. 1997).

Health Promoting Schools – a settings approach

The Health Promoting Schools approach provides a framework for schools to improve the health and wellbeing of the school community.

The concepts of the health-promoting schools provide vision and direction for creating a framework for policy and actions that can strengthen both education and health. (AHPSA not dated).
Health Promoting Schools:
- take a whole school approach
- address initiatives within the curriculum, school environment and partnerships
- provide a process for planning, implementing and evaluating
- help to unify a range of initiatives.

The health-promoting school approach is based on the following principles. It:
- links health and education
- is evidence based
- recognises and builds on the social determinants of health
- is cost-effective
- offers opportunities for coordinated and integrated responses
- recognises schools as key agents of socialisation and settings for health development (AHPSA not dated).

Workforce development is identified as one of eight key action areas to support health promoting schools. The strategic recommendations relating to workforce are:
- that the development and delivery of health-promoting school training, which is informed by contemporary theories of learning, educational change, and school-based practice should be coordinated, supported and resourced
- that national, state and territory education and health departments and the tertiary education sector:
  - support pre-service and in-service health-promoting school training programs for health and education professionals and other members of school communities (eg. parents, students, health staff)
  - encourage use of health-promoting school approaches in reforming school organisational structures and processes
  - sanction the place of staff well-being in the workplace/ school, and address it through health-promoting school approaches
- That at the school level, time and resources are made available to enable a critical mass of school community members to engage in health-promoting school professional development including:
school-based reflection on practice, and action in relation to curriculum
teaching and learning, school ethos, environment and organisation, and
school community partnerships and service links (e.g. action research
process)

- use of health-promoting school principles to review and revise school
organisation, management decision-making and operating practices

- partnerships with education and health researchers (AHPSA not dated).

Evidence of effectiveness

The National Framework for Health Promoting Schools 2000–2003 identifies the
health promoting schools initiative as a ‘best practice’ framework for school health
promotion and for intersectoral collaboration for health in schools. Four references are
cited as supporting this claim: AHPSA (1997); Lister-Sharp, Chapman et al. (1999);
NHMRC (1996); WHO (1996). The NHMRC examined the evidence concerning
school health programs in 1996. The aim was to identify necessary criteria for
successful health promotion in schools. The NHMRC report concluded that:

*The evidence points overwhelmingly to the adoption of comprehensive and
integrated approaches to teaching and learning, which foster teams within
the school and in the local community, and which support healthier
behaviours by addressing the physical and psychosocial environment of the
school, through supportive policies and practices*
(NHMRC 1996 cited in AHPSA not dated).

The Health Promoting Schools model warrants close inspection. Staff pre-service and
in-service training is one aspect of the health promoting schools model, situated
within a broader focus on student learning and curricula. The model highlights school
ethos, values, policies and partnerships as other important and intersecting dimensions
of a health-promoting schools approach. It is more akin to an organisational learning/
change model and capacity building approach than a workforce development model.
Yet the critical factor in the health promoting schools approach is likely to be the
same as that identified by May et al (1997) in relation to the integration of a primary
health care approach across human services in rural areas – working with key people
so they have:
- a common vision for the health of their community
- a common understanding of health promotion
- a supportive framework for practice.

### 4.3 Competency models

In the early 1990s, there was considerable interest in the development of competencies for the public health and health promotion workforces. Some of these initiatives are described below. The ‘drivers’ of this work have included educational and professional bodies as well as state and commonwealth health departments. This is contrary to the suggestion that industry is, or ought to be, the key driver in identifying the desired outcomes of training (GHR 2002). While there has been considerable effort and resources put into competency development, there appears to be little, if any, evaluation of this approach.

**Public Health**

As part of the Public Health Workforce Study in 1990, the Public Health Association of Australia (PHAA) delineated a set of 19 core competencies for professionals working in public health. Public health employers were asked to identify which competencies were essential and those which were desirable. Students enrolled in postgraduate public health courses were asked to report areas in which they wished to be more competent.

The Public Health Workforce Education and Training Study was commissioned by the Department of Human Services and Health and undertaken by the Centre for Public Health, University of New South Wales (UNSW) in 1995. As part of this work, the Centre for Public Health developed 28 competencies covering both knowledge and skills domains. Students and graduates of postgraduate programs in public health were asked to nominate the importance of the areas to their present work, as well as their perceived competency in the 28 areas. In addition, graduates were asked to nominate how well the area was covered in their studies and whether they required additional training in that area. Managers and staff of public health programs and services were also surveyed.
**Health Promotion**

In 1994, the NSW Health Promotion Unit articulated six roles that would be expected of a health promotion practitioner after two years of experience. These roles comprised 24 competencies. The Competency Based Standards for Health Promotion in NSW include performance criteria for each of the competencies, consistent with the National Training Board format (Public Health Association of Australia Inc. 1995). The NSW competencies have been used extensively in training staff (AHPA 2001).

The Centre for Health Promotion Research at Curtin University and the Australian Association of Health Promotion Professionals undertook a Delphi study and workshops in WA to identify core competencies for health promotion graduates. Thirty-seven competencies were identified and subsequently used in evaluating undergraduate health promotion courses conducted by the Department of Public Health at Curtin (Public Health Association of Australia Inc. 1995). The competencies were revised in 2000 (AHPA 2001).

**Aboriginal Health Workers**

In May 2002, the Standing Committee on Aboriginal and Torres Strait Islander Health released the ATSI Health Workforce National Strategic Framework. The report argues that a competent health workforce is integral to ensuring that the health system has the capacity to address the needs of ATSI peoples. Workforce reform and consolidation are posited as key strategies to achieve a competent workforce, and as requiring collaboration between Commonwealth, State and Territory governments and the ATSI community controlled health sector (Standing Committee on Aboriginal and Torres Strait Islander Health 2002).

The aim of the National Strategic Framework is:

*To transform and consolidate the workforce in Aboriginal and Torres Strait Islander health to achieve a competent health workforce with appropriate clinical, management, community development and cultural skills to address the health needs of Aboriginal and Torres Strait Islander peoples, supported by appropriate training, supply, recruitment and retention strategies.*

The strategic framework is developed around five objectives. The second objective embodies a discussion of competencies as a way to better define the scope of practice of Aboriginal Health Workers.
Improve the clarity of roles, regulation and recognition of ATSI Health Workers as a key component of the health workforce, and improve vocational, education and training sector support for training for ATSI Health Workers.

Currently, the term Aboriginal Health Worker encompasses a number of related vocational streams, including liaison, patient transport, alcohol and substance misuse workers, social and emotional well-being workers, and men’s, women’s and sexual health workers. The report endorses the development of an Aboriginal health worker vocational system to support comprehensive primary health care practice (ie a system that accommodates the various vocational streams and roles mentioned earlier).

The report recommends the development of national competency standards for Aboriginal Health Workers to promote consistency, portability and safety to practice. The national competency-based training framework is suggested as an appropriate base from which to develop these competencies.

The Standing Committee also recommends an increased focus on training for work in multi-disciplinary teams, particularly for allied health, medical and nursing students. It suggests that initiatives to improved current training programs could include coaching and mentoring strategies.

**Dietitians Association of Australia**

The Dietitians Association of Australia first developed competencies for entry-level dietitians in 1990, followed by further development of assessment strategies for National Competency Standards in 1992-3. The DAA states that:

> competency-based assessment is an approach to establishing occupationally-relevant standards of competence. The emphasis is on demonstrated competence in the skills important to an occupation or profession, rather than measuring knowledge in isolation from skill, or on measuring the time that has been spent in formal professional or academic training (Dietitians Association of Australia 1993).


The standards were developed by group workshops and interviews with recent graduates and draft papers were circulated widely for comment. Competencies are inferred by testing for the presence of desired attributes and by observation of
performance by individuals in the workplace. The first sub-division of the overall competency framework is into units reflecting the significant major functions of the profession or broad areas of performance. There are eight units of competency for entry-level dietitians in Australia, as listed:

1. Demonstrates knowledge sufficient to ensure safe practice
2. Interprets and translates scientific knowledge and principles related to nutrition into practical information
3. Collects, organises and assesses data relating to the health and nutritional status or individuals and groups
4. Manages nutrition care for individuals
5. Manages components of programs which deal with nutrition issues in the community as part of a health care team
6. Influences and contributes to activities promoting a safe and nutritious food supply
7. Demonstrates basic skills in research and evaluation
8. Demonstrates an organised, professional and ethical approach to work.

Units are further sub-divided to elements describing in more detail what is done within each competency. Performance criteria then describe what would constitute adequate evidence of personal competence.

Evidence of effectiveness
This literature review did not find documentation of an evidence base for the competencies approach to workforce development.

4.4 Discussion
This section has reviewed several approaches to workforce development in primary health care, variously described as models, methods or strategies. What are the lessons for public health nutrition workforce development?

There appears to have been little documented use or evaluation of the action research model in this setting. The health sector has instead taken on a capacity building model as first developed in NSW. From the case studies described earlier some key lessons can be identified. The importance of organisational, community and environmental support is stressed. This support might be realised as ‘champions’ within an
organisation, supportive policies and practices, and the availability of on-site workforce development opportunities and support to take advantage of these. Workforce development needs to be planned, comprehensive and integrated with the goals of the organisation. In a primary health care context the notion of ‘workforce’ may be extended to include the wider community of stakeholders. A partnership or multidisciplinary approach to workforce development facilitates exchange of skills and knowledge but this requires trust and good working relationships in order to be successful.

Some barriers and challenges to the capacity building approach were identified. Information provision on its own is insufficient to bring about change in behaviour. A strength of action research and capacity building approaches is that there is a focus on transferring new knowledge and skills into practice. This is more likely to occur when there is reflection and action at system, organisational and individual levels. A barrier to taking up workforce development opportunities is the financial and time constraints on workers in most primary health care organisations. This again stresses the need for organisational and system support.

An action research/capacity building approach starts from the premise that improving population health outcomes related to nutrition is a complex goal that needs a primary health care approach which encapsulates community participation, a focus on the socio-economic determinants of nutritional health, a partnership approach, healthy public policy, intersectoral collaboration, and a comprehensive range of strategies. Effective implementation of a primary health care approach requires a range of skills and (re)orientation of health services and the health workforce. The focus of workforce development is to develop skills in advocacy, community participation and partnership approaches across a broad range of disciplines. The logic of this approach is illustrated in Figure 4.1
The competency model has been developed over the last 10 – 15 years, mainly by professional associations and/or in consultation with the relevant workforce. The main benefits are consistency of skills and knowledge, portability of qualifications and quality assurance. Other than the use of accreditation to meet quality assurance indicators, there appears to have been little evaluation of the effectiveness of this model for workforce development in the public health nutrition sector. A question which arose in one case study was about the cost of training and education towards accreditation, and the additional costs of employing accredited workers. This is part of a broader question about who should pay for quality assurance within an organisation.

Figure 4.2 illustrates the logic of a competency approach to improving population health outcomes related to nutrition. This model focuses on the available evidence to support specific interventions and the skills that are required to implement these. The development of competencies facilitates assessment, accreditation and standardisation of skill sets.
COMPETENCIES APPROACH

Goal: Improved nutritional health of population

What interventions work?  Define priorities

What knowledge, skills, abilities does workforce need to implement

Assess current workforce capacity  Identify competencies

Identify gaps

What workforce development is needed?

Driver of workforce development is the need to deliver interventions that work.

(based on work of Roger Hughes pers. comm. October 9, 2002)

Figure 4.2 A Competency Approach to Workforce Development

Primary health care settings provide opportunities for implementing nutrition prevention strategies. SIGNAL maintains that the most effective way to engage primary health care professionals in preventive initiatives is to provide program-specific training (SIGNAL 2001).

Most of the ‘models’ seem to be about broadening workforce development to include organisational and system changes. Workforce development has been used to drive change, for example in implementing a primary health care approach in rural and regional setting. Workforce development is also described as a strategy to respond to, or cope with, change (as in the alcohol and other drugs field).
This review of the literature suggests that, in order to improve nutrition outcomes for populations or settings of interest, there is a need to take action at both:

- system/policy level – to create an environment supportive of workforce development
- primary health care workforce level – to support the uptake of evidence into practice.
5. Evaluation of workforce development strategies

The literature search for this review found little evaluation of workforce development strategies. Similarly, there has been little systematic evaluation of the models described in Section 4 above. According to the Australian Health Promotion Association (2001)

Evaluation of workforce development activities isn’t part of organisational planning.

An indicator of the effectiveness of workforce development is a positive change in behaviour or practice. The difficulties of translating new knowledge, skills and research evidence into practice are widely recognised. The report on health promotion workforce development (AHPA 2001) mentions formative evaluation with regard to the effectiveness of traineeships, research scholarships and other short education and training initiatives. It also describes the ‘Core Skills Health Promotion Course’ in NSW and the range of strategies used to support the short course, maintaining that ‘a number of reports have been produced that describe changes in practice following implementation’. However, no references are cited.

The AHPA report cites performance indicator work in SA and NSW as one attempt to integrate workforce development with organisational planning and review. As part of the ‘Performance Indicator’ project in community health services in SA, one of the task groups developed draft performance indicators for workforce development. The task group included several members of the Country Primary Health Care Forum and looked at developing indicators appropriate for a regional primary health care context (AHPA 2001; Performance Indicators in Community Health Project Working Group 2002).

Best practice evidence for workforce development specifically in health promotion is scarce. However, research evidence in the fields of knowledge use, practice development, organisational learning, diffusion of innovation and professional development indicate that training alone cannot resolve complex problems (AHPA 2001).
There are many different types of interventions that can be used to promote behavioural change among professionals and the implementation of research findings, but few rigorous studies that have examined the effectiveness of these interventions. In a review of interventions to promote the implementation of research findings by frontline workers, the Cochrane Effective Practice and Organisation of Care Review Group found that passive dissemination of information is generally ineffective in changing workplace practice no matter how important the issue or how valid the assessment methods (Bero, Grilli et al. 1998). The review found that multifaceted strategies were more effective than single strategies. Effective interventions for promoting behavioral change among health professionals included:

- educational outreach visits
- workshops involving discussion and practice
- reminders or prompts for behavioral change – manual or computerised.

Other strategies were found to be effective when used as part of a multifaceted approach. Strategies in this category included:

- audit and feedback techniques
- key practitioners as opinion leaders
- local consensus approaches.

The review also reported that few researchers attempted to link their findings to theories of behaviour change. Possible theoretical perspectives from which practice behaviour change can be studied include:

- diffusion of innovations
- education theory
- social influence theory
- management theory
- marketing
- a rational (or epidemiological) approach.

To date, no single theoretical perspective has been adequately validated by research (Bero, Grilli et al. 1998).
6. Conclusions and next steps

Is there an evidence base for effective approaches to workforce development for the primary health care and other relevant non-health sector workforces who have a role in improving nutrition? If not, how do we develop one?

This review has found that:

- there does not appear to be a body of evidence on workforce development methodologies in the peer-reviewed literature or the grey literature reviewed
- there appears to be little evaluation of workforce development models and programs for the primary health care, including specialist nutrition, workforces
- there are acknowledged limitations of current education/training in supporting the primary health care workforce to incorporate change
- the focus on workforce alone is not sufficient – workforce development approaches tend to be individualistic, rather than environmental
- there is a need to integrate workforce development into the broader context of the organisation and public health policy
- capacity building and competency-based approaches both have a place and show promise
- transfer of new evidence into practice is key and needs organisational support as well as support for the primary health care workforce.

6.1 Implications of health sector reform

The needs of the health system are changing, locally and globally, but professional roles are entrenched (National Health Service 2001; GHR 2002). Reform and change within health systems is being driven by globalisation and adoption of market forces, increasing development and cost of high technology treatment and pharmaceuticals and the ageing of the population. Within Australia, one response to the spiralling cost of acute care is to consider a re-orientation to primary care or primary health care. If this does occur it will impact on the type of workforce required to deliver services.

There is a need to ensure levels of education and training provided match the needs of health system. For example, if significant activity is shifted from acute sector to primary health care in the community, then the education and training system needs to respond to this change and design courses that reflect the competences required to work within community settings (GHR 2002).
Workforce development needs are also changing, but again the mechanisms are somewhat entrenched in an individual approach – tertiary, vocational education and training, staff development programs etc. A shift to primary health care will require a workforce that is willing and able to work in multidisciplinary teams and across sectors.

The Generational Health Review suggests some possible ways forward:

- establish a formal structured and resource program for capacity development and career advancement of all staff in the health sector
- develop a strategy that ensures education and training institutions meet the future health workforce needs of the State
- support measures to enable health professionals to easily obtain training in different specialties – thereby enhancing the movement and access of skills
- explore the development of a common health professional training base (GHR 2002 p119).

6.2 How can we get food and nutrition on everyone’s agenda?

The primary health care workforce includes specialist dietitians and nutritionists, other health workers and people in the non-health sector. In order to promote an understanding of the importance of good food and nutrition more widely, the nutrition health promotion sector needs to advocate and lobby for primary health care and food/nutrition topics to be included in all health education and training. It will be important to characterise all the workforces with an interest or impact on nutrition so that specific approaches and issues for workforce development can then be identified to suit particular populations and settings. Organisational and system development needs to run concurrently in order to increase the effectiveness of workforce development and ensure the transfer of evidence into practice.

Figure 6.1 illustrates a workforce development model that encompasses evidence-based practice in the development of policies and programs and the use of action research to identify what workforce development is needed to implement these. Workforce development strategies are then implemented using competencies or capacity building approaches as appropriate, giving consideration to the context and
target population. Reflection and evaluation occurs at each step and feeds back to policy or program development.

**Figure 6.1 A Model for Workforce Development**
6.3 What do we need to know in order to take the next step?

A number of questions arise that need to be considered in establishing strategies and implementing workforce development. Some questions are relatively simple, others will require broad engagement by policy makers and the primary health care sector.

1. What are the future needs and directions in health services and public health nutrition (eg policies, structures, programs) to address South Australia’s nutrition priorities?

2. What are the implications of these for workforce development – at health service, regional and state levels and across government departments?

3. Which are the workforces with potential to contribute to making improvements in nutrition-related health outcomes in priority populations or around priority issues?

4. Who should be the initial target for workforce development – nutritionists/dietitians or the broader primary health care workforce, or both?

5. What are the characteristics – number, roles and positions – of the specialist nutrition workforce and other primary health care workforces whose work encompasses addressing nutrition issues?

6. What current education and training is available in SA in food and nutrition issues for public health and primary health care, including specialist nutrition, workforces?

7. What theories of behaviour change are most appropriate for workforce development?

8. What approaches to workforce development are most effective and for whom?

9. What resources are needed to support workforce development and where might they be found?