

Health Workforce Study
Productivity Commission
PO Box 80
Belconnen ACT 2616

Dear Commissioners Woods and Owens,

Public Health Association of Australia Submission to Health Workforce Study

The Public Health Association of Australia (PHAA) is a forum for the promotion of the health of the public as well as serving as a professional association for public health practitioners. The Association provides opportunities for the exchange of ideas, knowledge and information on public health and actively undertakes advocacy for public health policy, development, research and training. The PHAA has a national and multi-disciplinary perspective on public health issues.

Thank you for this opportunity to provide a submission to the study into the Health Workforce. The PHAA, while cognisant of the overall health workforce, is providing this submission to highlight the issues that surround the Public Health workforce in Australia.

The Public Health workforce is generally engaged in:

- **health protection** - measures designed to mitigate risks to health arising from the environment and activities over which individuals have little or no control;
- **health promotion** – measures designed to help people make healthy lifestyle decisions;
- **disease prevention and early detection** including surveillance of communicable diseases, immunisation programs and screening programs.

The public health workforce is the main resource through which Australian society works deliberately to meet **health challenges and to improve population health**. The public health workforce is characterised by diversity and complexity, with personnel from a wide range of profession and occupational backgrounds. These are generally multi-skilled individuals who perform a multiplicity of functions, not always related to their primary occupational designation or training. This submission will refer to people who are involved in protecting, promoting and/or restoring the collective health of the whole or specific populations as public health personnel. A list of some of the professions included in the public health workforce is at **ATTACHMENT A** and a list showing the diversity of qualifications of people working in public health is at **ATTACHMENT B**.

The PHAA believes that it is critical that any study of the health workforce takes a broad approach and develops a detailed understanding of those disciplines that are not often the focus of attention in discussion on the health system, but which are integral to the delivery of better health outcomes. We would include the professions and disciplines encompassed by public health under this banner.

The National Public Health Partnership has undertaken a considerable effort in beginning this process by developing a framework for assessing public health workforce needs. However, there is little information available on the current public health workforce and a considerable amount of further work is needed if we are to understand the complexities of how public health is delivered in Australia. A list of the NPHP workforce publications is at **ATTACHMENT C. This represents a considerable body of work and it would be very useful for the Commission to support the NPHP in continuing this valuable workforce research.**

There are, however, a considerable number of barriers to workforce planning for the public health workforce. These include an a relatively low level in service planning from which workforce planning could be developed, the impact of historical funding decisions, the unpredictability of funding sources and opportunities, the unpredictability of demand and varying priorities of government rather than evidence based decision making about service and consequently workforce issues.

The PHAA believes that even in light of this lack of comprehensive workforce planning, the Public Health Education and Research Program (PHERT) is an essential element of developing and maintaining an appropriate public health workforce. We believe that the continued funding of this program is critical to both education and research in this part of the health workforce.

The PHAA also believes that the most critical issue facing the health system in Australia is the need to develop of strategies to can overcome health inequalities. This is an issue not just for the public health workforce, but for other components of the health system and the wider community. We believe that this wider issue needs to be addressed as an integral part of your workforce study.

The detailed PHAA submission is at ATTACHMENT D.

Should you have any queries regarding this submission, or should you think it useful to discuss any of the issues raised in our submission, please do not hesitate to contact me on (02) 62852373 or at plaut@phaa.net.au.

Yours sincerely Pieta Laut

Executive Director
29 July 2005

PHAA Submission to Health Workforce Study

Introduction

The Public Health Association of Australia (PHAA) welcomes the opportunity to contribute to the Productivity Commission's study of the health workforce.

The PHAA recognises that the levers available for influencing health workforce development are limited. The contribution of primary prevention and early detection of disease to the health population is increasingly recognised.ⁱ The principle policy "levers" to influence public health workforce flows are to be found in the financing structures of the health system, and in the governing bodies and organisations that administer them.

The PHAA believes that with a population that is ageing and that has an increasing level of chronic illness, there is a need for an increase in the public health workforce with a range of skills required to assess and care for this population. There is currently an imbalance in favour of acute health workers delivering hospital based care as opposed to community based care. Health care that focuses on a single organ system tends to deliver care that is fragmented, increase costs and exacerbate health care disparities when compared to primary based care.ⁱⁱ

The increasing specialisation of the workforce has resulted in difficulties in recruitment of health workers to rural and remote areas, where a workforce with public health skills is required. The aim of a sustainable health workforce should be to enhance equity in the distribution of the work force across Australia, with outer urban, regional and rural health services each acquiring a "critical mass" of trained health workers to provide the health service needed to address the needs of the population.

If public health workforce is to make an impact on current population trends in Australia, the perverse incentives produced by the financing structure of the health system that shape the medical work force, will need to change. The barriers operate at both the Commonwealth and State/Territory levels. Of particular relevance to PHAA are those incentives within (i) the Medicare Benefits Schedule (MBS) and (ii) the States' funding of hospital positions, both of which promote the growing trend toward specialisation at the expense of general public health approaches. People working in public health are particularly involved in decision making affecting more than one individual. The lack of recognition by the HIC of the contribution of this workforce to communities of interest in areas as diverse as environmental, indigenous and occupational groups contributes to difficulties in training.

The PHAA wishes to work with government to ensure that training and education programs produce public health workers with skills that serve the populace within the context of the Australian health system (s) and its financing structures. The modeling tools and data collections are currently lacking that will enable governments to provide advice on issues such as future models of care and service delivery.

1. **Consider the institutional, regulatory and other factors across both the health and education sectors affecting the supply of health workforce professionals, such as their entry, mobility and retention, including:**
 - a) **the effectiveness of relevant government programs and linkages between health service planning and health workforce planning;**

The Public Health workforce comprises a wide variety of disciplines, and the regulation of this workforce is largely provided through the regulation of primary disciplines.

The Australian Government instituted a national program known as the Public Health Education and Research Trust (PHERP) to strengthen national capacities to educate and train Australian's public health workforce in 1987. PHERP assists tertiary institutions across Australia to offer a range of high quality postgraduate public health education programs, including research training. Through the courses they offer, PHERP-funded universities provide infrastructure to enable implementation of Australia's public health agenda.

PHERP funding is distributed across five state-based consortia that work collaboratively to make best use of available academic skills and resources, enhance the accessibility of courses and increase the choice available to students. All centres provide at least Masters of Public Health courses, and most Centres also offer graduate diplomas and doctorates as well as short courses relevant to local population health needs.

Through the Department of Health and Ageing, the Australian Government has allocated over \$45 million in funding for phase 3 of PHERP (2001-2005). Universities that receive PHERP funding are required to match the Australian Government contribution.

PHERP aims to meet the strategic needs of public health education, training, research and policy development through the following six objectives:

- build on existing public health education and infrastructure and providing more leverage for more extensive public health work;
- strengthen the basis for high-level and consistent quality education and research programs;
- foster innovation to ensure emerging population health education and workforce development needs are being addressed; support population health workforce development and education initiatives which focus on the needs of Indigenous Australians;
- foster co-operation and collaboration across the population health education research sectors, including linkages to government and the public health workforce; and
- foster multi-disciplinary approaches to population health education and research.

The Public Health Education and Research Program's (PHERP) funding has facilitated infrastructure development and strengthening of inter-university

and health sector collaboration in education, research and development in public health, with several hundred post-graduate level qualifications in public health awarded annually. PHERP has established a national committee, The Australian network of Academic Public Health Institutions (ANAPHI) to facilitate the mobilisation and effective use of resources within the national network, and has formulated strategic directions with a view to addressing the National Public Health Partnership (NPHP) priorities.

Action has also been taken by States and Territories to build their public health workforce capacity, through the development and strengthening of practice based training programs, multidisciplinary Public Health Units, policy and strategic planning activities. Priority national public health workforce issues include Indigenous and rural workforce development. Workforce capacity, including distribution and training to meet the needs of Indigenous Australians and rural and remote populations, is being addressed through strategies including Framework Agreements between the Australian Government and States on Aboriginal and Torres Strait Islander Health and the Rural Incentives Program.

The PHERP is currently under review and the Australian Government is expected to release the review report early in the new financial year. The PHAA strongly supports the continuation of the program and believes that public health research and education gains would be lost if the program ceases or is downsized.

b) the extent to which there is cohesion and there are common goals across organisations and sectors in relation to health workforce education and training, and appropriate accountability frameworks;

The National Public Health Partnership (NPHP) has developed a list of core functions of public health (see **ATTACHMENTS 1**).

This list may be useful as a basis for the Australian and all State/Territory Governments to produce a comprehensive approach to developing information, data, analysis and trends that relate to the public health workforce. However, according to a study into public health vacancies, these functional descriptions have not yet been taken up in the advertising of positions.ⁱⁱⁱ

This study also noted that there is “a great emphasis given by employers to generic professional capabilities at the personal and inter-personal levels that are commonly required in management and delivery of public health programs. This finding is consistent with previous surveys of public health program graduates and their employers that indicate that skills in communication, teamwork, ability to solve problems and creatively improvise solutions in difficult situations are of major importance for

effective functioning in the public health workforce.....The widespread emphasis and concern among employers regarding these 'generic' capabilities reflects their importance and may also raise some questions regarding the adequacy of current professional training programs as producers of truly 'well-trained' professionals.”^{iv}

- c) the supply, attractiveness and effectiveness of workforce preparation through VET, undergraduate and postgraduate education and curriculum, including clinical training and the impact of this preparation on workforce supply;**

Please see comment above on PHERT.

The Australasian Faculty of Public Health Medicine, a specialty group within the Royal Australasian College of Physicians (RACP) is responsible for training physicians in public health medicine. In 2003, six new Fellows were admitted to Public Health Medicine (a fall of 5% since 2000) with 71 trainees currently in Public Health Medicine.^v There is, however, a limited number of publicly funded training positions which makes employment very competitive. There are no government funded public health positions in public hospitals in Australia. This contrasts with the situation in New Zealand where there is a national publicly funded training program with positions in each District Health Board.

- d) workforce participation, including access to the professions, net returns to individuals, professional mobility, occupational re-entry, and skills portability and recognition;**

The PHAA has no comment on this issue.

- e) workforce satisfaction, including occupational attractiveness, workplace pressure, practices and hours of work; and**

The PHAA wishes to note that the use of “project” type funding for pilot projects, innovation projects, research and many programs is a significant issue both for individual practitioners and their institutions. It is also an issue in calculating demand case studies.

- f) the productivity of the health workforce and the scope for productivity enhancements.**

The PHAA has no comment on this issue.

2. Consider the structure and distribution of the health workforce and its consequential efficiency and effectiveness, including:

- a) workforce structure, skills mix and responsibilities, including evolving health workforce roles and redesign, the flexibility,**

capacity, efficiency and effectiveness of the health workforce to address current and emerging health needs, including indigenous health;

Development of the public health workforce has been targeted as a national health priority by the Australian Government and the Department of Health and Aging has established and supported the PHERP to expand public health education and research in order to meet nation-wide public health workforce and other needs.

That need has been partial met by the PHERP, but there remains a continuing need to provide high quality graduates to the public health workforce. Equally, the PHAA believes that all (national and state based) public health strategies need to address workforce issues comprehensively in relation to the issues the strategy is addressing. In addition, there is also a continuing need for health practitioners in the acute care end of the spectrum to be educated about and apply population health and prevention approaches.

The National Public Health Partnership (NPHP) has commenced the task of examining frameworks for undertaking public health workforce planning, but has not at this stage undertaken work to determine workforce structure, skills mix and responsibilities, including evolving health workforce roles and redesign, the flexibility, capacity, efficiency and effectiveness of the health workforce to address current and emerging health needs, including indigenous health.

b) analysis of data on current expenditure and supply of clinical and non-clinical health workers, including the development of benchmarks against which to measure future workforce trends and expenditure; and

There is no current data on expenditure and supply of the public health workforce. This lack of data is part of the reason that the NPHP decided to embark on the development of a workforce framework paper.

c) the distribution of the health workforce, including the specific health workforce needs of rural, remote and outer metropolitan areas and across the public and private sectors.

The PHAA does not have any figures that relate directly to the distribution of the public health workforce. However, the PHAA notes that rural and remote populations and populations undergoing significant social change, or in socioeconomic distress need substantial public health support.

3. Consider the factors affecting demand for services provided by health workforce professionals including;

- a) **distribution of the population and demographic trends, including that of Indigenous Australians;**
- b) **likely future pattern of demand for services, including the impact of technology on diagnostic and health services; and**

It is difficult to define and quantify the public health workforce. *“There are significant shortcomings in classification schemes for public health work, work settings and workers, who can range from dedicated public health specialists and professionals, through to general health and associated workers whose jobs include some public health tasks, such as general practitioners or town planners. Even within the health profession itself it is hard to define public health workers:*

- *there is a wide variety of occupational groups;*
- *there are no clear boundaries between public health professional categories; there is an absence of professional credentialing requirements; and*
- *most health workers lack formal public health training.”^{vi}*

Similarly there are difficulties in estimating demand for the public health workforce. The demand for public health professionals is less directly sensitive to population size than the demand for health professionals concerned with the health of individuals, and it is more directly dependent on the nature and organisation of public health services. However, there is likely to be a critical minimum skill establishment necessary to maintain the integrity necessary for the operation of a successful public health service.

The drivers of demand for public health are organisations and the functions that they undertake (eg government – Commonwealth, State /Territory, local), Universities and other training establishments, research institutions, nongovernment organisations and the private sector (research companies and pharmaceutical companies).^{vii}

While not defining levels of demand for various public health personnel, the National Public Health Partnership has undertaken work to define a planning framework for public health practice (see **ATTACHMENT 2**). This study notes that the following principles should underpin the implementation of the Planning Framework for public health practice:

- *each community or population sub-group should have access to strategies, services and activities that optimise their health;*
- *each community or population sub-group should have access to a healthy and safe environment including clean air and water, and adequate food and housing;*
- *public health efforts must proceed in partnership with non-health sectors and in collaboration with international partners;*

- *a supportive legal and political environment is integral to the public health effort;*
- *improvements in knowledge about current and emerging health determinants and risks are vital to effective public health efforts;*
- *priority setting and decision making should be based on scientific evidence as far as possible and on criteria that are open to public scrutiny and debate;*
- *optimising population health outcomes requires effective linkage between public health and health system planning; and*
- *an ongoing capacity to scan and monitor the social and environmental trends likely to impact on future health status is essential for long term planning to prevent ill health.^{viii}*

c) **relationship between local and international supply of health workforce.**

The PHAA has no comment to make on this issue.

4. Provide advice on the identification of, and planning for, Australian healthcare priorities and services in the short, medium and long-term, including:

- a) practical, financially-responsible sectoral (health, education and training) and regulatory measures to improve recruitment, retention and skills-mix within the next ten years; and**
- b) ongoing data needs to provide for future workforce planning, including measures to improve the transparency and reliability of data on health workforce expenditure and participation, and its composite parts.**

A copy of the PHAA's health priorities, as documented for the last Federal election is attached for your information (see **ATTACHMENT 3**).

PHAA believes that better management of health inequalities, the management of chronic disease and mental health are critical to the delivery of equitable and appropriate health care services in Australia.

It is fundamental to the development of a responsible public health system that capacity to track existing and emerging issues and respond with an appropriately trained workforce exists. Some issues with implications for public health workforce development include:

- the need for appropriately qualified public health workers;
- the number of generic MPH places versus places for specialists;
- the continuing need to support those working in rural and remote area and areas undergoing social transition;
- indigenous community health workforce development and support;
- the need to systematically build public health training into training for clinicians and other health service practitioners;

- the on-going need to develop the capacity and the mechanisms for rapid and flexible response to urgent public health issues.^{ix}

The PHAA believes that public health workforce development needs to remain a priority at national, state/territory and local government levels, and that while workforce planning needs to be capable for providing a highly responsive workforce, consideration needs to be given to both maintaining greater than minimum infrastructure and to career pathways for public health workers. Further the PHAA believes that the NPHP should provide a coordinating point for state/territory based implementation of the model developed under the Calculating demand for an effective public health workforce study undertaken in 2004.

c) Provide advice on the issue of general practitioners in or near hospitals on weekends and after hours, including the relationship of services provided by general practitioners and acute care.

The PHAA has no comments on this issue at this time except to state that there is a clear need to consider equity of access issues especially where responsibility for emergency care is being transferred from hospital services to private practice. This is particularly the case in low income areas and in rural and remote areas where access to alternative services to hospitals is very limited.

ATTACHMENT A

Program/Project Officer, Coordinator, Manager	Director/Manager of Services
Health promotion Officer/Health Education Officer	Environmental Health Officer
Community Development Worker	Planning Officer
Research Coordinator/Evaluation Coordinator	Lecturer/Academic
Quality Improvement Officer/Manager	Information Officer/manager
Indigenous Health Officer	OHS Officer/Manager
Public Health Physician/PH medical Officer/PH Registrar	Public Health Nurse
Data Analyst/Manager	Administrative Officer/Executive Assistant
Epidemiologist	Health Service Planner/Strategic Planner
Statistician	Other

Source: Public Health Job Vacancies – who wants what, where? A report to the National Public Health Partnership Workforce Steering Group, p 4.

“We found that the 404 jobs for which detailed job descriptions were available spanned more than forty distinct domains or disciplines. Some jobs were clearly defined within one domain or discipline, some in several.”

Public Health Job Vacancies – who wants what, where? A report to the National Public Health Partnership Workforce Steering Group, p 4.

ATTACHMENT B

Variety of qualifications for public health positions

- “Relevant qualification or experience” with no further specification;
- Undergraduate “health” degree with no further specification;
- Nursing degree or RN qualification;
- Social science/behavioural science degree;
- Environmental health degree/diploma;
- Medical degree;
- MPH degree, social work degree, business or management degree/diploma;
- Health service management degree;
- Education degree, science degree;
- Health promotion degree/diploma;
- Epidemiology degree/diploma;
- Doctoral degree, Allied health practitioner degree, Statistics degree;
- Postgraduate “health” degree, OHS degree/diploma, Health information/MRA degree/diploma;
- Pharmacy degree;
- Post-basic or short-course certificate;
- Professional registration; and
- Other qualification^x

ATTACHMENT D

**PUBLIC HEALTH ASSOCIATION OF AUSTRALIA:
SUBMISSION ON HEALTH WORKFORCE STUDY**

Core Functions for Public Health

Rank ordering of “core” and “always or often” public health functions

	Percentage always a public health function	Percentage always or often a public health function
Disease surveillance	86.5	97.3
Disease outbreak control	85.1	97.3
Immunisation provision	81.1	90.6
Monitoring morbidity and mortality	77.3	94.6
Monitoring the determinants of health	76.0	96.0
Providing education and training for public health practitioners	73.3	93.3
Screening for selected communicable diseases	73.0	91.9
Developing and implementing quality assurance processes for public health	69.9	93.2
The production and protection of safe water	68.0	86.7
Developing and advocating for legislation and regulations that protect and promote health (eg occupational health and safety standards, road safety legislation)	66.7	86.7
Injury surveillance	63.5	93.2
Vector Control	60.3	90.4
Human resource development in the public health workforce	60.3	87.7
Controlling food access, quality and safety	60.0	96.0
Risk assessment and management in relation to environmental hazards	58.3	88.9
Assessing the differential impact of health policies on disadvantaged communities	57.3	92.0
Public health laboratories	57.1	84.2
Assessment of population needs and risks to determine which groups require services	56.0	90.7
Undertaking research on health issues in populations	56.0	90.7
Emergency and natural disaster services to protect health	56.0	92.0
Screening for selected non-communicable diseases (eg, cervical cancer, diabetes)	55.4	86.5
Behavioural risk factor surveillance	52.7	86.5
Controlling hazardous substances and wastes	52.0	86.7
Developing sustainable financing for health protection and promotion	52.0	84.0
Developing community capacity to protect and promote health	50.7	85.4
Controlling radiation	50.7	80.0
Reviewing, formulating and enacting health legislation	50.7	74.7
Assessing the impact of other sectors' policies on	49.3	84.0

health		
Ensuring draining, sewerage and solid waste disposal	49.3	81.3
Building organisational structures and processes for public health within agencies	47.9	90.4
Prevention of non-intentional injury	47.9	78.0
Enforcing health legislation and regulations	47.9	76.1
Developing community capacity to participate in health issues	45.3	82.6
Evaluation of health policies	42.7	81.4
Controlling atmospheric pollution	41.3	77.3
Developing fiscal strategies that support health improvement	40.0	73.3
Developing financial incentives to encourage preventive health care	40.0	73.3
Developing resource allocation and priority setting systems	38.9	77.8
Community mobilisation & advocacy for health issues	38.7	77.4
Ensuring safe workplaces	38.7	73.3
Prevention of intentional injury	37.8	67.5
Health services for indigenous peoples	37.3	84.0
Controlling noise	37.3	66.6
Treatment of infectious disease cases	36.5	63.5
Health services for refugees	36.0	82.7
Mental health promotion programs	35.6	74.0
Providing health information and education to individuals and groups	35.1	85.1
Building links between the health sector and other sectors	35.1	81.0
Ensuring universal access to health care services	35.1	68.9
Controlling the quality of therapeutic goods and appliances	35.1	60.8
Generating an organised approach to dealing with the consequences of chronic illness and disability	34.2	72.6
Health services for homeless people	32.0	77.3
Providing health information and education in community languages	32.0	76.0
Identifying health research priorities	32.0	74.7
Building organisational links between health agencies	31.5	76.7
Social marketing of health information	30.7	76.0
Veterinary public health services	30.6	68.1
Developing individuals' health knowledge, attitudes, practices and skills	28.4	78.4
School health services	28.0	60.0
Prenatal and neonatal screening	26.8	55.0
Building social networks and social support in communities	25.3	64.0
Health services for victims of violence and other	24.0	70.7

crises		
Maternal and child health care (not including pregnancy)	24.0	61.3
Ensuring access to physical activity and other recreation facilities	24.0	57.3
Controlling housing standards and provision	24.0	53.3
Town planning and land use	24.0	52.0
Family planning services	21.3	56.0
Ensuring access to facilities for social interaction	20.3	46.0
Occupational health services	18.9	68.9
Ensuring access to public transport and educational opportunities	18.9	48.6
Providing education and training for consumers and community groups	18.7	62.7
Lifestyle programs	17.8	49.3
Providing education and training for other health care workers	17.3	68.0
Evaluation of health care services and programs	17.3	56.0
Chronic disease self management	16.2	40.5
Mental health care services	14.7	61.4
Monitoring the delivery of health services and programs	14.7	57.4
Controlling land degradation and soil loss (eg by erosion)	14.7	36.0
Undertaking research on health services and programs	13.3	57.3
Drug treatment and rehabilitation services (eg, methadone)	12.2	37.9
Providing education and training for professionals in other sectors	10.7	49.4
Provision of cholesterol lowering and anti-hypertensive drugs	8.1	18.9
Individual dental check ups	6.7	22.7
Individual medical check ups	4.0	20.0
Provision of anti-depressant drugs	2.7	16.2
Prevention based care from alternative or complementary therapists	2.7	16.0

Source: National Public Health Partnership, National Delphi Study on Public Health Functions in Australia, January 2000, p 33-35

CORE FUNCTIONS OF PUBLIC HEALTH

- Assess, analyse and communicate population health needs and community expectations;
- Prevent and control communicable and non-communicable diseases and injuries through risk factor reduction, education, screening, immunisation and other interventions;
- Promote and support healthy lifestyles and behaviours through action with individuals, families, communities and wider society;
- Promote, develop and support health public policy, including legislation, regulation and fiscal measures;
- Plan, fund, manage and evaluate health gain and capacity building programmes designed to achieve measurable improvements in health status, and to strengthen skills, competencies, systems and infrastructure;
- Strengthen communities and build social capital through consultation, participation and empowerment;
- Promote, develop, support and initiate actions which ensure safe and healthy environments;
- Promote, develop and support healthy growth and development throughout all life stages;
- Promote, develop and support actions to improve the health status of Aboriginal and Torres Strait Islander people and other vulnerable groups; and
- Teach health personnel.^{xi}

ATTACHMENT 2

**Calculating Demand for An Effective Public Health Workforce
Final Report for the National Public Health Partnership, July 2004**

ATTACHMENT 3

Health Priorities,

Public Health Association of Australia

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- ⁱ Wanless D (2002) Securing our Future Health: Taking a Long Term View: Final Report. H-M Treasury UK, available at <http://www.hm-treasury.gov.uk/Consultations_and_Legislation/wanless/consultfinal.cfm
- ⁱⁱ Starfield B. Shi L. Grover A. Macinko J. (2005) The Effects of Specialist Supply On Populations' Health: Assessing The Evidence. Health Affairs, [March 15 Web Exclusive]
- ⁱⁱⁱ Arie Rotem, John Dewdney, Tanya Jochelson, Nadine Mallock, Kai Chan, Public Health Job Vacancies – who wants what, where? unpublished, p6
- ^{iv} Arie Rotem, John Dewdney, Tanya Jochelson, Nadine Mallock, Kai Chan, Public Health Job Vacancies – who wants what, where? unpublished, p16
- ^v Medical Training Review Panel (2004) 8th report
- ^{vi} Lee Ridoutt, David Gadiel, Kathy Cook, Marilyn Wise, Planning Framework for the Public Health Workforce: Discussion Paper, June 2002, p 4
- ^{vii} Lee ridoutt, David Gadiel, Kathy Cook, Marilyn Wise, Planning Framework for the Public Health Workforce: Discussion Paper, June 2002, p 24
- ^{viii} National Public Health Partnership, A Planning Framework For Public Health Practice, 2000, p i
- ^{ix} National Public Health Partnership, Public Health Workforce Development, June 1998, p 11
- ^x Arie Rotem, John Dewdney, Tanya Jochelson, Nadine Mallock, Kai Chan, Public Health Job Vacancies – who wants what, where? unpublished, p8
- ^{xi} National Public Health Partnership, A statement of core functions, June 2000, p 2

ATTACHMENT C

National Public Health Partnership Papers on the Public Health Workforce

1. **Public Health Workforce Development: Background Paper** National Public Health Partnership, June 1998
2. **National Delphi Study on Public Health Functions in Australia: report on findings** National Public Health Partnership, January 2000
3. **Public Health Planning and Practice Improvement: A Planning Framework for Public Health Practice**, National Public Health Partnership, September 2000
4. **Planning Framework for the Public Health Workforce: Discussion Paper** Human Capital Alliance, June 2002
5. **Public Health Practice in Australia Today: A statement of core functions** National Public Health Partnership, June 2002
6. **Public Health Performance Project: Report to the National Public Health Partnership Group** National Public Health Partnership, October 2002
7. **Public Health Job Vacancies – who wants what where?** Ari Rotem, John Dewdney, Tanya Jochelson, Nadine Mallock and Kai Chan, 2003
8. **Calculating demand for an effective public health workforce: Final Report for the National Public Health Partnership**, Human Capital Alliance and Marilyn Wise, July 2004