

**THE UNIQUE CONTRIBUTION
OF PUBLIC HEALTH PHYSICIANS
TO THE PUBLIC HEALTH
WORKFORCE**

FINAL REPORT



JULY 2010

**PREPARED FOR THE
AUSTRALASIAN FACULTY OF PUBLIC HEALTH MEDICINE
OF THE ROYAL AUSTRALASIAN COLLEGE OF PHYSICIANS**



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The Unique Contribution of Public Health Physicians study was guided by an Advisory Group. The Group membership, with their titles, is listed below:

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Chris Reynolds independently explored current relevant public health legislation within Australia to identify the qualification requirements of statutory roles. This research was run concurrently to the *Unique Contribution of Public Health Physician* study and a discussion of the legislation findings can be found in Chapter 5 with the full report attached in Appendix A.

Acronyms

AFPHM	Australasian Faculty of Public Health Medicine
AIHW	Australian Institute of Health and Welfare
AMSANT	Aboriginal Medical Service Alliance Northern Territory
CHO	Chief Health Officer
CPD	Continuing Professional Development
DPH	Diploma Public Health
FAFPHM	Fellow of the Australasian Faculty of Public Health Medicine
HCA	Human Capital Alliance (International) Pty Ltd
NPHP	National Public Health Partnership
PHERP	Public Health Education and Research Program
PHM	Public Health Medicine
MO	Medical Officer
MPH	Masters Public Health
RACP	Royal Australasian College of Physicians

1. Executive summary

The public health workforce was once the almost exclusive domain of medically qualified professionals. In the last few decades an explosion of opportunity for training in public health has resulted in many new entrants to the public health workforce from non medical practitioner backgrounds. Indeed, those who might be categorised as *public health physicians* are now a minority within the total public health workforce.

An examination of the public health physician workforce undertaken for this study found growth in numbers to be negligible and, relative to nearly all other types of health profession, including medical practitioners, the public health physician workforce is diminishing in size. A training rate of under three percent struggles to satisfy the replacement demand for the current public health physician workforce. Given that replacement demand may increase significantly in the near future as much of the 'grandfathered' component of the workforce reaches retirement, the prospect of the workforce shrinking in size is real. There are reports that genuine efforts by employers to increase public health physician staffing are being thwarted through lack of supply.

A component of this study undertaken by Chris Reynolds, a barrister and solicitor, demonstrated that contrary to popular belief, in Australia there are few statutory public health jobs / positions that require a specialist medical qualification let alone Fellowship of the Australasian Faculty of Public Health Medicine (FAFPHM). A comprehensive review of all current major Australian public health legislation found that, while statutory positions such as Medical Officer for Health may have been the origins of the profession, currently no positions require public health medicine qualifications. Thus public health physicians are largely being employed within an 'open labour market' context, competing with various other forms of public health practitioner labour. Because of the generally higher wage associated with appointing a medically qualified person to a public health position, there is believed to be an increasing preference to appoint suitably competent non medically qualified persons, fuelling concern over further erosion to the role of public health physicians (AFPHM, 2008, Eskin, 2002). In turn, these concerns have inspired research efforts to better understand the role of public health physicians in the broader public health workforce and to define the 'unique' or essential contribution to public health efforts (e.g. Jeffs, 1992). Public health physicians need to demonstrate value for the higher labour cost.

The Australasian Faculty of Public Health Medicine (AFPHM) therefore sought to describe what experience and competencies public health physicians bring to the public health workforce that persons of other discipline

backgrounds cannot easily (or at all) emulate, and what is the unique contribution to public health work that public health physicians can provide.

The specific objectives of this project were to:

- clarify current expectations of the role of the public health physician within the public health system and within other sectors;
- describe where this expectation is currently well expressed through positions descriptions that contribute to appropriate, effective and efficient public health work;
- potentially identify new areas of public health practice where public health physicians could contribute; and
- identify the unique contribution of physicians to public health work.

The project commenced in June 2009. The method was based on the collection of qualitative and quantitative evidence gathered through:

- collection and analysis of position descriptions occupied by public health physicians;
- critical incident interviews with public health physicians;
- interviews with senior managers supervising the work of public health physicians; and
- a literature review and analysis of text data.

Literature review

The literature review found that the work of public health physicians is not prescribed but the bulk of physicians appear to practice within comparatively narrow parameters — especially the areas of communicable disease control through systematic biomedical interventions and health protection (Griffiths, Jewell and Donnelly 2005, Institute of Medicine 2007, Glass 2000, Garvican and Doyle 2001).

The top five most commonly identified competency requirements of generalist public health practitioners described in the literature are:

- policy / program planning skills;
- research and evaluation;
- communication;
- partnerships, collaboration and advocacy; and
- cultural competency; and management.

The main competency requirements of public health physicians are similar although there is a stronger emphasis on competencies related to implementation / quality improvement, evaluation and professional practice.

Analysis of position descriptions

A total of 104 position descriptions for jobs currently held by public health physicians were collected from around Australia, representing approximately a quarter of active Fellows of the AFPHM at the time of the study. The sampling approach resulted in a strong representation of the government health sector. This is the largest employer of public health physicians in Australia.

The position descriptions specified work activity across all the major areas of public health practice viz.:

- health monitoring and surveillance;
- disease prevention and control;
- health protection;
- health promotion;
- health policy, planning and management;
- research; and
- education and training.

However, the greater proportion of positions specified work activity in the disease prevention and control, policy, planning and management, and health protection areas of public health activity. The more important (and common) skills such as 'communication' and 'organisation/management' are fairly universally required for public health physicians across the range of areas of practice. The single exception is the 'research' area of practice for which 'Population / public health research methods' skills are most prominent.

'Operational' positions were the most likely to specify a requirement for a Fellowship of AFPHM with almost half of this type of position requiring incumbents to possess a Fellowship (essential or desirable). The greater proportion of academic, advisory or management positions did not specify the need for Fellowship, although around a third of all management and advisory positions did specify Fellowship as essential. No academic position types specified an essential need for Fellowship, partly attributable to the generic nature of academic position descriptions (with the focus on teaching skills).

Critical incident interviews

Critical incident interviews were conducted with incumbents of twenty identified public health physician positions. Analysis of the critical incident data revealed public health physicians have higher credibility in comparison with other types of public health worker (perhaps even other types of medical practitioner in some circumstances) in regard to the general public. Public health physicians distinguish themselves partly by possessing different competencies and partly by dint of high cognitive ability and work ethic. The

competencies public health physicians are more likely to demonstrate different to other public health practitioners include:

- Leadership capabilities. These capabilities are expressed more as what the literature terms 'transformational' leadership skills (e.g. Collins-Nakai, 2006). These skills emphasise providing a vision, making decisions, emphasising collaborative practice of multidisciplinary teams. Public health physicians often play a role as a 'catalyst' or 'change agent' within multidisciplinary team based practice;
- Ability to independently critique evidence. Public health physicians show strong research skills;
- An indepth understanding of disease and microbiology. Allowing public health physicians to fashion a public health response to these diseases using a system wide perspective;
- Ability to independently and rapidly interpret risk. A rapid assessment of risk allows interpretation of implications for policy and practice and being able to appropriately prioritise a response; and,
- Ability to perform intersectoral work at a high level to affect health system reform, policy and practice based upon a systems view.

Senior manager interviews

The senior line managers of the public health physicians who participated in the critical incident interviews were identified and interviewed. In nearly all the circumstances public health physicians were a small minority of the total number of public health staff resources they controlled. An accurate count was not possible, but the proportion of public health physicians to other types of public health worker ranged from one in ten to one in twenty. Most managers agreed that the medical practitioner qualification endowed public health practitioners with high levels of credibility and a competitive advantage in respect to other public health practitioners. This credibility enhanced the public health practitioner's capacity for communication with other medical practitioners, other health workers, other sectors of government and even the corporate sector. Both the critical incident and senior line manager interviews produced one consistent theme. This was in relation to the ability of a public health physician to add evidence based value to critical public health issues.

Conclusion

This study has shown that public health physicians play a critical role in shaping, directing and making more effective much of the important public health activity in Australia. The capacity of the public health physicians to sustain this impact into the future is being brought into question by its dwindling workforce numbers in both absolute and particularly relative terms.

The Australasian Faculty of Public Health Medicine might therefore consider follow on work from this study including:

- A thorough study of the public health physician workforce. Such a study is required to better understand the true dimensions of current and future supply and the current requirements for public health physicians and future demand. Ideally sophisticated approaches that better define the work of public health physicians across multiple work settings (and therefore the number and type of physicians required) should be adopted to estimate demand. Efforts to improve the quality and use of public health physician position descriptions would ideally be undertaken within the context of a more comprehensive attempt to vision workforce demand.
- A fresh approach to the training of public health physicians in Australia that prepared current trainees to respond and adapt to a broader range of public health needs. A workforce study should better direct the training content (based on workforce demand), that is the curriculum development, and provide a much better understanding of trainee numbers required. A more qualified estimate of trainee numbers would presumably facilitate negotiations with funding sources to support registrar posts / training places in appropriate, accredited training programs.
- Further investigation of the data around credibility of public health physicians in eyes of the general public, other medical practitioners and within particular arenas such as politics to gain an understanding of what makes a credible voice. This work, if undertaken may be a key important factor underlying perceptions of other competencies which were seen to be a unique combination of a public health physician due to medical and public health training.

Public Health Physicians are one of the few professional groups that work across the span of public health work - from environmental health, health promotion to communicable disease control. Due to their initial foundation training in medicine, public health physicians bring a comprehensive understanding of the causes of disease and the physiological basis of their expression. This understanding enables a more system wide approach to the health of populations.

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2. Introduction

History of public health physicians

Public health as a special area of medical practice began in Liverpool, England, in 1847 when Dr William Henry Duncan was appointed the first Medical Officer of Health for Liverpool. This was the first time that the title, 'Medical Officer of Health', had been created and was enabled by the *Liverpool Sanitary Act of 1846*. The Act sought to address the living conditions in Liverpool, described at the time as 'disease factories of the future'. Indeed Chadwick in 1842 in his report of the *Sanitary Condition of the Labouring Population of Great Britain* had suggested that district medical officers be appointed for 'the general promotion of the means to prevent disease'. When he was appointed Duncan was not alone, at the same time a Borough Engineer and the Inspector of Nuisances were also appointed, and these positions worked together to improve health in Liverpool (Department of Health, 1999).

The Act also described the duties of the role of Medical Officer of Health:

"It shall be lawful for the said Council to appoint, ..., a legally qualified medical practitioner, of skill and experience, to inspect and report periodically on the sanitary condition of the said borough, to ascertain the existence of diseases, more especially epidemics increasing the rates of mortality, and to point out the existence of any nuisances or other local causes which are likely to originate and maintain such diseases and injuriously affect the health of the inhabitants of the said borough..."

(Liverpool Sanitary Act, 1846, Section 122.)

This Act influenced the *Public Health Act of 1848* and through this legislation Medical Officers for Health were appointed by the City of London and subsequently in other boroughs throughout England. The regular reporting on the health of these populations also began which allowed patterns of disease to be mapped over time throughout England.

The 1888 Local Government Act required that all Medical Officers of Health responsible for districts over 50,000 in population had to be both qualified doctors and have a diploma in sanitary science, state medicine or public health. In the 1880's the first Diploma of Public Health (DPH) in England had been established at Cambridge University. Shortly afterwards the General Medicine Council registered the DPH as a medical qualification and the Conjoint Board of the Royal College of Physicians and Surgeons recognised the DPH and set as a basic requirement one full year of study (Whol, 1983).

Australia kept pace with these developments and in 1885 John Ashburton Thompson was appointed the first medical inspector to the NSW Board of Health. He was the first public health doctor with qualifications in public health employed by a government in Australia having obtained a DPH from Cambridge University in 1882. He became Chief Medical Officer for NSW in 1896. Thompson also insisted that all his medical staff possess a diploma or an equivalent qualification (Lewis 2003).

The United Kingdom Faculty of Community Medicine

A period of substantial change in public health in the United Kingdom began after World War II with the *National Health Service Act 1946*. Many responsibilities of Medical Officers of Health were assigned to the newly created regional hospital boards. This created a new group of doctors responsible for administering hospitals and specialist services.

The Faculty of Community Medicine was created during this time of change. In 1968 a Royal Commission on Medical Education for the United Kingdom suggested that community medicine should be recognised as a specialty and defined it as "*the specialty concerned not with the treatment of individual patients but with the broad questions of health and disease in...sections of the community and in the community at large*". The Faculty of Community Medicine within the Royal College of Physicians was subsequently founded in 1972 and the graduates were known as Community Physicians (Warren 1998). The Faculty was subsequently renamed the Faculty of Public Health Medicine.

The Master of Public Health remained a postgraduate medical degree until 1989 when the University of Liverpool started the first multidisciplinary course. *Saving Lives: our healthier nation* released in 1999, introduced a new category of specialist in public health — a pathway open to those from backgrounds other than medicine. Subsequently the Faculty of Public Health Medicine opened its higher specialist training schemes to non medical practitioners. In 2001 the Faculty voted to drop 'medicine' from its title.

The Australasian Faculty of Public Health Medicine

The Australian Faculty of Public Health Medicine was established in 1990 and was the first Faculty of the Royal Australasian College of Physicians. The main goal of the Australian Faculty of Public Health Medicine was to establish a training program for consultants in public health. In 1993 it joined with the New Zealand College of Community Medicine to form the Australasian Faculty.

Current public health physician workforce

Who are public health physicians?

Many authors have described the public health workforce as an eclectic mix of disciplines and levels of contribution that is quite unlike nearly all other health professions / occupations which tend to be more tightly and clearly defined (for example Gebbie, 1999; Ridoutt, Gadiel, Cook & Wise, 2002). Public health physicians are the 'medical actors' in this collective movement (Bullen and Neuwelt, 2009), a comparatively disparate group of medical practitioners in their own right, drawn from a wide range of areas of medical practice (e.g. general practice, paediatrics, cardiology, medical administration, etc.) and specialist areas of interest (e.g. epidemiology, infectious diseases, drug and alcohol addiction, etc.) but fused together through specific training in the principles and practice of public health⁵. Indeed this diversity acts as a barrier to development of an accepted definition of a public health physician; no such definition was able to be found in the literature. As Glass (2000, p.41) notes:

"Much of the difficulty of studying physicians as a group in the public health system is that they are so diverse in where they work, the functions they perform, and the training they have had."

A simple definition of a public health physician in Australia could be anyone who is a Fellow, or eligible to be a Fellow, of the AFPHM. The Faculty website⁶ offers a form of definition as follows:

"Public health medicine is that branch of medical practice, which is primarily concerned with the health and care of populations. It is concerned with the promotion of health and the prevention of disease and illness; the assessment of a community's health needs; and the provision of services to communities in general and to specific groups within them."

The public health physician must understand health and disease in populations. They may be a generalist with a broad understanding of many conditions and circumstances, or they may specialise in an area of public health."

⁵ The parameters of which can also vary considerably in form and content.

⁶ <http://afphm.racp.edu.au/>

How many public health physicians are there in Australia?

Enumerating the number of public health physicians in active practice, even when using the boundaries provided by the AFPHM, is not easy. Fellows may maintain their interest in the Faculty without being active in the workforce; conversely active public health physicians may allow their Fellowship to lapse as Fellowship is seldom a requirement for positions held by a public health physician.

The Faculty currently estimates there are a total of 611 Fellows. According to Faculty records 535 of the Fellows are 'active'. The distribution of Fellows across various status classifications is shown in Table 1 below.

Table 1: Distribution of Australian AFPHM Fellows by Fellowship status

Fellowship status	Number of Fellows
Active	447
Honorary	3
Life Fellow	84
Semi Retired	1
Total active	535
Inactive	1
Resigned	32
Retired	27
Suspended	1
Terminated	15
Grand total	611

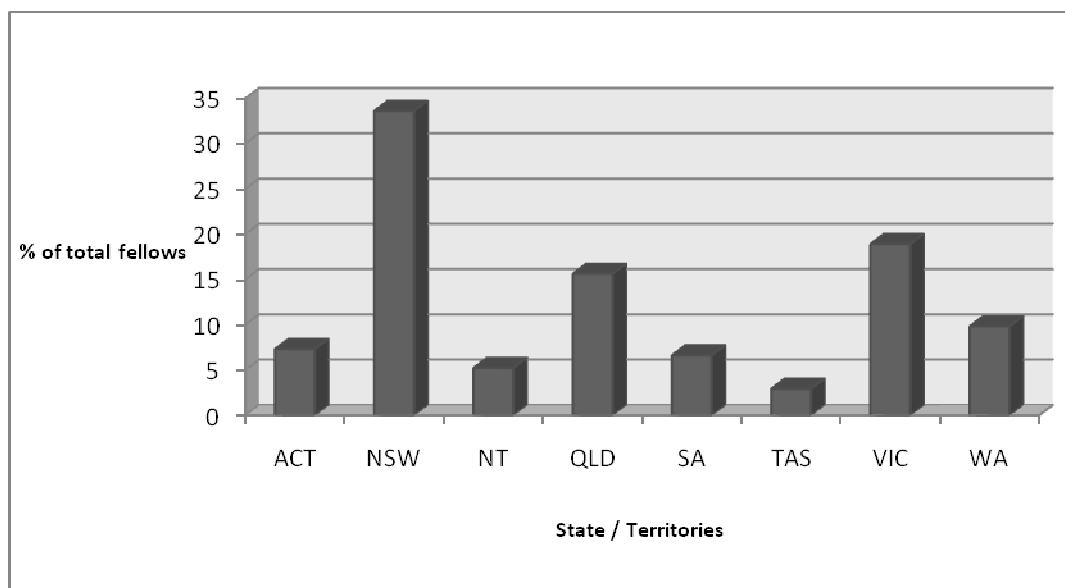
Source: AFPHM, 2010

Most of the Fellows of the Faculty (just over 50%) work in either New South Wales or Victoria as shown in

Figure 1 below. Interestingly, the number of new Fellows being admitted to the Faculty in the last decade (2001-2010) has declined when compared to the previous decade (1991-2000) as shown in Figure 2. The first year, 1990, is when the Faculty commenced; hence the number of admissions in that year is particularly large due to grandfathering⁷.

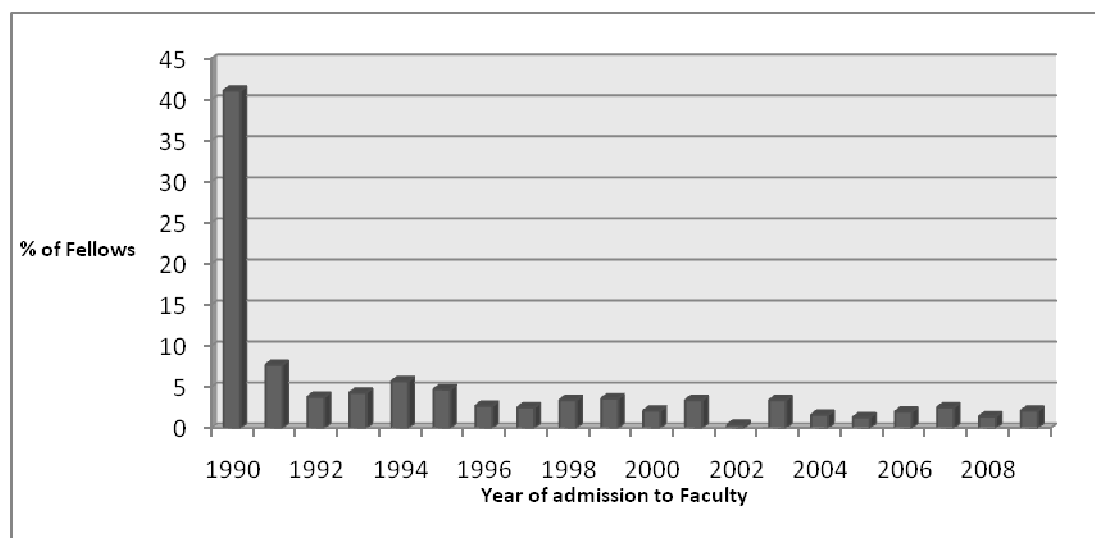
⁷ Indeed grandfathering continued during the early years of the 1990's to help establish the Faculty.

Figure 1: Distribution of Australian AFPHM Fellows by jurisdiction



Source: AFPHM, 2010, N = 559, includes all 'active' and 'retired' Fellowship categories

Figure 2: Distribution of Australian Fellows of AFPHM by year of admission to the Faculty



Source: AFPHM, 2010, N = 559, includes all 'active' and 'retired' Fellowship categories

An alternative way of counting public health physicians is to look at Australian Institute of Health and Welfare (AIHW) Medical Labour Force data collected through a survey administered by all Australian registration authorities in conjunction with registration renewal processes. The analysis of the 2007 workforce survey of medical registrants by the AIHW remains the most current source of information on the public health physician workforce. The overall response rate in the 2007 survey was 69.9% with New South Wales having a

higher response rate at 84.3%⁸. This makes the data not only the most current but also the most accurate⁹.

Within the Medical Labour Force Survey by the AIHW, public health physicians are classified as 'non clinicians' due to not performing clinical duties for the majority of working hours. A public health physician is defined as:

"...a medical practitioner who spent the majority of their total weekly working hours engaged in identifying disease and illness, along with their treatments and any preventative measures that affect the health of the general public..." (AIHW,2007).

The AIHW estimated that in 2007 the total (active) public health physician workforce throughout Australia was 416. This is the number of medical practitioners who indicated they spent more hours per week working as a 'Public Health Physician' (see question number nineteen of the AIHW medical workforce survey) than any other type of medical practice. These 416 public health physicians worked a total of 13,459 hours per week, or an estimated average of 34.1 hours. To place this into perspective, this was 0.6% of the 67,208 registered medical practitioners employed in the workforce at the time.

In addition to the public health physician workforce (those medical practitioners whose main role was a public health physician) a number of other medical practitioners also worked in public health (664) contributing a further 4,927 hours per week to public health physician work. These medical practitioners were primarily clinicians but could also include administrators, teacher/educators, researchers and occupational health physicians. Their average weekly contribution was an estimated 7.4 hours. The data is shown in

⁸ The Northern Territory had the lowest response rate at 27.1%, and its estimates should be treated with caution.

⁹ Some workforce planners would argue that a higher response rate is required given the likelihood that the non respondent population would be biased towards lower workforce participation than the respondent population. Still, most survey administrators would accept a response rate well over 50%.

Table 2.

Table 2: Employed medical practitioner hours of work whose role was a public health physician, 2007

Type of medical practitioner	Total number of hours worked	Average hours worked per week
Public health hours worked by public health physicians(a)	13,459	
Average hours worked in public health by public health physicians(a)(b)		34.1
Hours of public health work by other(c) medical practitioners	4,927	
Average hours worked in public health by other medical practitioners		7.4
Total public health hours worked	18,386	
Average hours worked in public health(d)		17.4

(a) The number of medical practitioners whose main role was public health physician.

(b) Excludes public health physicians who did not state their hours worked.

(c) Public health hours worked by non public health physicians in public health (includes clinicians, administrators, teacher/educators, researchers, occupational health physicians and other).

(d) Excludes employed medical practitioners who did not state their hours worked.

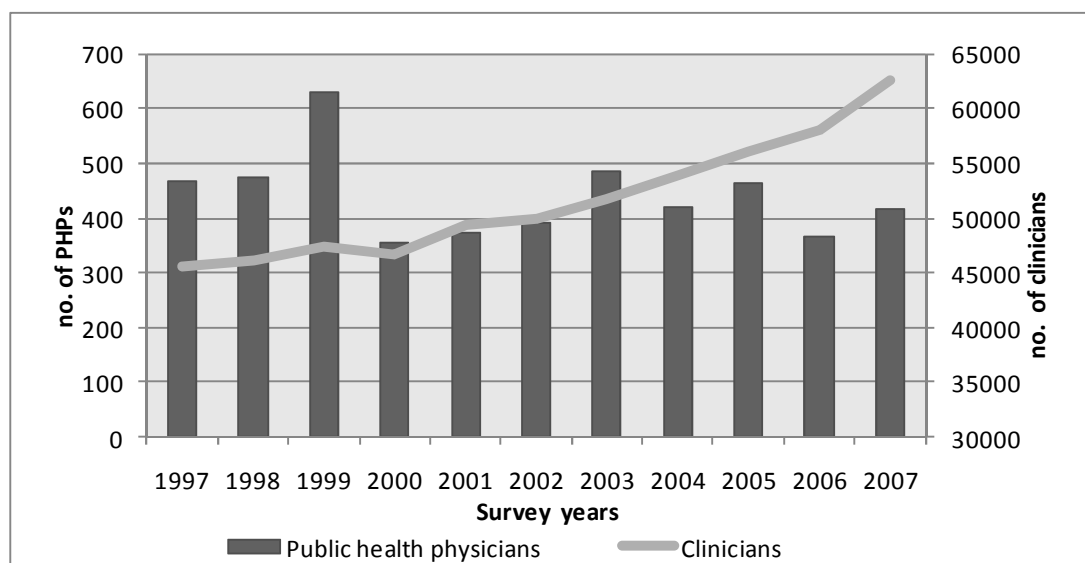
Source: AIHW Medical Labour Force Survey 2007.

From 1997 to 2007, there has been a slight decrease in those identified as public health physicians from 466 to 416 although more accurately the workforce could be described over that time period as oscillating in numbers between a low of 350 to a high of 450 — essentially a neutral growth scenario. Over the same period the clinical component of the medical workforce expanded from an estimated 45,641 to 62,652, a growth of over 37% (see Figure 3 below). The proportion of women identified as public health physicians increased over this period from 41.3% to 44.3%.

Public health physicians make up a small part of the medical practitioner workforce, and are generally thought to be a small component also of the Australian public health workforce. Accurate estimates of the size of the public health workforce are not available, however comprehensive enumeration work undertaken in the United States of America found public health physicians accounted for only 1.9% of the entire public health workforce (Gebbie, 2000)¹⁰.

¹⁰ This count though included administrative support staff; as a proportion of public health professionals public health physicians would be much higher.

Figure 3: Size of the public health physician and clinical components of the medical practitioner workforce, 1997 to 2007



Source: AIHW Medical Labour Force Survey 1997 – 2007

In the United Kingdom, a 1995-96 survey of Health Authorities (the primary employer of the public health workforce) found public health physicians accounted for 32.4% of all public health staff contributing to the public health function (Smith and Davies, 1997). When trainee public health physicians were included the contribution to total staffing of public health physicians rose to approximately half (47.9%). However this study was done with the 'specialist' public health workforce in the UK and was uni-professional and medical. At the time of the survey in England there were 10.2 full time equivalent public health physicians per million of population. Currently the UK Faculty of Public Health recommends a minimum target of 25 public health 'consultants' per million population (United Kingdom Faculty of Public Health, 2004)¹¹.

The contribution of public health physicians to the Australian public health workforce is probably closer to the situation in the United States of America. The only other component of the Australian public health workforce counted by the AIHW is that of nurses. In 2007 there were an estimated 2,463 nurses working primarily in public health roles¹² (health education, health promotion, public health) meaning there are approximately six nurses for every one public health physician. Since there are many other types of professionals working in the public health domain besides physicians and nurses, the proportion of physicians within the total public health workforce is likely to be

¹¹ If the same ratio was applied in Australia to public health physicians, then the estimated public health physician workforce would need to be 560 full time equivalents.

¹² And another 609 working in public health roles as a secondary job.

small. Crude estimates obtained from the employer interviews undertaken for this project suggested a proportion of 2%. Another useful understanding of the relative contribution of public health physicians is provided by Rotem *et al* (1995) in which a survey of Australian public health workplaces found 4.4% of public health 'staff' were Fellows of the AFPHM and 9.9% of 'staff' indicated their occupation as 'medical'.

Objectives

In an increasingly diverse and multidisciplinary public health workforce this study for the AFPHM is seeking to describe within the Australian context:

- what experience and competencies specialist public health physicians bring to the public health workforce that persons of other discipline backgrounds cannot easily (or at all) emulate;
- the unique¹³ contribution to public health work that public health physicians can make in maintaining an effective public health setting and in circumstances of crisis.

The specific objectives of this project agreed with the Advisory Group were to:

- clarify current expectations of the role of the public health physician within the public health system and within other sectors;
- describe where this expectation is currently well expressed through positions descriptions that contribute to appropriate, effective and efficient public health work;
- potentially identify new areas of public health practice where public health physicians could contribute; and
- identify the unique contribution of physicians to public health work.

The outcomes of the analysis will:

- assist Australian employers to analyse job positions to determine when the skills of a public health physician are essential to perform a role (and not just desirable);
- define the purpose of public health physicians in terms of specified human resource functions;
- summarise where public health legislation in Australia describes roles for statutory public health officers within the health workplace;
- enable the Australasian Faculty of Public Health Medicine to tailor both the Training Program and the Continuing Professional Development Program for Fellows to support and enhance this unique contribution; and

¹³ The project's initial proposal deliberately used the word 'unique'. The researcher and Advisory Group recognised the concerns which may arise as a result of its use, as it potentially overstates the objectives and outcomes of the study. It was proposed to continue its use due to its 'aspirational' value within the context of this project.

- allow the Faculty to reflect on the current competency framework.

3. Method

Overview

The project commenced in June 2009. The method was based on the collection of qualitative and quantitative evidence gathered through:

- collection and analysis of position descriptions occupied by public health physicians;
- critical incident interviews with public health physicians;
- interviews with senior managers supervising the work of public health physicians;
- literature review; and
- analysis of text data.

An additional research activity undertaken by Chris Reynolds was run concurrently but independently to explore relevant public health legislation across Australian jurisdictions to identify requirements regarding employment of public health physicians directed by the statutes. Further discussion on this report is detailed in Chapter 5 with a copy of the report *Statutory Public Health Officers in Australia*, in Appendix A.

Advisory Group

An expert Advisory Group was established to provide independent oversight of the project. The Advisory Group was formed by invitation from the AFPHM. The terms of reference for the Advisory Group included:

1. provide support to the researcher to achieve the objectives of the study;
2. provide comment on the Project Plan, including the proposed methods and the timeline to be followed;
3. provide specialist advice or identify other sources of specialist advice that may be relevant to the study;
4. facilitate the development of links to external organisations relevant to achieving the study outcomes;
5. consider the interim findings; and
6. review the final draft of the report of the outcomes of the study prior to the submission of the report to the Faculty Council.

The Advisory Group met four times throughout the consultancy project. A list of Advisory Group members is provided in the Acknowledgements.

Position description review

Position descriptions for jobs identified as currently occupied by a public health physician were collected for analysis. The position description review was limited to positions within Australia.

The positions were primarily collected with the assistance of the Advisory Group and AFPHM, who either directly provided position descriptions or indirectly provided the researcher with a contact to facilitate collection of the position descriptions. Personal contact was initially made by the Associate Director position at the Faculty or by HCA. This initial contact was then followed by an introductory letter from the President of the Faculty sent by email detailing the objectives of the study, see Appendix B. If no subsequent response was received a follow up email or telephone call was made. Position descriptions were predominately provided in electronic format with only a minority of position descriptions being received in hardcopy. The collection phase progressed much slower than anticipated in the project timeframe and the target number of 100 position descriptions took three months to collect.

Position descriptions were collected to maximise the diversity of the sample on a range of variables — in this regard the sample was purposefully gathered. For instance, position descriptions were sought from a range of jurisdictions including from the Commonwealth, Australian Capital Territory, Northern Territory, Western Australia, Queensland, New South Wales and Victoria. State/ Territory Health Departments were the main points of collection due to the high representation of public health physicians in this part of the health sector. Position descriptions were also collected from area / regional health services. Position descriptions were also sought for public health physicians holding academic positions at tertiary educational institutions, area/ regional health services, as well as Aboriginal Controlled Organisations and the non government sector.

The study became aware that a number of public health physicians work as private consultants, however those identified were self-employed and could not be included in the sample due to not having a formal position description.

A Microsoft Access database was created for the analysis of the data with fields created for:

- position title;
- jurisdiction;
- employer type;

- position type;
- area of practice;
- required qualifications;
- FAFPHM requirements;
- key responsibilities;
- duty statements;
- staffing arrangements; and
- numerous fields on the skill requirements (generally extracted / inferred from the other fields).

A total of 104 position descriptions for jobs currently held by public health physicians were collected from around Australia, representing approximately 17 % of all Fellows at the ACPHM at the time of the study. The purposeful sampling approach meant that position descriptions were gathered from all over Australia, with the exception of the Australian Capital Territory and South Australia. The distribution of the position description sample by location of employment is shown in Table 3 below. Note that some Commonwealth employees were counted in the State in which they were currently working.

Table 3: Number of position descriptions obtained from each jurisdiction (N=104)

Location of employment	Positions (n)	Proportion of all positions (%)
New South Wales	29	27.9
Northern Territory	16	15.4
Queensland	14	13.5
Tasmania	5	4.8
Victoria	23	22.1
Western Australia	17	16.3

The sampling approach resulted in a strong representation of the government health sector. This is the largest employer of public health physicians in Australia so not unexpectedly the sample is strongly represented by government health sector employer type categories, as shown in Table 4.

The employer type categories listed in Table 4 are mutually exclusive. Thus, positions which may have academic affiliations or conjoint appointments have not been included in the 'Academic institution' category and are classified according to the 'primary' place of employment for the purposes of this study. Position descriptions from an education and / or training institution are included in the 'Academic institution' category and are mostly from universities.

Table 4: Number of position descriptions obtained from each employer type (N=104)

Employer type	Positions (n)	Proportion of all positions (%)
Academic institution	18	17.3
Aboriginal community controlled	2	1.9
Area / regional health service	16	15.3
Commonwealth government department	2	1.9
State health authority	66	63.4

As noted earlier, public health physicians were also identified as working in the private sector within the pharmaceutical industry or as self-employed consultants however these position descriptions could not be obtained for the study. Investigations suggested that the number of public health physicians within non government organisations were small however no position descriptions were able to be obtained from this sector.

A potential limitation of the study method is that data collection was restricted to what could be obtained from the position descriptions. Incumbents in certain positions are undertaking tasks outside of the parameters of their position description, for instance as noted above teaching activities in addition to an operational or managerial role through affiliate relationships with universities. The difference between the role specified and detailed in the position description and the actual practice of the position incumbent was likely to be greater with position descriptions that are older and out of date — a not uncommon situation.

Universities across Australia represent a particular challenge in this regard as the study found that standardised and generic position descriptions are used for lecturer, senior lecturer, associate professor and professor in each University. Position descriptions for individual posts are rare, and in the case of academic public health physicians this can translate into considerable disconnect between the position description and the tasks performed.

Critical incident interviews

The critical incident interviews provided first hand information from the public health physician workforce about key competencies, skills or other attributes associated with the resolution of critical incidents. Critical incident interviews were conducted with incumbents of twenty identified public health physician positions in the Northern Territory, Queensland, Western Australia, Commonwealth, Victoria and New South Wales. The interview sample was purposefully selected using a set of selection criteria developed with the Advisory Group. These criteria were:

- geographical location;
- employer type (government, non government organisation, tertiary academic institutions and Aboriginal community controlled health organisations); and
- Fellowship requirement (not specified, desired and essential).

The aim was to ensure the sample was as representative as possible across employer type, jurisdictions and type of role of the position descriptions collected.

The first step of the interview process involved identifying the incumbent of a selected position description. An email was sent to the potential interview subject requesting participation in the interview process. The email included a letter of invitation describing project aims and objectives and a copy of the Project Plan. Interview subjects who did not agree to participate in the process were not pursued. On the day of the interview, the interviewee was invited to provide signed consent before the interview commenced, see Appendix C.

Incumbents of identified positions were interviewed using the critical incident technique to obtain descriptions of at least four fairly recent (ideally within the last twelve months) critical incidents for each interview. The interviewee determined the level of "critical" throughout the interview process so that the data collection process was not restricted.

Upon confirming an interview, a critical incident 'information package' was sent to the interviewee (see Appendix C). This 'information package' contained the interview schedule and detailed several examples of critical incidents which were developed with the Advisory Group to act as a guide; these examples were taken from a variety of public health scenarios including communicable disease outbreaks, tertiary education, as well as policy development initiatives. A critical incident for the purpose of the study was defined as:

"... any observable activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act. To be critical, an incident must occur in a situation where the purpose of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects (Flanagan, 1954)"

The interview was conducted over an hour using a free form structure. The interviewee was asked to describe critical incidents followed by a series of prompts and also questioned on the type of public health skills and

competencies required to resolve the incident. Each critical incident described required detail of the setting / context, incident, approach / action taken, outcomes and why the action taken was ineffective or effective (Dunn & Hamilton, 1986). The critical incident reported was either one that the interviewee had responded to personally, or observed as a third party.

Critical incident interviews were all conducted by a trained and experienced researcher (LR) in critical incident analysis to ensure reliability of questioning and ensure privacy and ethical considerations were maintained throughout the interview process and data analysis. For thirteen interviews a second person observed with the prior consent of the interviewee (LM on two occasions and SD on eleven occasions). The majority of interviews were conducted face to face, the exception being when an interviewee was unavailable during the researchers jurisdictional travel period and was then conducted by telephone. A total of thirteen interviews were performed face to face. The final stages of data collection included all data being transcribed by the researcher and appropriately stored.

As this study was partly conducted during the pandemic H1N1 influenza (swine flu) outbreak, many interviewees were involved either directly or indirectly in coordinating the response to this. This resulted in many interviewees providing this as an example of a critical incident. In later interviews the interviewer provided guidance and prompts to detail alternative critical incidents in other areas of public health practice so as to eliminate the over representation of incidents in communicable disease field of practice.

The analysis and reporting of interview data collected was done by adopting standard qualitative text analysis to distil main themes within each interviewee's response to the critical incident/s. As the data collected was transcribed, text analysis was conducted as the main form of analysis. This analysis was performed by the researcher (LR and SD). External validation of theme analysis was provided by LM and BOS. The highest degree of caution has been exercised by the researcher as to not report the information in any way that may allow the interview subjects to be identified.

Senior manager interviews

The senior line managers of the public health physicians who participated in the critical incident interviews were identified and interviewed. The Project Plan projected a maximum of twenty line managers and a total of seventeen interviewees were identified and agreed to participate, including managers from the Northern Territory, Commonwealth / Australian Capital Territory, Western Australia, Queensland, Victoria and New South Wales. These interviews were conducted in a face to face manner where possible, except

when the interviewee was unavailable during the researchers travel period and then they were conducted by telephone. A total of eleven senior manager interviews were conducted face to face.

Senior managers were identified either through the position descriptions or by the critical incident interviewee themselves. The senior managers were then sent a formal invitation to participate via email containing details of the project aims and objectives as well as a copy of the Project Plan. In some cases where a senior manager did not agree to participate, or where a critical incident interviewee was senior in their own right, an alternative colleague or external public health expert was sought as a substitute. Candidates who did not agree to participate in the study were not pursued.

On confirming an interview appointment the interviewee was sent an interview schedule developed with the Advisory Group. The interview schedule was developed to gather information regarding current staffing arrangements within the organisation in which public health physicians operate as well as to gather opinions as to why public health physicians tend to occupy particular positions (see *Appendix D*). Without providing specific details, findings from the critical incident data were used to seek validation on the response and actions taken. This information helped to confirm those skills and or competencies unique to public health physicians. Confidentiality was maintained by data being appropriately transcribed and stored by the consultant.

Each interview lasted an hour and adopted a freeform structure using specific questions to explore contextual issues. The interviewee was provided with the opportunity to discuss issues of relative importance to public health physicians in their workforce. This approach allowed further insight into individual opinions on the 'unique' or 'essential' contribution the critical incident interviewee provided in the context of the organisation.

Literature search and review

The literature search and review was conducted in two parts. The first stage was performed in the initial stages of the project using a web based search of the databases *Medline*, *PubMed*, *BioMed*, *Open Access Journal* and *Informaworld*. These were interrogated for Australian and international literature concerning the experience of public health physicians specifically in the United Kingdom, Canada, United States and New Zealand.

To provide a consistent topic search the terms in Table 5 below were used to direct the search process.

Table 5: Literature search terms

Primary key words	Secondary key words	Tertiary key words
Public health	Specialist / physician	Unique contribution
Population health	Workforce	Job description / role
Public health physician	Competencies / skills	Legislation
	Training	

Relevant literature was also identified by:

- searching specific scholarly journals individually using the above literature search terms including *Australian and New Zealand Health Policy*, *Journal of Public Health Medicine*, *New South Wales Public Health Bulletin* and *American Journal of Public Health*;
- checking the references used by relevant literature; and
- through the consultations, where interviewees suggested articles and publications which were of direct relevance.

Literature sources were then constructed into an annotated bibliography, detailing main arguments, themes, theories and concepts and then classified according to topics and subject matter.

The purpose of performing a literature search and review for this project was to:

- outline current information regarding the situation of public health physicians and the public health workforce;
- highlight key issues in regard to the perceived role of public health physicians;
- detail the competencies, knowledge, skills, training requirements of public health physicians;
- identify differences between the requirements for public health physicians and other forms of public health professional;
- identify gaps in research; and
- provide context for the remaining methodological tasks for the project.

The second stage of the literature review was performed after the data collection phase. This allowed themes that emerged through the text analysis of the interviews to inform the review of the literature.

Ethical considerations

The Royal Australasian College of Physicians, of which the Australasian Faculty of Public Health Medicine is part, has an agreement with the Sydney South

West Area Health Service (part of NSW Health) to provide human ethics research committee services. This agreement is for the period 1 March 2008 to 1 March 2013. Consequently a copy of the Project Plan for the study *Unique Contribution of Public Health Physicians to the Public Health Workforce*, finalised with the Advisory Group in July 2009, was submitted to the Human Ethics Research Committee located at Concord Repatriation General Hospital with a covering letter on the 18 August 2009. This was reviewed and approved as a quality improvement study on 21 August 2009. This was confirmed in writing see Appendix E.

Position descriptions are usually public documents in the government sector unless part of a specific contract or agreement. The seeking of informed consent prior to the conduct of the interview and the opportunity to opt out of the interview at any time ensured voluntary participation in the study.

The researcher identified the risks associated with the critical incident interviews in that they potentially seek to explore sensitive and or emotional topics. Consequently the risks associated with the inquiry approaches, in particular around the nature of critical incidents raised during the critical incident interviews, were identified and mitigated by the researcher by duly adhering to the National Statement on Ethical Conduct in Human Research¹⁴.

¹⁴ NHMRC 'National Statement on Ethical Conduct in Human Research' 2007 http://www.nhmrc.gov.au/PUBLICATIONS/ethics/2007_humans/contents.htm

4. Understanding from the literature

Background

In the last few decades a welcome expansion of opportunity for training in public health has resulted in many new entrants to the public health workforce from non medical practitioner backgrounds. Those who might be categorised as *specialist public health physicians* are now widely understood in most countries to be a minority within the total public health workforce (Institute of Medicine, 2007), certainly this is the case within Australia¹⁵.

Another factor believed to influence the size of the public health physician workforce is the generally higher wage associated with appointing a medically qualified person to a public health position. This is believed to be behind an increasing preference to appoint suitably qualified non medically qualified persons (AFPHM, 2008, Eskin, 2002). This has fuelled concern that the role of public health physicians could be further eroded leading potentially to the role becoming redundant. In turn, these concerns have inspired research efforts to better understand the role of public health physicians in the broader public health workforce and to define the 'unique' or essential contribution to public health efforts (e.g. Jeffs, 1992).

To do this the work of public health physicians needs to be placed in the context of all public health work.

Functions of public health practice

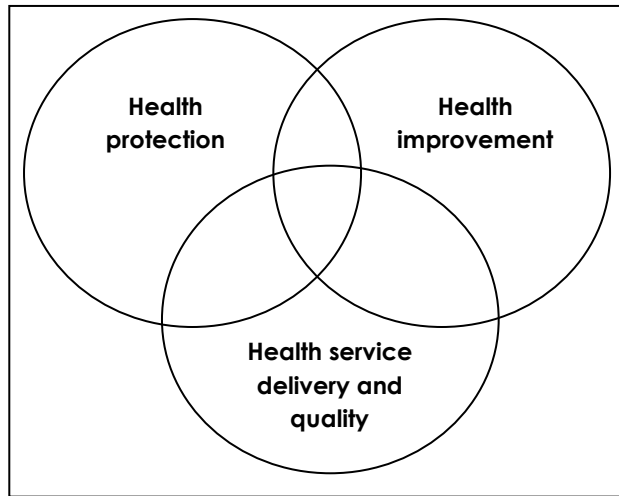
Common to all definitions of public health and its practice is the sense that it is tied to public interest (Beaghole and Dal Poz, 2003). The lack of a standardised definition for public health raises concerns over the need to define activities, inputs, resources and workforce contributing to public health services (Jorm, Gruszyn and Churches, 2009). One broad definition of public health promoted by Lin, Watson and Oldenburg (2009) is the organised efforts of society to keep people healthy and prevent injury, illness and premature death.

Many countries have tried to define public health not by what it is but rather by what it does; that is the identified core functions of a public health system. Griffiths, Jewell and Donnelly (2005) writing from a United Kingdom perspective proposed a model of public health which conceptualises three domains based on the historical importance of the control of communicable

¹⁵ There is a dearth of data available on the public health workforce to support any specific claims on the size or distribution of the public health workforce. Some discussion though of the relative contribution of public health physicians is provided in the introductory chapter.

disease, health education and the role of hospital and community services the three domains are illustrated in Figure 4.

Figure 4: Three domains of public health practice



The 'health improvement' domain was defined as covering activity to reduce inequities and engaging with individuals and their families within communities to improve health through adopting healthier lifestyles (Griffiths et al. 2005). They defined 'health protection' as the prevention and control of infectious diseases, response to emergencies and dealing with environmental hazards. 'Health service quality improvement' was defined as including service delivery, promoting effective clinical practice, clinical governance, service planning and prioritising and appropriate research and evaluation.

Within Australia the National Public Health Partnership (NPHP) defined core functions of public health practice (NPHP, 2000) which included a more detailed list of areas of practice:

- assess, analyse and communicate population health needs and community expectations;
- prevent and control communicable disease 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 healthy public policy, including legislation, regulation and fiscal matters;
- plan, fund and evaluate health gain and capacity building programs 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 health growth and development throughout life stages; and
- promote, develop and support actions to improve the health status of Aboriginal and Torres Strait Islander people and other vulnerable groups.

A middle road model of public health practice between the above two is provided by Human Capital Alliance (2007) which describes the areas of public health practice that a Master of Public Health in Australia, supported by Public Health Education Research Program (PHERP) funding, must embrace. The five areas of practice are:

- *Health Monitoring and Surveillance*: Assess, analyse and communicate population health needs and community expectations;
- *Disease Prevention and Control*: Prevent, detect and reduce communicable and non communicable diseases among human populations through systematic biomedical intervention such as screening, immunisation and contact tracing;
- *Health Protection*: Promote, develop and support physical interventions which ensure a safe and healthy environment;
- *Health Promotion*: Promote and support healthy lifestyles and behaviours through action with individuals and families, and by strengthening communities; and
- *Health policy, planning and evaluation*: Promote, develop and support good public policy through the application of appropriate legislation, regulation and fiscal measures, transparent priority setting and sound health policy.

Griffiths et al (2005) were of the opinion that public health physicians work mostly in the area of disease prevention and control and health protection while other types of (non medical) public health practitioner are dominant in other areas of practice. This assumption has been supported by other authors (e.g. Garvican, Mayon-White and Littlejohns, 1999; Institute of Medicine 2007). Similarly Garvican and Doyle (2001) found the knowledge base of public health physicians is strongest within communicable diseases. Glass (2000) identified public health physicians as mainly working in detection of public health problems, assessment of community health status, and prevention of disease, disability and injury — this equates to the 'health monitoring', 'disease prevention' and 'health protection' areas of practice described by the PHERP framework.

As will be demonstrated in later Chapters and is inferred from the above, the work of public health physicians is not prescribed but the bulk of physicians

do appear to practice within comparatively narrow parameters — especially the areas of communicable disease control through systematic biomedical interventions. This will be demonstrated later as an area of practice where public health physicians have a 'competitive advantage' over other forms of public health practitioner.

Competencies required for public health work

The extension of an examination of the practice of public health is to review the competencies that are required to perform public health functions.

Despite the availability of literature on what constitutes public health work, there is no agreed or recognised set of public health competencies (Slonim, Wheeler, Quinlan and Smith, 2010). Development of such an agreed set of core public health competencies for all public health practitioners would provide a "platform of transferable knowledge" creating a flexible workforce that would be able to deal with emerging issues (Bennett 2010).

Competency is an intangible construct that could be best defined as "... *an underlying characteristic of an individual which is causally related to effective or superior performance in a job*" (Boyzatis, 1982). There are many different approaches to identifying, describing and assessing competency. The two dominant and most commonly used approaches include: the **worker-oriented** approach and the **work-oriented** approach.

The *worker-oriented* approach,¹⁶ focuses on the knowledge, skills, abilities, and personal traits that an individual should have to be effective on the job—such as, technical understanding, analytical skills, flexibility, or innovativeness. This approach to competence is most popular in the USA and some of the Pacific-rim countries (Cook and Bernthal, 1998). A worker-oriented approach is often termed a 'Personal Qualities Approach'.

Proponents of the *work-oriented* approach¹⁷ argue that competence needs to be described in ways where it can be effectively assessed, and while personal qualities might be necessary to achieve satisfactory work performance, they are not enough. This approach identifies output criteria — rather than focusing on input — and describes what would constitute competent performance within the context of a specific work role or task. A work-oriented model can be referred to as an 'Occupational Standards Approach'.

¹⁶ Also known as the personal attributes, generic or personal qualities approach.

¹⁷ Also known as the behavioural, occupational standards or performance-based approach.

While many have sought to polarise the two approaches to describing competencies, there are those who would assert that the argument should not be which is the right approach, but rather when and under what circumstances is it best to use one the approaches. Some believe that the Occupational Standards Approach would be most suitable to aspects of performance that are easy to assess¹⁸ while higher level of professional competency might lend itself more to the Personal Qualities Approach. Some may take a comprehensive approach by effectively combining the two. Research in competency development for public health has occurred both internationally and within Australia through the work of National Public Health Partnership, the Australasian Faculty of Public Health Medicine and the New South Wales Department of Health.

In Table 6 below only a small proportion of the available literature on public health practice competence is synthesised to present the competency requirements of generalist public health practitioners.

¹⁸ NOOSR Research Paper #7.

Table 6: Examination of public health competency requirements identified in selected literature sources

Competencies / knowledge / skills	Public health related literature (see key below)											
	1	2	3	4	5	6	7	8	9	10	11	12
Health monitoring and surveillance												
Surveillance/ monitoring												
Community dimensions of practice												
Epidemiology / biostatistics												
Disease prevention and control												
Infectious disease control												
Injury prevention												
Bioterrorism & emergency response												
Public health biology/ sciences												
Health promotion												
Health promotion and prevention												
Plan evidenced based strategies												
Social and behavioural sciences												
Health protection												
Health, environment, social determinants												
Risk assessment/ management												
Intervention and prevention												
Health policy, planning and evaluation												
Policy / program planning and development												
Quality improvement												
Health economics												
Manage public health programs												
Underpinning skills												
Analytical skills												
Research and evaluation												
Communication skills												
Cultural competency												
Informatics/ health technology												
Leadership												
Professional practice												
Management												
Partnerships, collaboration /advocacy												
Knowledge of legislation, developments												
Understanding of the health system												

Competencies / knowledge / skills	Public health related literature (see key below)											
	1	2	3	4	5	6	7	8	9	10	11	12
Needs analysis and assessment												
Health equity												
Learning and development												
Systems thinking												

Key to public health workforce literature sources:

1. Council on Linkages between Academic and Public Health Practice (2009)
2. Human Capital Alliance (2007)
3. Centre for Disease Control and Prevention (2002)
4. Association of Schools of Public Health Committee (2004)
5. Calhoun, Ramiah, Weist, Shortell (2008)
6. Council on Linkages Between Academia and Public Health Practice (2001)
7. World Health Organisation (2005)
8. Gebbie (1999)
9. Federal/Provincial/ Territorial Joint Task Group on Public Health Human Resources (2005)
10. Queensland Health (2008)
11. Shilton, Howat, James, Lower (2007)
12. Rotem, O'Connor, Bauman, Black, Dewdney, Hodgkinson (1995)

As a result of synthesis of the literature sources in the above Table, the top six most commonly identified competencies identified are:

- policy / program planning skills;
- research and evaluation;
- communication;
- partnerships, collaboration and advocacy;
- cultural competency; and
- management.

Examples of how these top six competencies are defined, according to various literature sources, are provided below.

Policy/ program planning and development:

- "Determines feasibility and expected outcomes of policy options" (1);
- "Development of policies and planning in public health" (7);
- "Systematically assess the feasibility and social, economic, environmental, legal and ethical implications of policy options based on analysis of diverse form of evidence" (2);
- "The ability to plan for the design, development, implementation, and evaluation of strategies to improve individual and community health" (4).

Research and evaluation:

- “Develops mechanisms to monitor and evaluate programs for their effectiveness and quality” (1);
- “Apply evidence based approaches in the development and evaluation of social and behavioural science interventions” (4);
- “Use of evidence and research to target and inform population health interventions and influence access to and delivery of health services” (10);
- “Conduct research and evaluation according to research and project management principles” (10).

Communication:

- “Utilises a variety of approaches to disseminate public health information” (1);
- “Communicate effectively on health matters including appropriate use of media” (12);
- “Demonstrate effective written and oral skills for communicating with different audiences in the context of professional public health activities” (4).

Partnerships, collaboration and advocacy:

- “Facilitates collaboration and partnerships to ensure participation of key stakeholders” (1);
- “Advocate effectively with government to influence health policy” (12);
- “Demonstrate skills that foster collaboration and support, partnership and team building to achieve population health outcomes” (10).

Cultural competency:

- “Considers the role of cultural, social and behavioural factors in the accessibility, availability, acceptability and delivery of public health services” (1);
- “Use the basic concepts and skills involved in culturally appropriate community engagement and empowerment with diverse communities” (4);
- “Consider population diversity and health inequality and apply culturally- relevant and ethical approaches based on the Cultural Respect Framework when planning, implementing and evaluating population health interventions” (10).

Management:

- “Manages programs within current and forecasted budget constraints” (1);
- “Plan and manage health programs and services” (12);

- “Apply quality and performance improvement concepts to address organizational performance issues” (4);
- “Manage population health interventions and strategies within quality, time and budget constraints” (10).

Several competency frameworks have also been designed specifically for public health physicians. These are examined in Table 7 below using the same competencies list as provided in Table 6 above in order to facilitate a comparison.

Table 7: Examination of competency requirements for public health physicians identified in selected literature sources

Competencies	Public Health Physician related literature				
	13	14	15	16	17
Health monitoring and surveillance					
Surveillance/ monitoring					
Community dimensions of practice					
Social and behavioural sciences					
Disease prevention and control					
Biostatistics and epidemiology					
Infectious disease/ injury prevention and control					
Health promotion					
Health promotion/ protection					
Health protection					
Intervention, prevention and planning					
Risk assessment					
Health policy, planning and evaluation					
Policy / program planning skills					
Implementation, evaluation, quality improvement					
Health economics					
Bioterrorism & emergency readiness					
Underpinning skills					
Client/patient service					
Communication skills					
Cultural competency skills					
Informatics/ health technology					

Competencies	Public Health Physician related literature				
	13	14	15	16	17
Leadership					
Professional practice					
Management					
Medical expert					
Partnerships, collaboration and advocacy					
Learning and development					
Health equity					
Legislation/ health system					
Evidence base public health practice					
Program management					
Dissemination of information					
Determinants of health					
Ethical practice/ procedure					

Key to public health workforce literature sources:

- 13. NSW Department of Health (2000)
- 14. CanMEDS 2005
- 15. Australasian Faculty of Public Health Medicine New Zealand Office (2006)
- 16. United Kingdom Faculty of Public Health, Key Public Health Competencies (2010)
- 17. Australasian Faculty of Public Health Medicine (2009)

While the number of citations available to exclusively review competencies of public health physicians is small, especially in comparison to the literature available more generally on public health practitioners and practice, nevertheless it is useful to attempt a comparative analysis. Numerically, the main areas of competence identified specifically for public health physicians are:

- implementation, evaluation, quality improvement;
- communication skills;
- professional practice; and
- management.

A second level of competencies identified were:

- surveillance/ monitoring;
- community dimensions of practice;
- infectious disease/ Injury prevention and control;

- health promotion;
- intervention, prevention and planning;
- policy / program planning skills;
- cultural competency skills;
- informatics/ health technology;
- partnerships, collaboration and advocacy;
- learning and development;
- dissemination of information; and
- ethical practice/ procedure.

The results for public health physicians can be compared with the outcomes for a generalist public health practitioner.

Table 8: Competency outcomes

Public health physician	Generalist public health practitioner
implementation, evaluation, quality improvement	research and evaluation
communication skills	communication
professional practice	policy / program planning skills
management	partnerships, collaboration and advocacy
	cultural competency
	management

Arguments for the uniqueness of public health physicians

Many authors have attempted to advocate for the importance of public health physicians in the delivery of public health services and in so doing have tried to identify that contribution to public health work which is potentially unique to public health physicians. The motivations behind these endeavours range from a perceived need to make a case for maintaining (or even enhancing) public health physician numbers, to trying to understand the right mix of public health human resources in order to obtain optimal work performance and service delivery outcomes.

Jeffs (1992) (based on qualitative data assembled from a 'think tank' of AFPHM Fellows) offered the opinion that although public health physicians are only one of several types of practitioner within the public health workforce they have a:

"... singular position at the interface between traditional clinical approaches and the more broadly based health, behavioural and environmental sciences, [which] gives [them] the potential to make a special contribution to public health ..."

To take advantage of this singular position, Jeffs identified several possibilities including increased communication with the media, government and the community, advocacy of the role and potential of public health medicine and stronger advocacy for marginal sub-groups within the broader population.

The AFPHM (2008) through a similar consultative process with its membership identified a number of specific contributions that public health physicians could make that related only to their 'expert power' or unique area of expertise. These included:

- specific clinical expertise with infectious disease essential for the management and control of disease outbreaks;
- credibility with other medical practitioners and possibly too with the general public and decision makers, more apparent than is the case with other public health practitioners;
- an ability to communicate with clinicians, especially other medical practitioners, and be more easily able to detect and counter spurious clinical arguments against (or for) particular courses of action; and
- personal experience with the treatment of various conditions not just a theoretical understanding which drives a different type of motivation to prevent disease and enables a more convincing communication of the issues.

The Institute of Medicine (2007) also made a case for the unique role of public health physicians within the context of a growing non medical public health workforce:

"Despite the number and kinds of [public health] professionals, public health physicians remain central to the public health mission."

However in making this case they did so with some reservation, noting that the *"... unique role of public health physicians is perhaps less clear now than it was in the past."* Despite these reservations the Institute goes on to identify a number of ways physicians can make a unique contribution. Central to their contribution they identify the medical education which physicians receive which provides them with:

"... a deep understanding of molecular biology, human anatomy, patho-physiology, pharmacology ... that are essential to understanding the interaction between people and their environment."

Similarly, the Institute argues the medical education background:

- encourages gathering of data from a myriad of sources;
- teaches physicians to formulate the nature of the health problem, craft solutions and monitor outcomes;
- requires frequent reassessments and midcourse corrections;
- provides experience in working in multidisciplinary teams and the basic leadership skills for team building; and
- forces physicians to make decisions despite unsettling and irresolvable uncertainties.

This advantage supposedly endowed by a medical education to public health physicians seems, in the opinion of the Institute of Medicine (2007), to be most valuable in regard to identifying illnesses that could threaten the health and wellbeing of the general public. All of the examples they provide fit within the area of disease prevention and control practice. More generally the Institute of Medicine identified public health physicians:

- to be more credible experts with the community in most areas of public health;
- as potentially the best spokespeople and 'champions' of public health (and health system reforms);
- as being the most likely to motivate the medical community and gain cooperation and commitment at times of need (for instance a disease outbreak); and
- to be able to provide a leadership role and galvanise groups around a course of action. Indeed, the Institute argues that other health (acute and public health) professionals *"... look to [public health] physicians to be well informed resources, guides, spokespeople and leaders."*

Leadership is an interesting claim to uniqueness for public health physicians and one that is echoed in the opinions of a number of authors (e.g. Smith and Davies, 1997; Collins-Nakai, 2006; Chadi, 2009). Collins-Nakai (2006) talks about physicians as being 'accidental' leaders and being perceived as credible leaders whether they feel so themselves or not. Chadi (2009), similar to the Institute of Medicine (2007), puts the leadership capabilities down to the medical education and notes:

"... doctors working in both clinics and hospitals lead small groups of healthcare professionals on a daily basis. While the teams they are responsible for seem small, [they] nonetheless need to demonstrate essential leadership skills."

He goes on to say that doctors are constantly involved in situations where they need to both be able to manage and be managed. This is a theme picked up by others. Collins-Nakai (2006) for instance identifies the willingness of doctors to be part of a team and so adopt a very inclusive style of leadership:

“... leadership through influence, not authority; leadership by creating a shared purpose and a common vision, not by using position or power.”

Thus, while an inordinate proportion of public health physicians happen to be in management / leadership roles and therefore can wield 'legitimate' power (Glass, 2000), it is more transformational leadership qualities (Aarons, 2006) that most authors emphasise (Wright, Rowitz, Merkle, Reid, Robinson, Herzog, Weber, Carmichael, Balderstone and Baker, 2000). Collins-Nakai (2006) sums this up by stating that public health physician leadership involves visioning and motivating others to achieve the vision, dealing with change, often unanticipated and unplanned, and accepting challenging ethical dilemmas. In an unpublished manuscript provided to the study, Hyde notes that the common characteristics of leadership in public health are to:

- be a visionary;
- set the example;
- prioritise;
- empower and build community;
- trust and build respect;
- challenge and innovate; and
- act decisively.

In developing a public health leadership competency framework Wright et al (2000) constructed the list of main competency areas in which there is much in common with the above list and other authors¹⁹:

- core transformational competencies;
 - visionary leadership, sense of mission;
 - effective change agent;
- political competencies;
 - political processes;
 - negotiation;
 - ethics and power;
 - marketing and education;
- trans-organisational competencies;
 - understanding of organisational dynamics;
 - inter-organisational collaborating mechanisms;

¹⁹ For example, Coye et al, 1994; Collins-Nakai, 2006; Chadi, 2009.

- social forecasting;
- team building competencies;
 - develop team oriented structures and systems;
 - facilitate development of teams and workgroups;
 - serve in facilitation and mediation roles; and
 - serve as effective team member.

Several authors seem to be suggesting that it is these qualities that are more likely to be found in public health physicians although there remains a vigorous debate in most public health systems around an appropriate leadership role for public health physicians (McPherson, Coyle and Taylor, 2001).

5. Public health legislation

Positions defined in public health law

Since the mid 19th Century, first in the United Kingdom and later in Australia, many public health functions for the 'preservation of health and prevention of disease' have been supported by legislation. Legislation (which comprises the Act and any regulations made under it) can provide a range of powers and functions and it can create offences, or allow the making of orders. Such legislation can also establish certain statutory positions, such as the Medical Officer for Health or Chief Health Officers, and may define the roles or responsibilities of the position. These positions represent the origins of the role of the public health physician.

It is a commonly held belief that these statutory public health roles still exist and are filled by Fellows of the Australasian Faculty. As part of the study *The Unique Contribution of Public Health Physicians to the Public Health Workforce*, a comprehensive review of all current major public health legislation in Australia was undertaken to make a definitive statement about the provision for statutory public health officers in all jurisdictions in Australia. This work was funded by the Australasian Faculty of Public Health Medicine and undertaken by Chris Reynolds, a barrister and solicitor, who teaches Constitutional Law, Environmental Law and Law and Medicine, and who has a particular interest in public health law.

This study examined current health legislation in Australia through a desktop search of relevant Commonwealth/ State/ Territory public health legislation current in July 2009 and available from the web sites of parliamentary counsels' offices in the nine Australian jurisdictions. In particular, the search explored the primary Public Health and Health Administration Acts of the States and Territories. Collectively, these are the Acts which establish health agencies and responsibilities, covering environmental health, communicable disease control, quarantine, radiation safety and food safety.

In some jurisdictions information about public health functions of some positions was supplemented by information obtained from their websites. The analysis focused on:

- the statutory roles and functions of persons appointed to positions that involve the administration of public health legislation and policy; and
- the extent to which the legislation requires specific public health training or medical expertise as a condition of appointment.

Mr Lee Ridoutt, the Principal of HCA, and Dr Lynne Madden, then AFPHM Associate Director PHM, helped to define the scope of the search of public health legislation. The Advisory Group reviewed the findings of the final report, *Statutory Public Health Officers in Australia* and accepted the findings. A copy of the full report is included in Appendix A.

Results of examination

Public health is administered across Australia at State / Territory and Commonwealth levels. The Commonwealth is responsible for quarantine, epidemics, public health emergencies and implementation of international agreements where the State / Territories are responsible for environmental health and disease control. These differences create restrictions of the requirements and prescribed functions of positions.

There is no uniform approach to the appointment of public health office holders in Australia. Rather, a substantial difference exists between the public health offices and statutory positions established by each jurisdiction and the qualifications (if any) required for holders of those positions.

There are few public health positions within Australia described in the national public health legislation and few statutes which require a specialist medical qualification²⁰. Table 9A identifies legislation where a senior health officer / executive is identified and referred to in the legislation (it is generally the Chief Executive but can also be the senior public health officer. Table 9B summarises the results of the analysis of the legislation — shaded areas represent roles for which the nominated jurisdiction has legislation which refers to those roles.

Somewhat surprisingly there are only a handful of senior positions upon which the legislation is not mute, and even in these cases only in three instances are qualifications required — and then only a general medical practitioner qualification. In no cases was a requirement for public health qualifications able to be noted.

In respect to a small range of other roles in different States and Territories there are also some legislative requirements relating to their establishment and functions. These include Quarantine Officers (human), Medical Officers, Emergency Officer (medical) and 'Authorised Officers'.

²⁰ Although it could be argued that those few remaining positions are strongly imbued with what French and Raven (1959) would term 'legitimate' power.

Table 9A: Public health legislation which refers to specific senior positions in State & Territory health services

Jurisdiction	Relevant public health legislation
Australian Capital Territory	<ul style="list-style-type: none"> Public Health Act 1997 Radiation Protection Act 2006
New South Wales	<ul style="list-style-type: none"> Public Health Act 1991 Mental Health Act
Northern Territory	<ul style="list-style-type: none"> Public Health Act 1952 Food Act 2004 Radiation Act 1978
Queensland	<ul style="list-style-type: none"> Public Health Act 2005 Health Services Act 1991 Radiation Safety Act 1999 Food Act 2006
South Australia	<ul style="list-style-type: none"> Public and Environmental Health act 1987
Tasmania	<ul style="list-style-type: none"> Public Health Act 1997 HIV/AIDS Preventive Measures Act 1993
Victoria	<ul style="list-style-type: none"> Public Health and Wellbeing Act 2008 Radiation Act 2005 Food Act 1984 Pure Drinking Water Act 2003
Western Australia	<ul style="list-style-type: none"> Public Health Act 1911 Food Act 2008 Radiation Safety Act 1975
Commonwealth of Australia	<ul style="list-style-type: none"> National Health Security Act 2007 No other legislation specifies most senior positions

(Source: Reynolds, C & Madden, L 2010)

Table 9B: Positions and roles of senior persons specified in public health legislation

Jurisdiction	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	C'wealth
Head of Health Services (1)	NS		NS			NS			NS
Chief Health Officer				(2)	(3)	(4)		NS	NS
Qualification requirements of Chief Health Officer	MP	NS	MP	NS	NS		MP		

Position / role	Jurisdiction	ACT	NSW	NT	QLD	SA	TAS	VIC	WA	C' wealth
Director of Public Health / Chief Medical Officer						(6)				
Qualification requirements						NS	MP			

(Source: Reynolds, C & Madden, L 2010)

NOTES:

(1) Includes Director General, Chief Executive, Secretary

NS = not specified

(2) Health Service Act, 1991, creates the position. The Public Health Act invests functions

(3) Chief Public Health Officer proposed in the SA Public Health Bill 2009

(4) Administrative position only

MP = registered medical practitioner

(6) Very limited functions

6. Analysis of position descriptions

Introductory remarks

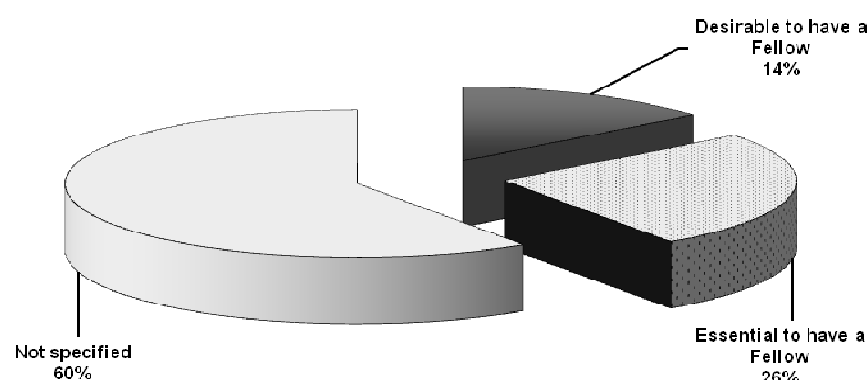
The analysis in this Chapter is presented in several sections based on the focus of analysis including:

- requirements for Fellowship of the Faculty;
- characteristics of the employer;
- jurisdiction;
- areas of practice; and
- skills required.

Fellowship requirements of positions

Examination of the qualifications required for each position revealed that only a minority specified that the occupant needed to be a Fellow, see Figure 5.

Figure 5: Number of position descriptions that required the occupant to have a Fellowship of the AFPHM (N=104)



Areas of practice

All the position descriptions were classified according to the area/s of practice of the work of the position. The taxonomy for the areas of practice used was that developed by HCA in 2007 for the Commonwealth Department of Health and Ageing to develop competencies for the MPH programs across Australia that were funded through the PHERP. There are seven broad areas:

Health monitoring and surveillance: Assess, analyse and communicate population health needs and community expectations.

Disease prevention and control: Prevent, detect and reduce communicable and non communicable diseases among human populations through systematic biomedical interventions such as screening, immunisation and contract tracing.

Health protection: Promote, develop and support physical interventions which ensure a safe and healthy environment.

Health promotion: Promote and support healthy lifestyles and behaviours through action with individuals and families, and by strengthening communities and building social capital through consultation, participation and empowerment.

Health policy, planning and management: Promote, develop and support good public policy through the application of appropriate legislation, regulation and fiscal measures, transparent priority setting in resource allocation and sound health policy to achieve both efficient and equitable gains in population health.

Research: was identified as 'underpinning knowledge' however, for the purposes of this analysis also been considered a major area of practice. It can be defined as: Undertake research design and methods involving quantitative and qualitative data analysis and recognition of the value of both, communication and dissemination of approaches and underpinned by the understanding of ethical and legislative requirement.

Education and Training: Performing or being involved in the development of educational and training programs for the purposes of undergraduate, postgraduate or professional learning purposes.

Positions descriptions could cover more than one area of practice. The findings are summarised in Table 10.

Table 10: Areas of public health practice encompassed by 104 position descriptions (some positions are counted across more than one area of practice).

Area of public health practice	Number of positions identifying area of practice	% of total positions identifying area of practice
Health monitoring and surveillance	23	22.1
Disease prevention and control	42	40.3
Health protection	32	30.7
Health promotion	25	24.0
Health policy, planning and management	50	48.0
Research	27	25.9
Education and training	21	20.2

Interestingly though, while the literature suggests public health physicians are likely to work more in the areas of disease prevention and control, health protection and health monitoring and surveillance, the position description analysis indicates a much greater role in policy and management (almost

half the positions). This could reflect the source of the positions and the significant proportion of positions that were formal management (or middle management) roles.

Primary focus of the positions

Position descriptions were classified according to the position type or the primary focus of the role as **operational**, **academic**, **advisory** or **management**. A description of each of the position types, defined for the purpose of this analysis, is provided below.

Operational: Where a position is required to perform duties that are commonly considered as being required for direct service delivery.

Academic: Where it was identified to be a position where all duties and key responsibilities were directed to serving a teaching role.

Advisory: Roles which involve providing advisory support to executive staff members and where a position is required to provide advice and participate in committees and working groups.

Management: Where a position is directly responsible for the management of operations, team members, business planning and budget arrangements.

Some positions have more than one focus, for instance they might have both an operational and management role and are counted therefore in both categories. An overview of the position descriptions according to their identified position type is provided in the Table below.

Table 11: Distribution of 104 positions held by AFPHM Fellows in Australia across four position types (some positions are counted across more than one position type).

Position type	Positions identifying position type n	Proportion of all positions identifying position type %
Operational	66	63.4
Management	38	36.5
Advisory	50	48.0
Academic	20	17.3

The largest proportion of positions has an operational component. In support of data in Table 10 on area of practice, a significant proportion of positions (over one third) have a formal management responsibility. As will be discussed in later Chapters, there is a strong likelihood that public health physicians are often directed to line management or senior advisory roles, partly to acknowledge leadership pretensions and partly to justify higher remuneration levels.

Skills required of positions

An overview of the *minimum* qualifications identified as being required by each position is provided in Table 12. The qualification 'requirement' could be specified as 'essential' or 'desirable' —only in the case of an 'essential' requirement does it comprise a true minimum. Table 12 counts only the 'highest' minimum (mutually exclusive categories); for example if a position specified a 'medical practitioner' qualification and a 'public health physician' qualification, then only the latter qualification is included. In Table 12 the qualifications are sorted in ascending order of perceived importance to what are nominally public health physician roles.

Table 12: Distribution of positions by required qualification

Minimum qualification requirements	Number of positions n	% of total positions with qualification requirement
FAFPHM	42	40.4
RACP	1	1
Medical practitioner	28	26.9
Relevant Public health background	21	20.1
FACHAM ²¹	1	1
Not specified	11	10.5

Seventy two positions (72%) required a qualification demonstrating a 'relevant public health background', which could be a FAFPHM but could also be a Masters of Public Health or other unspecified qualification. In nearly 10% of these positions a 'relevant public health background' qualification was a secondary qualification, that is, not the minimum requirement.

A list of 24 broad skill and knowledge requirements were identified in the position descriptions, generally embedded in the text associated with the duty statement, list of functions, the key responsibilities or statements of required knowledge and / or skills. All position descriptions were examined according to whether any of the listed skills were required for the position. Evidence of the skill being required was established from any of the text areas noted above. The distribution of required skills for the positions is shown in Table 13.

²¹ Fellowship Australasian Chapter of Addiction Medicine

Table 13: Skills required by 104 position descriptions — in ranked order of frequency

Stated skill or knowledge requirement	Positions nominating skill requirement	% of total positions nominating skill requirement
Communication skills	79	75.9
External liaison, negotiation, collaboration	76	73.0
Organisation/ line management	72	69.2
Population/ public health research methods	66	63.4
Interpersonal skills	64	61.5
Internal liaison, build & maintain relationships	59	56.7
Leadership	58	55.7
Experience in managing staff/ team	56	53.8
Develop/ teach and professional training	54	51.9
Analytical skills	49	47.1
Provide expert advice	44	42.3
Evaluation/ implementation	42	40.3
Ability to provide input and information into public health issues	41	39.4
High level policy analysis	37	35.5
Business planning	36	34.6
Knowledge of health system	36	34.6
Clinical skills/ patient management	34	32.6
Knowledge of legislation	29	27.8
ATSI/ understanding cross cultural issues	26	25.0
Emergency/ risk management skills	25	24.0
Capacity to work within executive team	16	15.3
Rural/ remote experience	7	6.7
Experience in investigation and reporting critical incidents	6	5.7
Understanding of barrier to effective service delivery	4	3.8

The following examples demonstrate how the most commonly required skills are expressed in position descriptions.

Communication: "Highly developed communication, consultation and negotiation skills", "Demonstrated ability to communicate effectively, both orally and in writing with health professions, the media and the general public", "Demonstrated superior verbal and written communication skills", "Excellent oral and written communication skills".

External liaison / high level networking: "Represent the Executive Director on National and State Committees in hearings and in negotiations and external parties; provide clinical leadership, professional development and support to clinical, unit and external health service"; "Develop and maintain productive relationships with the Commonwealth, other State governments, other departments and key external stakeholders".

Organisational / line management: "Responsible for the efficient and effective management of resources and services to maximise health improvement and reduce inequalities in health in the area"; "Manages a team of officers responsible for action in relation to persons in the community placing others at risk of transmission"; "Responsible for the day to day management of the office staff", "Manage performance appraisal and development of subordinate staff".

Population health research methods: "Provide high level expertise in epidemiology, biostatistics, evidence based approaches to population health and in research methods; conduct research relating to drug and alcohol health problems"; "Lead research in the organisation"; "Contribute to the delivery of postgraduate units and short courses which focus on research methodology".

Interpersonal skills: "Well developed communication and interpersonal skills"; "Sound interpersonal communication, negotiation and analytical skills".

Internal liaison, build and maintain relationships: "Liaise with internal and external stakeholders"; "Effective interaction with all internal and external clients"; "Building partnerships"; "Develop and maintain effective relationship and communication with staff".

Leadership: "Strategic leadership, support and advice to senior management"; "Leadership and advocacy within and outside the area on issues affecting population health"; "Provide leadership in managing the Division in line with community needs", "Demonstrated leadership in public health setting", "Demonstrated ability to provide leadership in a complex, professional work environment".

Experience in managing staff/ team: "Ability to manage a multidisciplinary team"; "Effectively manage and provide leadership to a team of employees engaged in the delivery of a comprehensive and high quality service"; "Manage the multidisciplinary team of staff"; "Proven ability to lead a team"; "Manage teams of public health officers in responding appropriately".

Analytical skills: "Creating and analytical problem solving skills", "High level, strategic, analytical and problem solving skills including the ability to participate in decision making on an interdisciplinary basis and experience in strategic planning in public health", "Highly developed conceptual, analytical and synthesis skills", "Analytical and problem solving skills to identify and analyse current future needs and to develop innovative solutions, plans and strategies to effectively respond to those needs".

The most commonly sought skill (by over half the positions) is the generic 'communication skills'. Almost as commonly required are some skills more closely associated with public health practice:

- external liaison, negotiation, collaboration;
- analytical skills;
- experience in managing staff/ team; and
- population/ public health research methods.

Analysis of skills required by different position characteristics

The skills and knowledge categories in Table 13 were cross tabulated with the requirements for **Fellowship** of positions. This was done to explore whether any differences exist between positions where the employer specifies a Fellowship requirement. The results are provided in Table 14. The shaded boxes are the top five most nominated skills in each Fellowship requirement category.

Table 14: Skills and knowledge requirements of positions by Fellowship requirements (figures are proportion of Fellowship requirement category requiring specified skills and knowledge)

Skill	Fellowship		
	Essential N=27	Desirable N=15	Not Specified N=62
Communication skills	21 (77.7%)	12 (80%)	46(74.1%)
External liaison, negotiation, collaboration	19 (70.3%)	11 (73.3%)	46 (74.1%)
Organisation/ line management	16 (59.2%)	10 (66.6%)	46 (74.1%)
Population/ public health research methods	18 (66.6%)	11 (73.3%)	37 (59.6%)
Interpersonal skills	15 (55.5%)	9 (60%)	40 (64.5%)
Internal liaison, build & maintain relationships	17 (62.9%)	10 (66.6%)	32 (51.6%)
Leadership	15 (55.5%)	5 (33.3%)	38 (61.2%)
Experience in managing staff/ team	12 (44.4%)	8 (53.3%)	36 (58%)
Develop/ teach and professional training	10 (37.0%)	7 (46.6%)	37 (59.6%)
Analytical skills	16 (59.2%)	4 (26.6%)	29 (46.7%)
Provide expert advice	18 (66.6%)	5 (33.3%)	21 (33.8%)
Evaluation/ implementation	9 (33.3%)	9 (60%)	24 (38.7%)
Ability to provide input and information into public health issues	15 (55.5%)	6 (40%)	20 (32.2%)
High level policy analysis	11 (40.7%)	4 (26.6%)	22 (35.4%)
Business planning	11 (40.7%)	2 (13.3%)	23 (37%)
Knowledge of health system	13 (48.1%)	5 (33.3%)	18 (29%)
Clinical skills/ patient management	4 (14.8%)	10 (66.6%)	20 (32.2%)
Knowledge of legislation	10 (37.0%)	8 (53.3%)	11 (14.5%)
ATSI/ understanding cross cultural issues	6 (22.2%)	11 (73.3%)	9 (14.5%)

Skill	Fellowship		
	Essential N=27	Desirable N=15	Not Specified N=62
Emergency/ risk management skills	5 (18.5%)	7 (46.6%)	13 (20.9%)
Capacity to work within executive team	6 (22.2%)	1 (6.6%)	9 (14.5%)
Rural/ remote experience	0	6 (40%)	1 (1.6%)
Experience in investigation and reporting critical incidents	3 (11.1%)	1 (6.6%)	2 (3.2%)
Understanding of barriers to effective service delivery	0	0	4 (6.4%)

The ten most common skills identified in Table 14 were also cross tabulated against the 'areas of practice' to differentiate the skills required to perform in each of these practice areas. The results are presented in Table 15. Table 15 identifies that the more important (and common) skills such as 'communication' and 'organisation/management' skills are fairly universally required across the range of areas of practice. The single exception is the research area of practice for which 'Population/ public health research methods' skills are most prominent.

Table 15: Types of skills required by each area of practice

Skill type	Area of practice						
	Health monitoring and surveillance (N=23)	Disease prevention and control (N=42)	Health protection (N=32)	Health promotion (N=25)	Health policy, planning and m'ment (N=50)	Research Methodology (N=27)	Education and Training (N=13)
	n	n	n	n	n	n	n
Communication skills	20 (86.9%)	35 (83.3%)	27 (84.3%)	22 (88.0%)	38 (76.0%)	16 (59.2%)	10 (76.9%)
Organisation/ line management	20 (86.9%)	34 (83.3%)	25 (78.1%)	20 (80.0%)	42 (84.0%)	14 (56.0%)	4 (30.7%)
Interpersonal skills	15 (65.2%)	31 (73.8%)	21 (65.6%)	16 (64.0%)	33 (66.0%)	14 (56.0%)	7 (53.8%)

External liaison, negotiation, collaboration	18 (78.2%)	31 (73.8%)	25 (78.1%)	19 (76.0%)	41 (82.0%)	21 (77.7%)	6 (46.1%)
Analytical skills	12 (52.1%)	21 (50.0%)	15 (46.8%)	12 (48.0%)	29 (58.0%)	7 (25.9%)	5 (38.4%)
Experience in managing staff/ team	18 (78.2%)	29 (69.0%)	20 (74.0%)	15 (60.0%)	29 (58.0%)	13 (48.1%)	4 (30.7%)
Population/ public health research methods	11 (47.8%)	25 (59.5%)	17 (53.1%)	13 (52.0%)	28 (56.0%)	25 (92.5%)	5 (38.4%)
Leadership	19 (82.6%)	25 (59.5%)	22 (68.7%)	17 (68.0%)	35 (70.0%)	11 (40.7%)	3 (23.0%)
Knowledge of health system	10 (43.4%)	16 (38.0%)	12 (37.5%)	10 (40.0%)	25 (50.0%)	4 (14.8%)	2 (15.3%)
Evaluation/ implementation	13 (56.5%)	21 (50.0%)	15 (46.8%)	10 (40.0%)	28 (56.0%)	8 (29.6%)	3 (23.0%)

In a similar manner position types were cross tabulated with the top ten skill areas and the results are presented in Table 16. The skill area most frequently mentioned has been shaded for each position type. Academic positions differed from others in the need for population/public health research skills and were notable in that knowledge of the health system was not a skill required in these types of positions.

Table 16: Types of skills required by different position types

Skill type	Type of position							
	Operational (N=66)		Academic (N=18)		Advisory (N=50)		Management (N=38)	
	n	%	n	%	n	%	n	%
Communication skills	56	(84.8%)	8	(44.4%)	42	(84%)	31	(81.5%)
Organisation/ line management	46	(69.6%)	6	(33.3%)	41	(82%)	34	(89.4%)
Interpersonal skills	47	(71.2%)	6	(33.3%)	34	(68%)	25	(65.7%)
External liaison, negotiation, collaboration	46	(69.6%)	12	(66.6%)	40	(80%)	30	(78.9%)
Analytical skills	29	(43.9%)	4	(22.2%)	26	(52%)	21	(55.2%)
Experience in managing staff/ team	38	(57.5%)	5	(27.7%)	31	(62%)	27	(71%)

Skill type	Type of position							
	Operational (N=66)		Academic (N=18)		Advisory (N=50)		Management (N=38)	
	n	%	n	%	n	%	n	%
Population/ public health research methods	38	(57.5%)	15	(83.3%)	32	(64%)	20	(52.6%)
Leadership	31	(46.9%)	9	(50%)	30	(60%)	30	(78.9%)
Knowledge of health system	27	(40.9%)	0		21	(42%)	20	(52.6%)
Evaluation/ implementation	30	(45.4%)	2	(11.1%)	23	(46%)	21	(55.2%)

Analysis of Fellowship requirements by different position characteristics

An overview of whether positions specified a requirement of a Faculty Fellowship according to the type of position is presented in Table 17. 'Operational' positions were the most likely to specify a requirement for a Fellowship of AFPHM with almost half of this type of position requiring Fellowship (essential or desirable). The greater proportion of academic, advisory or management positions did not specify the need for Fellowship, around a third of all management and advisory positions did specify Fellowship as essential. No academic position types specified an essential need for Fellowship, partly attributable to the generic nature of academic position descriptions (with the focus on teaching skills).

Table 17: Fellowship requirement by position type

Position type	Fellowship requirement		
	Essential (n=27)	Desirable (n=15)	Not specified (n=62)
Operational (n=66)	19 (28.7%)	13 (19.6%)	34 (51.5%)
Academic (n=18)	0	1 (5.5%)	17 (94.4%)
Advisory (n=50)	13 (26%)	8 (16%)	29 (58%)
Management (n=38)	11 (28.9%)	3 (7.8%)	24 (63.1%)

The requirement for Fellowship in position descriptions by different employer types is summarised in Table 18. State Health Authorities, including State/Territory health departments had the largest proportion of position descriptions that listed Fellowship of AFPHM as an essential, or desired requirement (36, 54%).

Table 18: Fellowship requirements in position descriptions of jobs held by Fellows in different types of employers

Employer type	FAFPHM requirements		
	Essential	Desirable	Not specified
	n	n	n
Academic		1	17
ACCHO	1	1	
Area/ Regional Health Service	2		14
Commonwealth	1		1
State Health Authority	23	13	30

Comparison between the jurisdictions is difficult due to the wide variation in the number of positions between them. Perhaps the most comparable groups were Victoria and New South Wales which had similar number of positions (n=23 and n=29 respectively). In Victoria only 3.8 per cent of positions specified FAFPHM as a requirement, a much lower proportion of positions when compared with New South Wales at 12.5 percent. The Table below has analysed Fellowship requirements according to jurisdictions.

Table 19: Fellowship requirements by jurisdiction

Fellowship requirement	NSW (n=29)	VIC (n=23)	TAS (n=5)	WA (n=17)	NT (n=16)	QLD (n=14)
Essential	12 (41.3%)	2 (8.6%)	3 (60%)	3 (17.6%)	3 (18.7%)	4 (28.5%)
Desirable	1 (3.4%)	2 (8.6%)	0	6 (35.2%)	4 (25%)	2 (14.2%)
Not specified	16 (55.1%)	19 (82.6%)	2 (40%)	8 (47%)	9 (52.6%)	8 (57.1%)

7. Analysis of interviews

Critical incident interviews

The 20 interview subjects described a total of 83 critical incidents. The critical incidents varied in scope, time period, content and context.

The context of the critical incidents included the following settings across Australia and internationally:

- area health services;
- State/ Territory government departments;
- international health departments/ agencies;
- communicable disease control centres;
- Commonwealth departments;
- peak bodies; and
- tertiary education providers.

The content area described by the interviewees included:

- strategy development;
- health system reform;
- communicable diseases;
- infectious diseases;
- environmental health;
- emergency and disaster response;
- public health response; and
- tertiary education.

Several critical incident examples were more strategic in their approach involving a longer time period within a broader political and public arena. This type of incident generally detailed more consultative processes across committees, level of government and the collection of evidence to support and illustrate the need for change or reform. Many other examples however were a direct response to an issue, being a disease outbreak, disease notification, natural disaster or emergency. This type of direct response involved more immediate action, typically over a shorter time period and invariably the public health physician was part of a multidisciplinary team approach.

To illustrate the level and type of variation across the critical incidents collected, some examples are summarised below. Each is reported in a broad sense and does not include any specific references to identify the

participant. The critical competencies detailed after each scenario are those identified by the participant and not by the researcher.

Scenario 1 – Strategy development

Public health physician became health representative on relevant ministerial advisory body and after appointment to position began reviewing literature to find little evidence supporting current traffic accident prevention practice. Issue of high death rate amongst young drivers led to review of current legislation/regulations which were liberal on licensing. Public health physician strongly influenced the introduction of graduated licensing.

Critical competencies:

- data analysis;
- bringing various forms of evidence to apply policy development;
- convincing argument;
- networking;
- communication capacity both writing and verbal;
- Doctors make life or death decision from day one as an intern – somewhat unique background to medical practitioner profession.

Scenario 2 – Communicable disease

During the H1N1 influenza outbreak and associated media activity, the public health physician was responsible for 13,000 staff stretching over five inpatient clinics and seventeen community clinics across metropolitan area.

Had relatively high sick leave amongst staff however it was lower than 2 years previously when a flu epidemic occurred, with the only difference being longer average period of sick leave when taken. Number of staff sick told to stay at home for one week to reduce risk of transferring the virus to patients and other co-workers.

A cough etiquette and hand washing program was run for all staff which established effective hygiene methods. Patients identified as infected with the virus were placed

in quarantine with couple of patients sent to the Intensive Care Unit. Some units where patients had separate rooms and also presented with the virus were also quarantined in their own room. New patients were not admitted to areas where the virus was present.

Seasonally, staff and patients are vaccinated against influenza. When the H1N1 influenza vaccine was available it had good uptake which was firstly made available to high risk patients and long term residents, staff and all patients. Although the outbreak had no direct consequences, it was fortunate in the limited degree of spread. The vaccination is still being promoted in case of a relapse.

Critical competencies:

- infectious disease knowledge;
- concise communication;
- public health physician training – think about population health more broadly; and
- included issues outside of specialist area including factors relating to morbidity and mortality – diabetes, heart disease, chronic diseases.

Scenario 3 – Environmental health

Local Council Environmental Health Officer came across a factory which has been emitting a carcinogenic gas for over twenty five years as part of a process to sterilise medical equipment. Emission control guidelines for the particular gas did not exist as it had fallen through a gap in relevant legislation.

The Environmental Health Officer approached the local Public Health Unit to ask advice on how to deal with the situation. The public health physician performed a health risk assessment to determine what type of cancers could be developed, what the exposure risk was, while performing community consultations. Had to handle an oncologist who had no public health skills and local

environmental activists who had an agenda other than public health interests.

Critical competencies:

- risk communication;
- competent media consultation and community consultations;
- credibility as Doctor within community;
- medical person able to calmly communicate real likelihood of getting cancer;
- varied knowledge of being public health physician and range of clinical experience; and
- falling back on primary medical knowledge.

Scenario 4 – Clinical governance

Interviewee was alerted to a practicing pathologist working in the local area who was identified as having a high error rate. The identified individual was working as a sole practitioner and was difficult to tie down. The public health physician organised for a total of 7,500 cases completed by the pathologist to be reviewed independently by numerous pathologists around the country – this required negotiation through a legal firm to establish contracts.

The scenario required the understanding of an overseas accreditation system where the pathologist was originally from as well as an understanding of Australian accreditation processes.

The scenario resulted in the development of research principles, review processes as well as setting up a hotline to deal with the public who suffered harm as a result of misdiagnosis. A protocol for communication on behalf of the CEO with patients and family was also developed along side preparing speeches for the relevant Minister and establishing a media campaign.

Interviewee worked hard to obtain continued commitment to open and transparent approach with the community – which continued to the end. This was

important in gaining community trust whilst maintaining credibility.

Critical competencies:

- see, explore, grasp all of the elements in the issue;
- see big picture but manage system attention to detail;
- being a doctor allows good peer relationships with clinical pathologists;
- knowledge of pathology and biological processes at molecular level;
- understand aspect of risks across primary / secondary / tertiary intervention; and
- community credibility/ authority.

Scenario 5 – Emergency disaster response

Involved in deploying multi jurisdictional team over first few days after the 'Boxing Day' tsunami in consultation with the Australian Health and Disaster Committee. Half of the team was deployed to Bande Ache with the remaining deployed to the Maldives. Interviewee played role of team leader amongst logistics experts and various clinicians.

Arriving in Maldives three days after the tsunami meant that the majority of immediate acute issues were already dealt with. Met with the government's Director General of Health to gain an understanding of situation and how assistance would best be utilised. Next ten to twelve days was spent providing public health services involving water supply, refugees, infectious disease outbreaks, burials and sanitation across smaller islands. Providing a lot of treatment, identifying water sources, providing surveillance to operation centre as to what was going on,

Three teams of five visited couple of islands a day working closely with local doctors. Clinics had lost a lot of equipment and medicine, used a series of transport modes as logistics of moving around island was difficult. Also providing advice as to further management of situation whilst coordination response.

Critical competencies:

- population perspective;
- understand need for broader public health needs;
- communication;
- Australian teams culturally sensitive – public health work with different cultures which have different health systems to achieve aims;
- management and collaboration;
- public health physician can actually step back and play leadership role unlike clinicians who can get side tracked;
- limits to resources no point in duplicating them – supplement local agencies; and
- solving issues with other agencies.

Scenario 6 – Quality and safety

Interviewee identified through infectious disease notification system an individual who had recently undergone a coronary artery bypass procedure as positive to Hepatitis C. Potentially significant situation as the individual may have acquired the infection in preparation for, or during procedure.

Public health physician worked with the infection disease nurse appraising all potential avenues of transmission/ risk including patient was diabetic, undergone numerous invasive procedures, reviewed neighbouring patients, undertook interviews with relevant specialists and general practitioners.

The case required an extensive review of minor detail for which a public health physician was needed. The tasks involved reviewing clinical records, consultations with medical practitioners, consistent liaison with senior hospital positions including Chief Medical Officer.

No primary source of infection was sourced but was satisfied that the infection was not a result of hospital intervention. Always adopt the worse case scenario.

Critical competencies:

- clinical knowledge equal to the requirement;
- ability to analyse clinical scenarios;
- assessing risks and prioritising; and
- communication with other clinicians.

The majority of the critical incident scenarios described by interview subjects focused on communicable disease related work and other areas where the critical incident was likely to be a perceived 'crisis', quite public (or potentially so), and requiring more immediate responses. This included critical incidents related to infectious disease outbreak, emergence of disease clusters, international disasters. That public health physicians would focus on these types of incidents is not surprising given (1) the likelihood that a public health physician will be working in a related area (or would have done so for many years of their career) (2) that immediate action oriented incidents tend to be more memorable and easier to describe, and (3) that it is likely that public health physicians perceived in these areas of practice that their medical / biological knowledge, rapid response / decision making skills and high credibility provide them a 'competitive advantage' over other types of public health practitioner.

As noted in the methodology section, some public health physicians were directed to consider non communicable disease related incidents and this developed a broader set of incidents and therefore competencies to consider. The more outstanding and prevalent areas of competence and other attributes revealed for public health physicians were:

- The credibility of public health physicians in a range of settings and across a number of critical types of audience. Public health physicians have higher credibility in comparison with other types of public health worker (perhaps even other types of medical practitioner in some circumstances) in regard to the general public (almost invariably the public face of H1N1 influenza control was provided by public health physicians), government and public servants, and other medical practitioners. Whether this credibility is warranted or not²² is a moot point — it provides public health physicians with a strong base upon which to influence positively a

²² Some observers in the literature for instance and some interview subjects noted the credibility rested to some extent on the hegemony of medical practice within the health system. As such it could be argued to be vulnerable to any deterioration of the broader position and status of medical practice. However few would argue that the dominion of medical practice in the health system is likely to be undermined any time soon. Moreover, public health physicians mostly claim that while credibility may be given initially without apparent effort, it is retained and even enhanced through subsequent actions.

range of communication situations. Credibility translates into 'trust', and Covey (2009) has noted how trust facilitates much greater speed and efficiency of both communication and subsequent transactions;

- Leadership capabilities. While many of the subjects interviewed had some line management responsibilities for staff and services, it was not this but rather more what the literature terms 'transformational' leadership skills (e.g. Collins-Nakai, 2006) that were identified as critical. These skills emphasise providing a vision, making decisions, emphasising collaborative practice of multidisciplinary teams. Some critical incidents highlighted the visioning aspect of leadership and the role public health physicians often play as a 'catalyst' within multidisciplinary team based practice. Other terms used were 'facilitator' and 'change agent' (which will be discussed later). One interview subject likened his role in a particular incident as the "yeast" in producing the appropriate outcome;
- Ability to independently critique evidence. Public health physicians show strong research skills through their in depth understanding of diseases and microbiology public health physicians can comparatively quickly fashion a public health response to these diseases using a system wide perspective. Many incidents reflected a determination to use evidence to mount a rationale for a pathway forward. They translate clinical implications into population health approach;
- Ability to independently interpret risk. Public health practitioners demonstrate an understanding of risk – the aspect of primary / secondary / tertiary intervention. A rapid assessment of risk allows interpretation of implications for policy and practice and being able to appropriately *prioritise* a response; and,
- Partly as a consequence of high credibility but the result of other attributes as well, public health physicians perform intersectoral work at a high level to affect health system reform, policy and practice based upon a systems view. Public health physicians have organisational/political awareness that is possibly sharpened with public health training. They can advocate across agencies to change behaviour and thinking of clinicians and health care organisations; apply effective communication, negotiation and conflict resolution skills with a range of people and relevant organisations.

Some interview subjects in discussing the competencies they exercised in critical incidents wondered if the skills and knowledge applied was idiosyncratic, and posited more in the individual than a result of training or some other process that could lead to a claim of possession for the broader public health physician population. This is a similar argument raised by some managers of public health physicians (see below), that public health physicians distinguish themselves not so much by different competencies but rather by dint of higher intelligence and work ethic.

Senior manager interviews

The majority of senior managers interviewed worked within and or were responsible for the operation and management of a public health department, branch and or unit within metropolitan areas of the State and Territory jurisdictions noted in the methodology. Some managers were from the non government, Indigenous health and academic sectors.

In nearly all the circumstances public health physicians were but a small minority of the public health staff resources they controlled. An accurate count was not possible, but the proportion of public health physicians to other types of public health worker ranged from one in ten to one in 20. Often the public health physicians they supervised were themselves in middle or fairly senior management positions supervising staff and being responsible for an area of service delivery. A small but important group of subordinate public health physicians were in advisory type roles and expected to play a more 'transformational' leadership role.

The findings presented below are a result of text data analysis performed on the senior manager interview summaries. For the purposes of discussion, the data has been grouped into major themes and or points of discussion formed throughout the interview process.

Competence of a public health physician

The main skills and or competencies of a public health physician cited by senior managers are listed below. These skills have been categorised into broad areas of public health and medical knowledge. Note, the list does not represent a comprehensive description of the competencies that public health physicians possess, but rather those competencies which physicians possess which seem to make the most difference to successful public health outcomes.

Public health competencies

- disaster and emergency response management;
- ethics, equality and equity;
- strong understanding of health system;

- interface between clinical practice and public health;
- policy and response strategy development;
- epidemiology;
- social policy;
- advocacy; and
- environmental health.

Analytical skills

- synthesis of information (data/ literature);
- interpretive skills;
- self management;
- evaluation and planning;
- coherent/ concise analysis;
- technically excellent;
- quality of researching skills;
- having a sufficiently solid grasp of the content issues to be able to translate the public health message for the community;
- weighting information in level of uncertainty; and
- articulation of situations.

Biological/ disease knowledge

- biological processes;
- disease prevention;
- infectious / communicable disease;
- clinical pathway of diseases;
- understanding of health impacts;
- surveillance; and
- knowledge of risks.

Case work/ clinical practice

- case definition;
- functional investigation;
- one to one care;
- relate individual to population, relate populations back to a picture of individuals when constructing a community response;
- reviewing preparation/ protocols/ cases;
- clinical aspects of management of chronic illness; and
- best intervention / type approach.

Networking

- collaboration;
- networking;
- intersectoral work; and

- facilitate synergies.

Management/Leadership

- strategic thinking, being able to craft a vision;
- change agent, being a catalyst for change within a project, program or even the organisation;
- prioritising issues;
- management;
- operational capacity;
- advisory role;
- being able to 'front' communication with the media and the general public, striking a cogent leadership figure;
- distributive leadership; and
- transformational leadership.

Systems view

- systems framework orientated approach;
- integrate individual elements to form whole picture;
- align program (public health and response);
- respond in framework; and
- helicopter view.

The list is a mixture of skills, competencies and knowledge areas. Another area highlighted by managers was the actual qualification of public health physicians (that is as a medical practitioner) and the medical training journey that physicians have taken. Most managers agreed that the medical practitioner qualification endowed public health practitioners with high levels of credibility and a competitive advantage in respect to other public health practitioners. This credibility enhanced the public health practitioner's capacity for communication with other medical practitioners, other health workers, other sectors of government and even the corporate sector (one manager talked about a public health physician's capacity to persuade a large supermarket chain to close their store for a period of time in the interests of public safety).

Less obvious but just as important, managers argued that the clinical training public health practitioners received, at least the years after graduation (but for most much more) honed skills in:

- consultation with colleagues in multidisciplinary teams;
- understanding of the value of, and commitment to team work;
- referral and delegation of tasks;
- clinical management / skills;
- understanding of clinical aspects to approach; and
- understanding of protocols.

In comparison to other health care professionals managers perceive public health physicians to be a 'bridging force' between public health and the acute sector due to their clinical understanding. This 'content knowledge' allows public health physicians a background understanding in responding to issues and the ability to converse freely and comprehensively with specialists both within and outside public health. This idea of public health physicians being a bridging force was also associated with the capacity to translate medical information into useful public health communications.

Despite being able to identify a range of critical competencies that their public health physicians might possess the senior manager interview process more generally seemed to suggest that it was not any particular individual skill or set of competencies that made the contribution of public health physicians unique. Rather it was the combination and mix of the skills and competencies listed above that can not be easily replicated by other public health practitioners. And it is a 'dose' of this mix of skills which when added to the rest of the public health workforce elicits synergistic outcomes from the 'team'. In other words, the addition of a public health physician to a public health team generates a level of output and productivity that is greater than the sum of the parts.

Management/Leadership

A disproportionate number of public health physicians occupy formal management roles. Some senior managers confessed that sometimes public health physicians were placed in middle to senior manager roles in order to pay a sufficient remuneration to attract and retain them. Alternatively, it could be used as a rationale or justification of a high salary level, when others might argue an alternative form of public health labour. Discussion of the leadership issue throughout the senior manager interview process could have been influenced by this factor and hence also impacts on the perspective of public health physician leadership capabilities. The total proportion of public health physicians in middle to senior management positions could not be surveyed for the purposes of this study.

The formal leadership capabilities of public health physicians were contested by some senior managers. They argued that it was not the public health physician background, preparation and associated unique competencies which prepared them for management / leadership roles, but that effective leadership was due to personal qualities. One interviewee went so far as to say that given the intellectual capacity of the individuals concerned (top one percent of high school graduations) combined with a superior work ethic, naturally delivered a high proportion of the public health physician workforce into management roles.

Not that public health physicians occupying management roles is necessarily appropriate. The consequences of public health physicians working within management positions were highlighted as loss of innovation and reduced thinking time. These concerns are also attributed to the quality of work and costs associated with employing public health physicians, i.e. high quality work equals highly paid employees, further contributing to high expectations from the employing organisation. Excluding public health physicians from being considered for a position due to cost implications was also noted as being unjustified as they are often considered the most capable and appropriate 'value for money'.

Many forms of leadership were suggested to be displayed by public health physicians, including issue leadership, distributive leadership and transformational leadership. Managers noted that within a multidisciplinary team context, public health physicians are often looked to particularly in times of uncertainty to provide leadership, effectively leading the team so that all members have a relative understanding of their contribution to the situation. One manager noted how frequently a team of otherwise very bright public health practitioners could be 'thrashing around' seeking answers and the input from a public health physician would provide instant direction and clarity around both the problem and the solution.

Workforce considerations

Interviewees were asked to consider the required critical mass of public health physicians. The best 'net' investment, the particular number of public health physicians or ideal proportion across the health system was not known. Although discussed by senior managers in their own contexts, the majority were reluctant to offer an estimated number or proportion. Many interviewees noted that more public health physicians would be valuable across their organisation/ jurisdiction, however raised concerns whether a 'value for money' argument could be sustained. One candidate estimated currently having 2.5-3% public health physicians within the broader public health workforce situated within a metropolitan area. Although a minority, the public health physicians within the particular State/ Territory were definitely valued in terms of the quality of work and established credibility.

While not resolving what might constitute a critical mass, the suggestion was strong that major areas of public health practice including environmental health, communicable disease control and food safety should all have at least one public health physician present. The idea of 'sprinkling' public health physician's across the branches and departments was suggested to be beneficial by bringing a stronger understanding of population health issues, health systems and a systems view across the health system. Whilst also allowing the capacity of a public health physician to lead change and to be present in all areas of public health.

Currently there are no established guidelines or benchmarks as to how many public health physicians should be employed within a jurisdiction, department, public health unit, organisation.

Overview from all interview data

The analysis of interview data attempted to determine the main skills and competencies which were seen to be unique to public health physicians by the interviewees. In the case of the senior manager interviews these skills and competencies were discussed in terms of what was the unique contribution of the public health physician from the context of the employer. For the critical incident interviews the interviewee's were prompted to distinguish the main competencies and or skills which they utilised in responding to incidents.

Table 20 illustrates the skills and competencies identified through the critical incident and senior manager sets of data. Note that only those competencies which are potentially unique or at least more critically developed in public health physicians, are included.

Table 20: Skills/ competencies cited in interview process

Theme	Critical incident	Senior manager
Public health competencies		
Disaster and emergency response principles		
Translation of medical message to public		
Interface between clinical practice and public health		
Policy and response strategy development		
Ability to become instant expert		
Change agent		
Advocacy		
Analytical skills		
Communication		
Independent synthesis and analysis of evidence (literature, data, information)		
Interpretive skills		
Weighting of information in levels of uncertainty		
Strong commitment to knowledge or evidence based approach		
Biological/ disease knowledge		

Theme	Critical incident	Senior manager
Biological processes at the molecular level		
Disease prevention		
Infectious diseases		
Clinical pathway of diseases		
Risk factors of diseases/ health impacts		
Clinical work/ practice		
Case definition / review		
One to One care		
Chronic illness management		
Best type of intervention / approach		
Networking		
Collaboration		
Networking		
Intersectoral work		
Knowledge of stakeholders/ who to put confidence in		
Leadership		
Strategic thinking / planning / visioning		
Prioritising actions / issues		
Advisory role		
Distributive leadership		
Transformational leadership		
Self management		
Systems view		
Systems framework approach		
Integrate individual elements to form understanding of broader issue – Helicopter view		
Align public health and response		
Holistic response		
Medical practice connection		
Credibility		
Collegiate respect		
Acceptability in the community		

Overall managers seemed to identify more areas of competence that distinguished public health physicians.

8. Discussion of findings & future directions

Workforce issues

The size of the public health physician workforce in Australia since 1997 has grown very little and has instead varied above and below an average of approximately 400 from year to year. At the same time other parts of the medical practitioner workforce, especially clinical components, have grown robustly at approximately 3% per annum. The broader public health workforce too has grown significantly, and while this growth is difficult to quantify it is possible to accept that public health physicians are becoming an increasingly small proportion of both the medical practitioner and public health workforces.

This is not surprising given the apparent training rate of public health physicians, a crude estimate for which calculated from Faculty statistics, over the last decade is less than 3%. A training rate of under 3% for any profession will struggle to satisfy 'replacement demand' — that is workforce requirements the result of natural attrition from the workforce — and certainly not support workforce growth. Public health physicians were noted by managers interviewed to have a fairly high retention rate often only resigning to relocate or retire. This may have been an important factor in helping to maintain supply levels in spite of a low training rate. As the initial 'grandfathered' group of Faculty membership, which is proportionately a large part of the total membership, reaches retirement age the supply of public health physicians could be seriously undermined if current training rates are not addressed. This issue would bear closer scrutiny.

The workforce growth trends potentially hide from examination employer intentions with regard to the recruitment of public health physicians. Is the gradual dilution of public health physician numbers in the public health services workforce a market response to the need to cut costs and gain extra 'value' from limited budget resources, or simply a situation where employers cannot obtain public health physicians and are forced to improvise with alternative types of labour? Most employers interviewed indicated they could or would employ more public health physicians, and that a lack of genuine candidates for advertised positions, even in major urban locations, was thwarting efforts to increase public health physician staffing.

In a subsequent section of this conclusion some issues in regard to the conditions and quality of public health physician training are raised based on unsolicited comments particularly from manager interviews, however the

question of the right quantity of persons trained (that is the right training rate) as the above question suggests is not simple. The capacity of public health services to absorb an increased supply of public health physicians, where the demand for labour is almost exclusively expressed as salaried employment, is more difficult to guarantee than for clinical medical practitioners. In the case of clinical areas of medical practice the majority of the workforce is participating in some form of private practice, where the conditions of workforce demand are significantly more elastic, and therefore more able to absorb increases in supply. Nevertheless, it seems counterintuitive that at a time when preventive health effort is becoming increasingly touted as a policy priority and increasing levels of investment are being directed towards prevention effort (e.g. the *National Partnership Agreement on Preventive Health*), the public health physician workforce should not be growing. A proper study of the supply and demand for the public health physician workforce would be appropriate and possible even with the relatively limited data available.

Requirements to employ public health physicians

At the commencement of the study a common belief was that many of the public health physician occupied positions in the health system because of some mandatory conditions. This is clearly not the case.

The study of Statutory Public Health Officers in Australia (described in Chapter 5 and detailed more in Appendix A) clearly establishes that very few positions in the Australian health system are identified in relevant public health or health administration legislation / regulations, fewer still have minimum qualification requirements associated with identified positions, and when requirements are specified they never nominate Fellowship of the Australasian Faculty of Public Health Medicine and at the most require current registration as a medical practitioner. Currently there is not a single position in Australia occupied by a public health physician because of legislative requirements.

Of course there are other ways of mandating the occupant of a position, in particular through specifying the requirements for qualifications or experience in the position description (which will then dictate recruitment conditions). The review of over 104 positions in Australia currently occupied by public health physicians, approximately one fourth of all such positions, found just over one quarter (26%) specified that the position incumbent must be a Fellow of the Australasian Faculty of Public Health Medicine, and for only an additional 14% of positions was this condition deemed desirable.

Well over half (60%) of the positions examined had no requirement, meaning that the 'market' had filled these positions with public health physicians presumably because a decision had been made that those skills were the

most appropriate and represented the best value for money. Of course the true situation is likely to be more complex, and many of these positions could be filled with a public health physician because of convention ('they have always been occupied by a public health physician!'), however it is reasonable to assume that most of the positions are so occupied because of a positive decision.

An obvious question arises as to whether more public health positions should be mandated as such and therefore quarantined from the vagaries of market forces. Would this be a way of promoting growth or simply minimising any reduction in demand to a finite number? Or would an effort to convince the 'market' of the value of public health physicians be more conducive to the promotion of demand for public health physicians?

It seems that where the market is choosing a public health physician the position requirements emphasise less the management skills and more the 'content' skills of public health physicians such as analytical skills, providing expert advice, ability to provide input and information into public health issues, business planning and knowledge of the health system. Interestingly where a public health physician qualification is 'desirable' only, the skills emphasised in the position descriptions are clinical skills / patient management, knowledge of appropriate legislation and understanding cross cultural issues. State Health Authority employers are much more likely than any other type of employer to have a public health physician qualification as an essential requirement of employment.

Employer expectations

There is significant variation in expectation of employers of public health physicians. As a rule though, an expectation exists that given the differential between the remuneration for public health physicians and all other forms of public health workforce, public health physicians will (a) deliver more output especially of 'intellectual' products, (b) provide a credible 'face' to public health activity, especially when interfacing with populations outside of the public health arena (including the general public) and (c) assume management responsibilities. Over one third of the public health physician position descriptions were identified as 'management' positions, while over half explicitly identified management functions as part of the position requirements (especially managing staff). Many of the managers interviewed indicated that more not less public health occupied positions were likely to be associated with management responsibilities, this being a comparatively easy way to justify the remuneration differential and obtain apparent value for money.

From a content perspective it seems there is some expectation that public health physicians will focus on the 'traditional' areas of public health work, viz. health monitoring and surveillance, disease prevention and control and health protection. These are the areas of public health practice where most public health physicians are employed, where they have a widely perceived 'competitive advantage' (due to their broad knowledge of the biological aspects of disease) and where their capacity to interface credibly with clinicians and with the general public can be of most value.

Based on the findings from the interviews with employers, there is an emerging employer demand for public health physicians to apply their skills, competencies and leadership capacity to other areas of public health practice beyond the 'traditional'. Several critical incident interviews identified public health physicians bringing their skills successfully to practice areas such as chronic disease prevention, climate change impact and injury prevention. Some employers wanted to see public health physicians taking more risk and actively pursuing work in these areas. Managers also thought that public health physicians could apply their value and influence to the clinical governance domain, Indigenous health reform and health system policy. In particular it was also noted that public health physicians were not delivering results in 'comparatively simple clinical problem areas' such as Indigenous child hearing loss.

The most interesting expectation though expressed by a small but important number of employers was for public health physicians to be more active in health system reform. They argued that the somewhat complex nature of these areas would require public health physicians to work actively within bureaucracy as a 'change agent' and in a 'brokerage role'. The view articulated was that public health physicians are somewhat uniquely placed to exert influence, a combination of (1) being firmly located within the policy making / administration system, (2) having strong networks of influence both within and across the health system and often too within the political system, (3) being able to construct and promote a strong argument for a particular [business] case, and (4) having widely acknowledged credibility partly stemming from not having any overt vested interest (not always the case with clinicians or medical administrators). Many of the critical incident and employer interviews highlighted the capacity of public health physicians to be agents of change, the "yeast to make the bread rise", the "catalyst" for progress.

This expectation clearly has implications for the types of positions that are created and how they are described (see below) and potentially conflicts with the trend to place public health physicians in roles where their credibility as 'change agents' could be compromised.

The question of uniqueness

During the course of the study the wisdom of using the term unique became under increasing challenge from within the study team, the Advisory Group and others including persons interviewed. Unique is a binary attribute, you are either unique or you are not. It was argued that perhaps the concept being explored was more to do with rareness, and higher probability that particular (valued) qualities might reside in public health physicians when compared with other forms of public health workforce. Or perhaps it was that a 'special' value proposition (using marketing terminology) could be associated with the public health physician workforce.

The uniqueness of public health physicians and their contribution to the public health workforce is clearly not due to one specific skill or competency or even an easily identifiable cluster of skills. Indeed, the senior manager interview process suggested strongly that it was not any particular individual skill or set of competencies that made the contribution of public health physicians unique. So too, the literature review found significant overlap in the primary required skills of public health physicians and other forms of public health workforce.

Both the literature and managers suggest it is the broad combination of the skills from training as a medical practitioner and then completing public health training that promotes a competence set that is difficult for any other form of public health practitioner to replicate. It is a *rare combination* of skills, which in all probability will make public health physicians *more likely* to be credible experts with the community in most areas of public health, potentially the best 'champions' of public health (and health system reforms), to be able to motivate the medical community and gain cooperation and commitment at times of need (for instance a disease outbreak), and to be able to provide a leadership role and galvanise groups around a course of action. This is not to say that other public health practitioners or clinicians cannot see the big picture, cannot analyse and develop solutions, cannot understand and rapidly assess risk, are not comfortable with making decisions in data poor situations, cannot lead and manage ideas, teams or projects. It is rather that public health physicians are [much] more likely to have this 'package' and deliver the value that these attributes can provide.

Through both the critical incident and employer/manager interviews one consistent theme was produced. This was in relation to the ability of a public health physician to add evidence based value to critical public health issues. As noted previously, this was commonly described as a 'change agent' or 'catalyst' role where public health physicians were seen to promote and advocate on the basis of evidence rather than personal gain. This intervention is best illustrated where an interplay between the clinical and

non clinical settings of public health and illness is required, but can and often does extend into other areas where examining available evidence, building a case, making a quick decision and persuading others of the merits of a particular course of action can be critical.

This catalyst role probably also plays an important part in public health physician's leadership / management responsibilities especially within multi disciplinary teams. Without quite knowing how it happens or what are the key ingredients, most managers interviewed were of the view that when a public health physician is added to the rest of the public health workforce this elicits synergistic outcomes from the 'team'. In other words, the addition of a public health physician to a public health team generates a level of output and productivity that is greater than the sum of the parts. What 'dose' of public health physicians is required to elicit the desired outcomes from teams, what types of multidisciplinary teams respond best, what types of issues and problems benefit most from the efforts that might be inspired or directed by public health physicians is not well understood by managers and may be an area for further research.

There are also some claims on behalf of public health physicians to possession of 'rare' competencies that are contentious. A claim to leadership / management competence for instance is one such area, where clearly other public health practitioners and other types of health workers in general can lay claim. Moreover, there is no evidence in the training of public health physicians of significant preparation for leadership or management and training for medical practice prepares clinicians as much for team membership as it does leadership. It is most likely that any special leadership assertions need to be made within the narrow parameters of public health practice and more situational or transformational leadership circumstances.

Another area of claimed special competence is that being a doctor in public health confers a higher level of credibility in a range of arenas, but especially with the general public. The controversy around this claim relates more to its appropriateness rather than its validity. The recent prominence of public health physicians as the face of almost all the State and Territory health systems across Australia in 'selling' government responses to the H1N1 influenza threat was powerful evidence of the credibility issue. It seems that the general public trust doctors more than other forms of health practitioner and that public health physicians build on this trust and generate high levels of credibility through obvious demonstration of knowledge and confidence, especially in areas such as communicable disease control. Other health practitioners would struggle to achieve similar levels of credibility. Whether this situation is fair to other forms of health practitioner is irrelevant, as several senior managers pointed out doctors currently have some level of

'sovereignty' over the health system, a phenomenon accepted by the general public and unlikely to change in the foreseeable future.

Of course the above discussion of uniqueness or more appropriately a rare 'package' of competencies and attributes that is possessed by public health physicians is constructed from an idealised perspective. Like all workforces, competence is normally distributed. Clearly there are some public health physicians who rarely find themselves in leadership or catalyst / change agent roles and probably not all are equally suited to playing such a role. There are undoubtedly some public health physicians who fill 'backroom' type roles that could easily be assumed by another type of public health practitioner for instance with postgraduate training in epidemiology. It is important therefore to emphasise again that it is the superior *potential* of individuals within the public health physician population to display rare and desirable qualities that is valued. These qualities of the public health physician population / workforce can be accentuated through recruitment and training.

Training implications

While not a focus of either the critical incident or senior manager interviews several issues regarding current public health physician training schemes were raised by those interviewed, particularly in discussions about current trainees. The literature of course also comments much on training issues but this tends to be of a broader nature and not specific to Australian training circumstances.

There are three aspects of training where discussion is promoted by the findings of this study; training quantity, quality and content.

It was noted earlier that the training rate for the public health physician workforce is low and barely able to satisfy 'replacement demand' the result of natural attrition from the workforce. It was noted that growth therefore in the public health physician workforce is negligible and relative to most other health workforces it is shrinking. Assuming this not to be a planned phenomenon nor considered to be desirable, it begs the question as to what the **quantity** of trainees should be, how many public health physicians should there be in the Australia health system. There is no definitive answer to this question. In the UK, practitioner to population ratio guidelines (a crude estimate at best) have been suggested of 25 per million. If this ratio were applied to Australia an estimated additional 200 full time equivalent public health physicians would need to be currently employed. A more systematic approach to estimating demand for public health physicians needs to be developed.

Current separate State and Territory training programs being implemented under and on behalf of the Australasian Faculty of Public Health Medicine were noted for their differences in operation and potentially in **quality** standards. Concerns were raised throughout the interview process about a lack of a standardised national approach to public health physician training. Some thought that the comparatively small number of total trainees each year might be conducive to a national rather than State and Territory program approach.

Perhaps because of the independent operation of programs, with a consequent low number of participants therefore in several of the programs, issues arise in regard to providing trainees / registrars with sufficient breadth of experience. Managers advocated having more positions across a department/ organisation in major areas of public health practice, allowing for a more 'fertile' training environment. A larger number of trainee positions would give current and upcoming trainees the possibility of more experience in areas not traditionally available including chronic disease prevention, Indigenous health reform, climate change response, examination of the built environment, etc.

Finally there is the **content** of training. Clearly there has been significant effort in the past to define content as evidenced through the construction of competency standards and through the development of curricula for a range of public health officer training programs around Australia. The findings of this study however bring into question the priorities of current training efforts within the broad guidelines offered by the competency standards.

For instance, given the importance of management competencies identified in the role of public health physicians several managers were of the opinion that current public health physician training programs were not adequately developing public health physicians' ability to manage and lead. These views as suggested earlier in discussing leadership are more likely swayed by the fact that the majority of public health physicians interviewed are currently within middle to senior management positions. However, this situation is more likely to become the norm as value is sought from a comparatively costly resource. In regard to developing management / leadership competence some observers have noted that the training program curriculum of the Royal Australian College of Medical Administrators already covers this area; perhaps joint or overlapping training arrangements could be developed. Such arrangements would be even more appropriate where the aim was to develop a more flexible type of medical practitioner resource for more remote areas of health service delivery. The prototype for this type of multi-

skilled practitioner fit for a specific [rural] purpose is the 'rural specialist' role fashioned in Queensland Health²³.

A remaining issue in regard to training does not concern quantity, quality or content of training for public health physicians but rather who can participate in the training. The competitive edge that public health physicians possess in the labour market might be argued to be the result of their training experience. If this could be replicated for others, then hypothetically the difference in skills sets between public health physicians and other public health practitioners could be eliminated or at least minimised. Some training programs already in practice are by default testing this hypothesis (for instance the NSW Public Health Officer Training Program) and some observers anecdotally judge there to be little difference in capacity between medical and non medical background graduates. The findings of this study though would suggest that it is the *medical practice* training which is critical to forming the specific perspective and competencies that public health physicians bring to public health practice and this would be extremely difficult to replicate.

Position description issues

A substantial number of positions descriptions were collected for the study (approximately one quarter of all public health physicians within Australia). With the exception of academic positions which are discussed further below, generally there were few common elements for public health physician position descriptions in terms of required qualifications, skills or competencies. In regards to format there was a range of approaches taken, some of which appealed more from a human resources management perspective. There was more commonality across the position descriptions in terms of statement of duties. These were most frequently tailored to 'public health duties' which tended to be generic to the traditional areas of public health (for instance communicable disease) rather than generic to the types of skills which a public health physician might possess and be able to apply in the workplace. While it was noted that many position descriptions might only poorly reflect the actual tasks being performed by a position incumbent and have rarely been kept up to date, nevertheless in theory current position descriptions could restrict public health physicians from shifting effort into new areas of work desired by some managers (or at least could form a justification for a public health physician not engaging in such a change). While acknowledging that position descriptions probably influence mostly

²³ Queensland Health, Rural Generalist Pathway website <http://www.health.qld.gov.au/ruralgeneralist/content/history.asp> accessed on 16 February, 2010.

recruitment and remuneration decisions and not many other human resource management functions, a better drafted position description could fulfil greater human resource management potential, including more precisely directing work effort and appraising and managing performance.

In this regard a surprising finding was that position descriptions for academic public health physicians are invariably completely generic, and drafted to provide a common description for all academics at different levels, for instance senior lecturer, associate professor, professor, etc. Most if not all academic position descriptions are devoid of descriptive elements that would indicate the incumbent is likely to be a public health physician, except perhaps in the qualification requirements.

There is a potential need to develop a range of skills and competencies common to the training offered by the AFPHM (or which they could offer in response to the needs identified in this study) to provide a position description 'template' to employing organisations for public health physicians (or a range of templates). In the first instance this would take the form of a broad role, or several idealised public health physician roles²⁴. The value of this exercise is not just in improved human resource development (training) or management functioning (recruitment, remuneration, work allocation, performance management) but equally as important human resource planning. In an earlier section the paucity of workforce data was detailed; in truth workforce supply data is crude but useable, public health physician workforce demand data on the other hand is virtually non-existent. Defining better what a public health physician will look like, what work they will perform, what competencies they require will considerably enhance thinking about workforce demand.

The opportunity for employers to further define roles of public health physicians and tailor the templates to accommodate differences in various Australian jurisdictions in the position descriptions would obviously still exist. Defining more uniform public health physician position descriptions could facilitate curriculum development for the advanced public health physician training program/s, the assessment of skills and for compulsory professional development programs.

Future actions

This study has shown that public health physicians play a critical role in shaping, directing and making more effective much of the more important public health activity in Australia.

²⁴ These roles could be related to form career pathways or progressions, commencing with more operational and possibly narrower roles, and evolving into more visionary and reformist type roles.

The capacity of the public health physicians to sustain this impact into the future is being brought into question by its dwindling workforce numbers in both absolute and particularly relative terms. The Australasian Faculty of Public Health Medicine might therefore consider in the first instance a thorough study of the public health physician workforce. Such a study is required to better understand:

- the true dimensions of current and future supply – estimates are possible based on currently available data but these will be associated with some uncertainty; and
- the current requirements for public health physicians and future demand – this can be estimated using comparatively crude practitioner to population ratios or more sophisticated approaches that better define the work of public health physicians across multiple work settings (and therefore the number and type of physicians). Any efforts to improve the quality and use of public health physician position descriptions would ideally be undertaken within the context of a more comprehensive attempt to vision workforce demand.

A workforce study is a reasonable prelude to approaching afresh the training of public health physicians in Australia. It should better direct the training content (based on workforce demand), that is the curriculum development, and provide a much better understanding of trainee numbers required. On the best guesses of this study the training rate (number of trainees in Faculty programs across Australia) should be much higher, but just how much is unknown. A more qualified estimate of trainee numbers would presumably facilitate negotiations with funding sources to support registrar posts / training places in appropriate, accredited training programs.

Within the context of a broad change process (redefining the workforce, redesigning the training approach), the Faculty might take the opportunity to review and consider deeper changes for instance by adopting a broader public health model.

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Appendix A: Separately commissioned report on statutory provisions



The Royal Australasian
College of Physicians

Statutory Public Health Officers in Australia Report

Date: 10 May 2010

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STATUTORY PUBLIC HEALTH OFFICERS IN AUSTRALIA

Introduction

Since the mid 19th Century many public health functions for the 'preservation of health and prevention of disease' have been supported by legislation. This legislation also established certain statutory positions, such as the Medical Officer for Health or Chief Health Officers, and often defined the roles or responsibilities of the position. The Australasian Faculty of Public Health Medicine is currently undertaking a study to determine what the Australian workplace requires of public health physicians. To inform that study this paper examines current health legislation in Australia and focuses on:

the statutory roles and functions of persons appointed to positions that involve the administration of public health legislation and policy; and
the extent to which the legislation requires specific public health training or medical expertise as a condition of appointment.

Public health legislation in Australia

Public health is administered across Australia at local, regional (State and Territory) and national (Commonwealth) levels. Environmental health and disease control functions were first incorporated into 19th century colonial legislation. These have remained as State and Territory Acts and in practice their administration is the joint responsibility of local and state governments. For the Commonwealth, its public health responsibility since 1901 has been to manage: quarantine; the national impacts of epidemics and related public health emergencies; and the implementation of international agreements such as the International Health Regulations. As such, Commonwealth legislation is different to that of the States and Territories, reflecting its particular role and interests while also being restricted to the list of legislative areas set out in the Constitution.²⁵

Legislation (which comprises the Act and any regulations²⁶ made under it) can provide a range of powers and functions and it can create offences, or allow the making of orders. Acts are divided into Parts which deal with particular areas (such as communicable disease), and are then further

²⁵ See the powers set out in s51.

²⁶ Regulations (often referred to as subordinate legislation) provide the detailed controls and requirements in particular areas covered by the act. For example, if the act requires notification of specified diseases, a set of regulations will list the relevant diseases and set out the administrative requirements such as forms and time limits necessary to ensure that an effective notification system is in place.

divided into Divisions and numbered sections.²⁷ Orders are formal requirements to act in specified ways (for example to destroy infected articles, to cease undertaking an activity that amounts to a risk to public health or to refrain from conduct that might place others at risk from infection). They are issued by persons specifically empowered to do so, such as a Chief Health Officer or delegate of the Chief Health Officer, or an authorised officer. Individuals who do not comply with the requirements of the order risk committing an offence.

Legislation can also establish licensing and reporting requirements or provide incentives or penalise conduct through prosecution in the courts. It can also create administrative arrangements and in the field of public health these typically are office holders, often vested with specified powers and responsibilities as set out in the legislation. This study focuses on those statutory offices and the persons who can be appointed to them. Where powers and responsibilities are set out in the legislation they are usually quoted extensively because they represent the 'public face' of the office and the community has a legitimate expectation that the powers will be carried out. The office holder can also be held accountable (either through the courts or public opinion) for the extent to which he or she undertakes them.

However, while the statutory roles and functions of a position may provide the framework for the tasks of a person appointed to it, many powers are used rarely (for example, the power to detain a person on medical grounds) and the day to day duties and responsibilities of an office holder such a Chief Health Officer, are far more extensive than the statutory powers and responsibilities as set out in legislation. In that sense they should not necessarily be taken as a 'duty statement' or a list of 'expected competencies' (which in practice will be wider and more comprehensive than anything provided for in an Act) but they do establish the formal 'public' requirements and expectations of the persons appointed to the office who can be held publicly accountable for the extent to which they undertake their responsibilities or exercise their powers.

It should also be noted that in some cases the legislation says little about the powers of persons appointed to a statutory position (such is the case with Medical Officers of Health, in the jurisdictions in which they continue to exist). In these cases there is a body of historical understanding about the role or collegiate professional expectations which adds a far better understanding of their function than the legislation.

²⁷ In this paper a section is referred to as 's', with the appropriate number following. Regulations are referred to by 'r' also with the appropriate number following and Bills (proposed legislation but not yet passed by Parliament) have clauses rather than sections – referred to as 'cl'.

Method

A desktop search of relevant Commonwealth/ State/ Territory public health legislation current in July 2009 and available from the web sites of parliamentary counsels' offices in the nine Australian jurisdictions was undertaken. In particular, it explored the primary Public Health and Health Administration Acts of the States and Territories. Collectively, these are the Acts which establish health agencies and responsibilities, and cover environmental health, communicable disease control, quarantine, radiation safety and food safety. In addition for some jurisdictions information about public health functions of some positions was supplemented by information obtained from their websites.

The findings are divided into nine parts, each dealing with an Australian jurisdiction (the Commonwealth government, the six States and two Territories). Tables included in the Appendix provide comparisons across jurisdictions.

COMMONWEALTH

Commonwealth public health legislation is restricted primarily to the *Quarantine Act 1908*, though it has used its other constitutional powers (notably corporations, trade and commerce, and external affairs) to pass a range of Acts that would be seen as part of public health law.

Chief Medical Officer

The Commonwealth Department of Health and Ageing has a Chief Medical Officer. The position is described as:

the principal medical adviser to the Minister and the Department of Health and Ageing. [the Chief Medical Officer] plays a key, strategic role in developing and administering major health reforms for all Australians. In particular [the Chief Medical Officer's] close association with Australia's medical fraternities and researchers will be crucial in the development of evidence based public health policy.²⁸

The Chief Medical Officer is not established as a statutory position, but is referred to in the *National Health Security Act 2007*. In particular the Minister (for Health) must, in making or amending the list of national notifiable diseases, consult with the Commonwealth Chief Medical Officer. The Chief Medical Officer can also make temporary additions to the list.²⁹ The Chief Medical Officer is also a member of the NHMRC.³⁰ However, these are scattered references and do not establish the role of Chief Medical Officer as an office with a particular statutory function.

Quarantine Officers etc

The *Quarantine Act 1908* establishes the following officers responsible for human quarantine:

Director of Human Quarantine, who 'shall, under the Minister, be charged with the execution of this Act, and any regulations and proclamations in force under this Act, in relation to human quarantine.'

Chief Quarantine Officers (Human Quarantine) appointed by the Minister (to perform their functions and exercise their powers 'under, and subject to the directions of, the Director of Human Quarantine.'

²⁸ <http://www.health.gov.au/internet/main/publishing.nsf/Content/health-profile-bishop.htm>

²⁹ Ss 11 & 12

³⁰ s 20 *National Health and Medical Research Council Act 1992*. See also *Gene Technology Amendment Act 2007* Schedule 1

*Quarantine officers (human quarantine) is to perform functions and exercise powers 'subject to the directions of a Chief Quarantine Officer (Human Quarantine) or the Director of Human Quarantine.'*³¹

S9 provides for the appointment of Human Quarantine Officers:

(1) The Director of Human Quarantine and any Chief Quarantine Officers (Human Quarantine) shall be appointed by the Minister by writing.

(2) The Director of Human Quarantine may, by writing, appoint to be a quarantine officer (human quarantine):

(a) an APS employee; or

(b) a State officer; or

(c) a police officer; or

(d) a protective service officer; or

(e) an employee of a body corporate established or continued in existence for a public purpose by or under a Commonwealth law, if the body corporate is prescribed for the purposes of this paragraph.

(4) A State officer may be appointed to be a Chief Quarantine Officer under this section.

There is no requirement for a quarantine officer to be a medical practitioner – indeed the capacity to appoint police indicates that they need not be.

Medical Officers

Medical officers have specified roles in Commonwealth legislation, such as the *Quarantine Act 1908* and also in the *Migration Regulations*, *Australian Military Regulations* and *Air Force Regulations* but these latter roles do not have a public health focus.

³¹ S 8A

NEW SOUTH WALES

Responsibility for health services in New South Wales lies with the New South Wales Department of Health. The Department is answerable to the Minister for Health (the 'Minister') and is headed by the Director General of Health who is "incorporated as a corporation sole with the corporate name 'Health Administration Corporation'".

The function of the Minister is to formulate general policies, in accordance with which the functions of the Minister, Department, Director General and others are to be exercised, 'for the purpose of promoting, protecting, developing, maintaining and improving the health and wellbeing of the people of New South Wales to the maximum extent possible, having regard to the needs of and financial and other resources available to the State.'³²

Director General

The functions of the Director- General of the New South Wales Department of Health as established by legislation are to:

(a) to initiate, promote, commission and undertake surveys and investigations into:

- (i) the health needs of the people of New South Wales,*
- (ii) the resources of the State available to meet those needs,*
- and*
- (iii) the methods by which those needs should be met,*

(b) to inquire into the nature, extent and standards of the health services, facilities and personnel required to meet the health needs of the people of New South Wales and to determine the cost of meeting those needs,

(c) to plan the provision of comprehensive, balanced and coordinated health services throughout New South Wales,

(d) to formulate the programs and methods by which the health needs of the people of New South Wales may be met,

(e) to undertake, promote and encourage research in relation to any health service,

(f) to facilitate the provision of health services by any Council (within the meaning of the Local Government Act 1993) or by any other body or person,

³² S 5 Health Administration Act 1982

(g) to facilitate the provision by any Government Department, statutory authority, other body or person of social welfare services necessary or desirable to complement any health service,

(h) to promote and facilitate the provision of the professional, technical or other education or training of any persons employed or to be employed in the provision of any health service,

(i) to promote and facilitate a system of health care for the people of New South Wales provided by private bodies, institutions, associations and persons, as well as by the State and public bodies,

(j) to do such supplemental, incidental or consequential acts as may be necessary or expedient for the exercise of the Director General's functions under the foregoing provisions of this subsection.³³

The Director General also has specific functions in relation to infectious disease control, including:

- the destruction of articles;
- notification of disease;
- disclosure of information, requirement for a medical examination;
- the issue of immunisation guidelines.

The compilation and maintenance of the New South Wales Pap Test Register is also a function of the Director General

The Director General has powers to conduct inquiries into

- (a) any matter relating to the health of the public, or
- (b) any matter that, under this Act, authorises a direction by, or that requires the approval or consent of, the Minister or the Director General, or
- (c) any alleged offence under this Act.³⁴

There is no requirement that the Director General be a medical practitioner.

Chief Health Officer

The Chief Health Officer of the NSW Department of Health is the statutory office holder who undertakes the public health functions specified under the *Public Health Act 1991*³⁵ These functions include the provisions relating to safe drinking water. The Chief Health Officer also has functions under the *Mental Health Act 1990*. While there appears to be no clear statement that the Chief

³³ S 8 Health Administration Act 1982

³⁴ S 71 Public Health Act 1991

³⁵ S10A

Health Officer be a medical practitioner it does appear to be implied insofar as S 21 of the *Public Health Act 1991* relating to the making of public health orders, provides the following definition:

"authorised medical practitioner" means:

- (a) the Chief Health Officer, Department of Health, or
- (b) a medical practitioner authorised by the Director General to exercise the functions of an authorised medical practitioner under this Division.

The Chief Health Officer is the spokesperson for public health matters in NSW and is responsible for the *Report The Health of the People of NSW - Report of the Chief Health Officer*³⁶ The current incumbent is a medical practitioner and was, at the time the last report was issued, described as acting Deputy Director General, Population Health and Chief Health Officer.

Medical Officers of Health

Medical Officers of Health are nominated by the Governor under the *Public Health Act 1991* and the Act provides that regulations may then confer or impose functions on a Medical Officer of Health.³⁷ A Medical Officer of Health may be appointed as a medical referee for the purpose of the cremation controls;³⁸ and local authorities must notify Medical Officers of Health if there is a public health risk.

Environmental Health Officers

An Environmental Health Officer is defined in the *Public Health Act 1991* as:

- (a) an officer of the Department of Health, or
- (b) an employee of a local authority, or
- (c) an employee of a public health organisation within the meaning of the *Health Services Act 1997*.³⁹

Environmental health officers may be appointed as authorised officers and have specific powers under the Act.⁴⁰

Miscellaneous

Food regulation in NSW is largely undertaken by a separate statutory agency, the NSW Food Authority (answerable to the Minister for Agriculture) which was established under the *Food Act 2003* and the day to day inspection and enforcement is by authorised officers (ie environmental health officers

³⁶ http://www.health.nsw.gov.au/publichealth/chorep/toc/pre_foreword.asp

³⁷ S 62; the Director-General may appoint a medical practitioner to act as a temporary medical officer of health: *ibid* s 62A

³⁸ Reg 42 *Public Health (Disposal of Bodies) Regulation 2002*

³⁹ S 3

⁴⁰ S 3 – see definition of 'authorised officer'

typically employed by local government). Radiation safety is undertaken by the NSW Environment Protection Authority.⁴¹

QUEENSLAND

Chief Executive

In Queensland the *Health Services Act 1991* establishes the statutory provision of 'Chief Executive' with functions of:

(a) providing strategic leadership and direction in relation to the delivery of public sector health services, so as to protect, promote and maintain the health of Queensland residents;

(b) ensuring the development of a State-wide health services plan;

(c) ensuring available resources for the delivery of public sector health services are used effectively and efficiently;

(d) entering into performance agreements with general managers appointed for health service areas;

(e) entering into performance agreements with health executives, other than health executives who have entered into performance agreements with general managers appointed for health service areas;

(f) performing other functions given to the chief executive under this Act.⁴²

The Chief Executive (whose functions include the provision of health services as well as public health) has extensive powers and functions under the *Public Health Act 2005*. The Chief Executive also has administrative powers under the *Food Act 2006* and the *Radiation Safety Act 1999*.

The person appointed as Chief Executive is not required to be a medical practitioner.

At a State level, the *Public Health Act 2005* is administered principally by the Chief Executive notably in relation to order making for infectious diseases, though the Minister for Health has specified functions in relation to declaring

⁴¹ See Radiation Control Act 1990

⁴² Health Services Act 1991 s 7 see also Public Service Act ss 89 and 90

notifiable conditions,⁴³ school closures⁴⁴ the establishing of public health inquiries⁴⁵ and the declaration of public health emergencies.⁴⁶

There is also a general power of delegation of the Chief Executive's functions provided by the *Public Service Act 2008*.⁴⁷ The Regulation making power is specified by S 461 of the Act.

Chief Health Officer

The Chief Health Officer is appointed under the *Health Services Act 1991*. The Chief Health Officer must be a public sector employee and a doctor.⁴⁸ The functions of the Chief Health Officer are—

- (a) providing high level medical advice to the Chief Executive and the Minister on health issues, including policy and legislative matters associated with the health and safety of the Queensland public; and*
- (b) performing other functions given to the Chief Health Officer under another Act.*⁴⁹

The *Public Health Act 2005* also vests specific functions on both the Chief Executive and the Chief Health Officer. However, the Chief Health Officer has only a few functions in the Act, for example, before declaring a public health emergency the Minister must consult with the Chief Health Officer as well as the Chief Executive,⁵⁰ and, overall, the Chief Executive has the greater formal role in administering the Act. Though, in practice the Chief Executive's powers are exercised by other persons delegated to do so (though for some powers the Act does not allow further delegation).⁵¹

Authorised Officers

Authorised persons (officers) also exercise powers and functions under the *Public Health Act 2005*, such as powers of entry, inspection etc, though primarily at a local council level. They are appointed either by the Chief Executive of the Department or the Chief Executive of a local council. The Act does not specify the qualifications necessary for appointment: s 378 provides

'The administering executive may appoint a person as an authorised person only if—

⁴³ Chapter 3 and s 327

⁴⁴ S 181

⁴⁵ Chapter 7

⁴⁶ Chapter 8

⁴⁷ S 103

⁴⁸ S 57B. See the Report of the Chief Health Officer: http://www.health.qld.gov.au/cho_report/ and http://www.health.qld.gov.au/about_qhealth/org_structure/qh_structure.pdf

⁴⁹ S 57C

⁵⁰ Ss 319, 327

⁵¹ S 455

- (a) the administering executive is satisfied the person is qualified for appointment because the person has the necessary expertise or experience; and*
- (b) the person has the competencies, if any, prescribed under a regulation as relevant to the person's appointment.' [at this stage none appear to have been prescribed]*

The Act provides for the appointment of both medical and general emergency officers.⁵² The Act further provides that:

The Chief Executive may appoint a doctor as an emergency officer (medical) only if the Chief Executive considers the doctor has the necessary expertise and experience to be an emergency officer (medical).⁵³

The powers are the emergency powers set out in Part 6 of the Act and, for medical emergency officers, also Part 7. The latter powers relate to quarantine, detention and treatment.

It should be noted that medical officers are referred to and provided with powers and functions in relation to child health.⁵⁴ However, these relate more to child health and welfare than to public health functions.

⁵² S333

⁵³ S 336

⁵⁴ Chapter 5 of the *Public Health Act 2005*.

SOUTH AUSTRALIA

The relevant current legislation in South Australia is the *Public and Environmental Health Act 1987* which consolidates general public health responsibility and specifies the responsibilities for State and local authorities under the Act.

Chief Executive

Most powers under the *Public and Environmental Health Act 1987* are exercised by the Chief Executive of South Australian Health Department (of which the public health directorate is part) or by the Minister for Health. In practice these powers are delegated to individual officers within the public health area of the Department. The Chief Executive, who is appointed under the *Health Care Act 2008* and is responsible to the Minister for the management, administration and provision of health services in South Australia.⁵⁵ The general objects of the *Health Care Act 2008* are

- (a) to enable the provision of an integrated health system that provides optimal health outcomes for South Australians; and
- (b) to facilitate the provision of safe, high quality health services that are focussed on the prevention and proper management of disease, illness and injury and to facilitate efficiencies through the use of certain facilities for veterinary science; and
- (c) to facilitate a scheme for health services to meet recognised standards.⁵⁶

There are no objects specified in the *Public and Environmental Health Act 1987*.

Chief Medical Officer

The *Public and Environmental Health Act 1987* has a single reference to the Chief Medical Officer. This is in relation to the making of an emergency (public health) declaration; the Chief Executive must consult with the Chief Medical Officer.⁵⁷

Authorised Officers

Authorised officers are appointed to exercise the enforcement and inspection functions and are required to hold qualifications approved by the Minister. Authorised officers are generally qualified environmental health officers.

Miscellaneous

⁵⁵ S 7

⁵⁶ S 4

⁵⁷ S 37C

The *Food Act 2001* is administered by the Minister for Health, in effect by the Minister's delegates and otherwise by local councils. The *Radiation Protection and Control Act 1983* is administered by the Minister for Environment, though in practice by the SA Environment Protection Authority. The Act does establish a Radiation Protection Committee as an advisory body, which has medical representation.⁵⁸

In August 2009 the SA Health Department issued a draft Bill the *South Australian Public Health Bill 2009* which is to completely revamp existing legislation and adopt a new 'risk based' approach to public health requirements. The Bill envisages the appointment of a new statutory office holder (the Chief Public Health Officer - CPHO) with the following functions.

- (a) to develop and implement strategies to protect or promote public health;
- (b) to ensure that this Act, and any designated health legislation, are complied with;
- (c) to advise the Minister and the Chief Executive of the Department about proposed legislative or administrative changes related to public health, and about other matters relevant to public health;
- (d) to establish and maintain a network of health practitioners and agencies designed to foster collaboration and coordination to promote public health and the furtherance of the objects of this Act;
- (e) at the request of Minister or on the Chief Public Health Officer's own initiative, to investigate and report on matters of public health significance;
- (f) after advising the Minister and the Chief Executive of the Department, to make public statements on matters relevant to public health;⁵⁹

The Bill envisages that the CPHO will be the State's primary authority on public health, but there is no requirement that he or she have medical qualifications or qualifications in public health. ⁶⁰ In practice the CPHO may well be qualified in either or both areas.

⁵⁸ S 9 The *Radiation Protection and Control Act 1983* (membership must include a radiologist and a radiotherapist)

⁵⁹ Cl 21

⁶⁰ Cl 20

TASMANIA

Health is administered in Tasmania through the Department of Health and Human Services within which Population Health is a departmental 'operational unit'.⁶¹ The Department is responsible to the Minister for Health (the 'Minister') as defined in the *Health Services Act 1960*.

Public health responsibilities in Tasmania are established by the *Public Health Act 1997*, which seeks to protect and promote the health of communities in Tasmania and reduce the incidence of preventable illness. A range of public health functions are regulated, including disease prevention, tobacco regulation, environmental health regulation and the management of disease registers. Provision is made for the making of specific regulations under the Act and for the issuing of guidelines relating to any matter under the Act.

Secretary

The head of the Department of Health and Human Services is the Secretary⁶² who retains functions under the *HIV/AIDS Preventive Measures Act 1993*, orders are made by the Secretary of the Department of Health and Human Services.

Director of Public Health

The Director of Public Health (the 'Director') is appointed under the Act and exercises statutory functions. The Act provides that the Director must be a registered medical practitioner and have qualifications in public health.⁶³

The Director's functions are set out as follows, to:

- 1) *develop and implement strategies to promote and improve public health;*
- 2) *ensure that the provisions of the Act are complied with;*
- 3) *advise the Minister on any changes to the Act that may be necessary or appropriate; and*
- 4) *carry out any other function for the purpose of the Act the Minister determines.*⁶⁴

The Director also has the power to do anything necessary or convenient to perform any functions under the Act.⁶⁵

⁶¹ http://www.dhhs.tas.gov.au/about_the_department/structure/groups/chief_health_officer

⁶² See http://www.dhhs.tas.gov.au/__data/assets/pdf_file/0004/37867/DHHS_org_chart_JAN09.pdf

⁶³ S 6

⁶⁴ S 7(1)

⁶⁵ S 7(2)

The Act also provides a power of delegation: the Director may delegate his or her functions to any person, class of person, public authority or agency and there appears to be no requirement that the Director's medical functions must only be delegated to a medical practitioner.⁶⁶ The Director also has powers as a 'relevant authority' under the *Food Act 2003* and also under the *Radiation Protection Act 2005*.

Chief Health Officer & Chief Medical Officer

The Department also has a Chief Health Officer and a Chief Medical Officer, though these are not statutory positions within public health legislation.⁶⁷

The role of the Chief Health Officer, as specified on the Department's website appears to be more expansive than the Director's. It incorporates the Operational Unit Population Health, the Chief Medical Officer and State-wide Forensic Medical Services and, more specifically includes the following functions:

- Population Health / Public Health.
- Monitoring, protecting and promoting health through food safety, nutrition regulation, communicable disease prevention and control, immunisation programs, radiation regulation, tobacco control, pharmaceutical services (drugs and poisons) and environmental health.
- Preventing and reducing population risk factors, addressing national health priorities, developing health promotion and prevention strategies, Aboriginal health policy, refugee and multicultural health, women's health, youth health and men's health.
- Needle and Syringe Program.
- Epidemiology - Analysis of data and statistics relating to population health outcomes.
- Infection Control and Surveillance.
- Clinical Advisory Committee.
- Cancer Network.
- State-wide Forensic Medical Services.
- Non Government Organisations relating to the portfolio responsibilities for CHO.⁶⁸

Environmental Health Officers / Medical Officers of Health.

⁶⁶ S 9(1)

⁶⁷ http://www.dhhs.tas.gov.au/__data/assets/pdf_file/0004/37867/DHHS_org_chart_JAN09.pdf
see also http://www.dhhs.tas.gov.au/about_the_department/structure/groups/chief_health_officer

⁶⁸ http://www.dhhs.tas.gov.au/about_the_department/structure/groups/chief_health_officer

The Act allows for the appointment of persons with approved qualifications as health officers who may be appointed as an Environmental Health Officer or a Medical Officer of Health.⁶⁹ The Director 'may approve the qualifications required for appointment generally or for a particular appointment.'⁷⁰

The functions of the health officers (and in particular the medical officer of health) are specified in general terms

(1) The general manager of a Council is to ensure that a Medical Officer of Health and an Environmental Health Officer carry out any functions the Director directs the council to carry out.

(2) Medical officers of health and environmental health officers are to –

- (a) ensure that the provisions of this Act are complied with within the municipal area in respect of which they are appointed; and
- (b) assist in the preparation of any reports required to be made by a council under this Act.⁷¹

Beyond this general role there are few specific functions given to the Medical Officer of Health.⁷²

Authorised Officers

Authorised officers are defined as

- (a) the Director; or
- (b) a Medical Officer of Health; or
- (c) an Environmental Health Officer.⁷³

They are given the normal statutory powers of investigation, entry and seizure.⁷⁴

⁶⁹ S 10, 11

⁷⁰ S 12

⁷¹ S 13

⁷² See s56, burial or removal of body to morgue

⁷³ S 3

⁷⁴ S 30

VICTORIA

The recently passed *Public Health and Wellbeing Act 2008* provides the primary public health powers in Victoria.

Secretary

The primary statutory office holder referred to in the Act is the Secretary of the Department, who has the following functions. Namely:

- (a) to promote awareness and understanding of public health and wellbeing issues within the community;
- (b) to develop public health and wellbeing policies;
- (c) to assist persons who have an impact on public health to enhance opportunities for protecting public health;
- (d) to support, equip and empower communities to address local public health issues and needs;
- (e) to establish and maintain a comprehensive information system which includes information in respect of—
 - (i) the health status of persons and classes of persons in Victoria, including information about the extent and effects of disease, illness, injury, disability or premature death;
 - (ii) the determinants of individual health and public health and wellbeing;
 - (iii) the effectiveness of health interventions to improve public health in Victoria;
- (f) to make recommendations and reports to the Minister with respect to matters relating to public health and wellbeing and to advise the Minister on the operation of this Act and the regulations.⁷⁵

The Secretary also has specified administrative functions under the *Food Act 1984* the *Radiation Act 2005*⁷⁶ and the *Safe Drinking Water Act 2003*.⁷⁷

Chief Health Officer

The Act also allows for the appointment of a medical practitioner as Chief Health Officer (appointed by the Secretary). Specifically, s 20 of the *Public Health and Wellbeing Act 2008* provides:

- (1) Subject to the *Public Administration Act 2004*, there is to be appointed by the Secretary as the Chief Health Officer a person who is a registered medical practitioner.

⁷⁵ s17(2). See also s 17(1). The Secretary is subject to the direction and control of the Minister

⁷⁶ See in particular, s 9 - functions of the Secretary

⁷⁷ See in particular, s 27 - functions of the Secretary.

and the Act establishes the Chief Health Officer as the expert and operational head of public health delivery and administration in Victoria. In particular, s 21 provides that the Chief Health Officer's functions are:

- (a) to develop and implement strategies to promote and protect public health and wellbeing;
- (b) to provide advice to the Minister or the Secretary on matters relating to public health and wellbeing;
- (c) to publish on a biennial basis and make available in an accessible manner to members of the public a comprehensive report on public health and wellbeing in Victoria;
- (d) to perform any other functions or exercise any powers specified under this Act or any other Act or under any regulations made under this or any other Act.

The power of delegation, provided by s 22, and the person exercising the delegation must be a medical practitioner. The Act also provides for the appointment of contractors and staff to assist the Chief Health Officer.⁷⁸ The Act further sets out particular functions and powers of the Chief Health Officer, including broad issues such as health impact assessment⁷⁹ and more specifically, the powers to make orders and impose controls in relation to communicable disease.⁸⁰

The Chief Health Officer also has specific powers to 'give directions to a hospital, multi purpose service, proprietor, Director of the Victorian Institute of Forensic Medicine or an authorised senior medical officer' about the requirements for persons suitable to be authorised as a senior medical officer 'for the purposes of making orders or authorisations' under the Act; or the 'process for authorising a person to be a senior medical officer for the purposes of making orders or authorisations under the Act.'⁸¹

The Minister can only declare a public health emergency with the advice of the Chief Health Officer, though the Minister can revoke or vary the declaration without further advice from the Chief Health Officer.⁸² The Act provides the Chief Health Officer with extensive powers to act during an emergency. This includes powers to detain persons or groups of persons in the emergency areas, to restrict their movement within those areas and to prevent others from entering them.⁸³

⁷⁸ S 23

⁷⁹ S 53

⁸⁰ See for example ss 113, 114, 117, 119, 188, 189

⁸¹ S 141

⁸² S 198

⁸³ S 199 & 200

Senior Medical Officers

Senior medical officers are also vested with certain powers and responsibilities under the Act.⁸⁴

Authorised Officers

Authorised officers are appointed by councils⁸⁵ and by the Secretary.⁸⁶ Authorised officers have statutory powers under the Act and while they are typically persons qualified as environmental health officers, s 30 does not prescribe the qualifications necessary to be appointed and it would be possible for a medical practitioner to be appointed as an authorised officer if there was a need to do so.

⁸⁴ S 198

⁸⁵ S 29

⁸⁶ S 30

WESTERN AUSTRALIA

The *Health Act 1911* is currently being reviewed and it is expected that significant changes will be made to the administration.

Currently the 1911 Act is committed to the Minister who is a body corporate for the purposes of the Act.⁸⁷ The Act vests powers in a number of statutory positions, namely the Chief Executive (described in the Act as the CEO), the Executive Director, Public Health and the Executive Director, Personal Health

Chief Executive

The head of the WA Health Department is the Chief Executive Officer.⁸⁸ The Chief Executive is likely to be the primary statutory authority under the new Public Health Act and also under the *Food Act 2008*.⁸⁹

Executive Director, Public Health / Executive Director, Personal Health Services

The *Health Legislation Administration Act 1984* provides for the appointment of an Executive Director, Personal Health Services; and Executive Director, Public Health and Scientific Support Services.⁹⁰ The Act requires both to be medical practitioners.

The Executive Director, Public Health (the 'Executive Director') is responsible for the state-wide functions of the *Public Health Act 1911*, and together with any medical officer or Environmental Health Officer acting with his or her authority, also has the powers of a Medical Officer of Health or Environmental Health Officer of a local government.⁹¹ The Executive Director Personal Health's powers relate to the provisions in the Act that relate to children.⁹²

Medical Officers of Health

The *Public Health Act 1911* also allows for the appointment of Medical Officers of Health at both a State and a local level. In particular s 27 provides

(1) Every local government may, and when required by the Executive Director, Public Health shall, appoint a medical practitioner as Medical Officer of Health, and also such environmental health officers and analysts as may be deemed necessary by the Executive Director, Public Health

⁸⁷ Ss 7, 8

⁸⁸ S 3 *Health Legislation Administration Act 1984*; Pt 3 *Public Sector Management Act 1994*

⁸⁹ As defined in s 8 *Food Act 2008* the CEO 'means the chief executive officer of the department of the Public Service principally assisting in the administration of this Act';

⁹⁰ S 6 *Health Legislation Administration Act 1984*

⁹¹ S 12 *Public Health Act 1911*

⁹² S 337

The section describes their functions in broad terms 'such duties as the local government from time to time directs, and also such as are specially prescribed by any order addressed by the Executive Director, Public Health to the local government' and sets their minimum pay at \$30 per annum! The MOH is also the medical officer of schools and schoolchildren. The Act gives the MOH power to direct environmental health officers. S33 provides:

Every medical officer of health —

(1) may give to any Environmental Health Officer such directions and instructions as he may deem necessary from time to time, for the due execution of this Act, and such environmental health officers shall obey and carry out directions or instructions so given; and

(2) shall have and may exercise, in addition to the powers conferred on him by or under this Act, all the powers of an Environmental Health Officer.

New legislation

The Act is being repealed and on current thinking, it will be administered largely through powers vested in the Chief Executive of the WA Health Department and through delegated powers.⁹³ The CEO is to have the following powers and responsibilities:

(a) initiating, supporting and managing public health planning for the State; and

(b) developing and implementing policies and programmes to achieve the objects of this Act; and

(c) providing advice or recommendations to the Minister or to any other person or body or to the community generally on matters relevant to public health; and

(d) providing advice or recommendations to the Minister on possible changes to this Act, to public health policies or to the regulations that the CEO considers appropriate or necessary; and

(e) performing the functions that are conferred on the CEO by or under this Act; and

(f) administering this Act in accordance with its objects and principles.⁹⁴

⁹³ CI 15 Public Health Bill 2008

⁹⁴ CI 12

The decision appears to have been made to replace specific office holders with the Chief Executive and to abolish the role of Medical Officer of Health. Authorised officers will continue to be appointed and to exercise powers.⁹⁵

Miscellaneous

Responsibility for radiation safety is divided between the Minister for Health and the Radiological Council, which must include two medical practitioners.⁹⁶

⁹⁵ Cl 20

⁹⁶ Ss 10, 13 *Radiation Safety Act 1975*

AUSTRALIAN CAPITAL TERRITORY

The *Public Health Act 1997* is administered within the Territory's Department of Health. The Department has a Chief Executive, and persons who have been appointed to statutory positions under the *Public Health Act 1997* are also officers of the Department, notably the Chief Health Officer who is the head of the Department's Population Health Division.

The Chief Executive

The Chief Executive of ACT Health Department has administrative responsibilities under the *Radiation Protection Act 2006*. There is no requirement that the Chief Executive be a medical practitioner.⁹⁷

Chief Health Officer

The Public Health Act 1997 requires the appointment of a Chief Health Officer⁹⁸ who must be 'a public servant and a doctor.' There is also provision for the appointment of an acting Chief Health Officer⁹⁹ who must also be a doctor. The term 'doctor' is defined in the *Legislation Act 2001* as

- (a) a person unconditionally registered as a medical practitioner under the *Health Professionals Act 2004*; and
- (b) for an activity, includes a person conditionally registered as a medical practitioner under the *Health Professionals Act 2004* to the extent that the person is allowed to do the activity under the person's conditional registration.

The Chief Health Officer's (note that the ACT legislation always has this position in lower case) functions include general compliance with the Act and other public health acts (food and drugs) within the Minister's portfolio but more widely extends to developing a range of unspecified public health initiatives. In particular, s 9 provides that:

- (1) The functions of the chief health officer are as follows
 - (a) to develop and implement strategies to promote and protect public health;
 - (b) to ensure that the following Acts are complied with:
 - (i) this Act;
 - (ii) the *Food Act 2001*;
 - (iii) the *Medicines, Poisons and Therapeutic Goods Act 2008*;

⁹⁷ <http://www.health.act.gov.au/c/health?a=da&did=10103830&pid=1170291294>. See also the organisational chart at <http://www.health.act.gov.au/c/health?a=sendfile&ft=p&fid=1247008166&sid=>

⁹⁸ S 7

⁹⁹ S 8

- (c) to advise the Minister about proposed legislative or administrative changes related to public health and the safety and suitability of food for human consumption;
- (d) to carry out any other functions decided, in writing, by the Minister for an Act mentioned in paragraph (b).

(2) The Chief Health Officer may also exercise any other function given to the Chief Health Officer by another Territory law. Doctors can be appointed as authorised medical officers are appointed under s 13. Once appointed they can exercise the functions given to them under the Act or any other Territory law.

The Chief Health Officer sustains his or her responsibilities in a number of ways and through powers provided in the Public Health Act 1997. There is a general power to undertake an investigation into

- (a) any matter concerning public health; or
- (b) the administration of this Act.¹⁰⁰

The Chief Health Officer also has a range of specified functions relating to order making for example imposing prohibition notices,¹⁰¹ approving the distribution of syringes,¹⁰² to seek enforcement of an abatement order,¹⁰³ declaring notifiable conditions,¹⁰⁴ issuing directions to persons whose behaviours may be placing others at risk,¹⁰⁵ the declaration of public health alerts¹⁰⁶ and take action in an emergency. The powers that can be exercised by the Chief Health Officer in an emergency include ordering: the reduction, removal or destruction of any threat to public health; the segregation or isolation of any persons in an area; the evacuation of any persons from an area; the prevention or permission of access to an area; the control of the movement of any vehicle. The Chief Health Officer may also: direct a person to undergo a medical examination; direct the person to either away from or to a specified area, or remain in a specified area for a specified time while the emergency remains in force; direct that a person surrender, destroy, or modify any substance or thing in the person's possession or control¹⁰⁷

The Chief Health Officer also has administrative responsibilities under the *Food Act 2001*.

¹⁰⁰ S 124

¹⁰¹ S 66

¹⁰² S 66C

¹⁰³ S 73

¹⁰⁴ S 101

¹⁰⁵ S 113

¹⁰⁶ S 118A

¹⁰⁷ S 120

Medical Officers

The Act also provides for the appointment of medical officers):¹⁰⁸

(1) The chief health officer may, in writing, authorise an authorised medical officer to be an authorised officer for this Act or a provision of this Act.

(2) An authorised medical officer may also exercise any other function given by this Act or another Territory law.¹⁰⁹

The *Public Health Act 1997* does not provide specific powers to medical officers but once appointed they have all the powers of an authorised officer, to enter premises, gather evidence and undertake specified investigatory and enforcement functions.¹¹⁰

Public Health Officers

The *Public Health Act 1997* also allows for the appointment of public health officers, who can also be appointed to exercise the powers of authorised officers.¹¹¹

¹⁰⁸ S 13

¹⁰⁹ S 14

¹¹⁰ See Div 5.2 generally

¹¹¹ Ss 12, 12A

NORTHERN TERRITORY

Health services in the Northern Territory are provided through the Territory's Department of Health and Families which is the responsibility of the Minister for Health, (the 'Minister').¹¹²

The main Act relating to public health is the *Public Health Act 1952*, which is a framework creating the central administration of public health in the Territory and allows for regulations to be made in a wide number of areas of significance to public health.

Chief Health Officer

Under the *Public Health Act 1952* the Minister shall appoint a Chief Health Officer, who must be an employee of the Territory public service and also a medical practitioner.¹¹³ The Chief Health Officer is subject to the direction and control of the Minister¹¹⁴ and may delegate his or her powers.¹¹⁵

Under the *Public Health (Nuisance Prevention) Regulations 1960* a general duty is imposed on the Chief Health Officer to inspect for nuisances and to enforce the provisions of the Regulations

The Chief Health Officer also has functions under the *Food Act*¹¹⁶ and also under the *Radiation (Safety Control) Act 1978*.¹¹⁷

Medical Offices of Health / Health Surveyors

Under the Act, the Minister shall appoint Medical Officers of Health (who must be registered or entitled to be registered as medical practitioners)¹¹⁸ and may appoint health surveyors (environmental health officers) as necessary.¹¹⁹ The Chief Health Officer has all the powers of a Medical Officer of Health.¹²⁰ The Chief Health Officer may also appoint health officers who have the powers and functions of health surveyors.¹²¹

Medical officers of health have specific functions specified under the sanitation and related regulations made under *Public Health Act 1952*. These

¹¹² S 6 Medical Services Act 1982

¹¹³ S 5(1) Public Health Act 1952

¹¹⁴ S 5(2)

¹¹⁵ S 7A, though the powers cannot be further delegated

¹¹⁶ S 30 Food Act 1986

¹¹⁷ S 6 Radiation (Safety Control) Act 1978

¹¹⁸ S 6(1) Public Health Act 1952

¹¹⁹ S 6 (2)

¹²⁰ S7(1)

¹²¹ S 7B

include dealing with overcrowded dwelling houses¹²² and declaring places unfit for human habitation.¹²³ Other public health functions are imposed under the *Public Health (Shops, Eating Houses, Boarding-Houses, Hostels and Hotels) Regulations 1960*.¹²⁴

Conclusions

There is no uniform approach to the appointment of public health office holders in Australia. Rather, a substantial difference exists between the public health offices and statutory positions established by each jurisdiction and the qualifications (if any) required for holders of those positions. It should also be noted that public health law reform is an ongoing process, with South Australia having released a draft Bill and Western Australia proceeding with a new Act. New South Wales is also in the process of reviewing its Public Health Act.

¹²² R 12 Public Health (General Sanitation etc) Regulations 1960

¹²³ R 13 Public Health (General Sanitation etc) Regulations 1960

¹²⁴ R 47

Part 1 - Public Health legislation that the head of health services is referred to, or is wholly or partly responsible for¹²⁵

Jurisdiction →	ACT	NSW	NT	QLD	SA	TAS	VIC	WA (current)	Cth of Aust
Principal public health legislation	Public Health Act 1997	Public Health Act 1991	Public Health Act 1952	Public Health Act 2005	Public and Environmental Health act 1987	Public Health Act 1997	Public Health and Wellbeing Act 2008	Public Health Act 1911	
Radiation, Food etc	Radiation Protection Act 2006		Food Act 2004 Radiation Act 1978	Radiation Safety Act 1999 Food Act 2006		HIV/AIDS Preventive Measures Act 1993	Radiation Act 2005 Food Act 1984 Pure Drinking Water Act 2003	Food Act 2008 Radiation Safety Act 1975	

¹²⁵ It should be noted that at the time of writing, draft bills for new public health acts have been prepared in NSW, SA and WA. None of these are not expected to be operational until 2011 at the earliest

Part 2 - Position and Role of the head of health services (eg Director General, Chief Executive, Department Secretary) generally

Jurisdiction →	ACT	NSW	NT	QLD	SA	TAS	VIC	WA (current)	WA (proposed)	Cth of Aust
Legislation that establishes health services	Health Act 1993 & Legislation Act 2001	Health Administration Act 1982	Medical Services Act 1982	Health Services Act 1991	Health Care Act 2008	Health Services Act 1960	Public health and Wellbeing Act 2008	Health Legislation Administration Act 1984		
Head of health services position	Chief Executive	Director General	Secretary	Chief Executive	Chief Executive	Secretary	Secretary	Chief Executive	Chief Executive	

Part 3- Position and Role of a Chief Officer responsible specifically for public health services¹²⁶

Jurisdiction →	ACT	NSW	NT	QLD	SA	TAS	VIC	WA (current)	WA (proposed)	Clth of Aust
Head of Health Services		Director General		Chief Executive	Chief Executive		Secretary	Chief Executive	Chief Exec	
Chief Health Officer	X (note also responsible for Food Act Medicines, Poisons & Therapeutic Goods Act.) <i>must be M Prac</i>	X Also appointed under Mental Health Act	X <i>must be M Prac</i>	X Health Services Act 1991 Creates the position Public Health Act invests functions	Chief Public Health Officer proposed in the SA Public Health Bill 2009	Administrative position	X <i>must be M Prac</i>	-		
Director of Public Health						X <i>must be M Prac and have public health quals¹²⁷</i>				

¹²⁶ The overall heads of health services have been included in this table where, in addition to their other functions, they also have a specified role under the principal public health legislation

¹²⁷ The Director also has powers as a relevant authority under the Food Act 2003 and the Radiation Protection Act 2005

APPENDIX

Public Health Legislation & Public Health Positions

Australia - summary

Chief Medical Officer					X (very limited function)	Administrative position				X Referred to in National Health Security Act 2007
Executive Director Health and Scientific Services								X (Health Leg Admin Act) <i>must be M Prac</i>		
Executive Director Personal Health Services								X (HLA Act) limited powers <i>must be M Prac</i>		

Part 4 - Position and Roles of other statutory office holders exercising statutory public health functions.

Jurisdiction →	ACT	NSW	NT	QLD	SA	TAS	VIC	WA (current)	WA (proposed)	CIth Aust	of
Medical Officer for Health		X	X			X		X			
Environmental Health Officer	X (public health officers)	X	X (Health Surveyor)			X		X			
Director of Human Quarantine										X	
Chief Quarantine Officers (human)										X	
Quarantine Officers (human)								X		X	
Authorised Officers	X	X		X	X		X		X		
Emergency Officer (medical)				X							
Medical Officers / Senior Medical Officers	X			X (child welfare) ¹²⁸			X (making orders etc)			X	

¹²⁸ See Public Health Act 2005, Chapter 5, Child Health

The Unique Contribution of Public Health Physicians to the Public Health Workforce

- Dr David Ashbridge, CEO, Northern Territory Health;
- Professor Mark Harris, Executive Director, Centre for Primary Health Care and Equity, University of NSW;
- Professor Richard Heller, Emeritus Professor, Coordinator Peoples-uni;
- Associate Professor Alison Jones, Manager Educational Development, Research and Evaluation, Education Deanery, Royal Australasian College of Physicians;
- Associate Professor Jan Ritchie, Visiting Senior Research Fellow, School of Public Health and Community Medicine, University of New South Wales ;
- Professor George Rubin, Director Population Health, Planning and Performance, South East Sydney and Illawarra Health; President Australasian Faculty of Public Health Medicine ;
- Dr Marie-Louise Stokes, Acting General Manager of Institute of Medical Education and Training;
- Dr Gregory Stewart, Director of Population Health, Planning and Performance, Sydney South West Area Health Service;
- Dr Tarun Weeramanthri, Executive Director, Public Health Division, Department of Health, Western Australia; and
- Professor Andrew Wilson, Deputy Director General, Policy, Planning and Resourcing, Queensland Health.

Appendix B: Introductory letter

Date ¹²⁹

Contact name
Contact position
Contact employee
Address line 1
Address line 2

Dear Contact name,

Regarding: a request for assistance in collating position descriptions of jobs occupied by Public Health Physicians within the Department of Health and Human Services.

The Australasian Faculty of Public Health Medicine (AFPHM) is undertaking a project to determine, within the context of the Australian multidisciplinary public health workforce, the particular competencies and experience which specialist public health physicians bring to the workplace. The outcomes of this project will assist to identify where public health physicians make a unique contribution to public health through their particular skills, experience, competency or knowledge. This information is required to tailor the AFPHM Training Program and Continuing Professional Development Program for Fellows to ensure that we support these roles. We also anticipate that the findings will assist employers to analyse job positions to better determine when public health physician skills are required.

The objectives of the project are to:

- Clarify current expectations of the role of the public health physician within the public health system and in other sectors;
- Describe where these expectations are currently well expressed in job positions/descriptions thereby contributing to effective and efficient public health work;
- Identify new areas of public health practice where public health physicians could contribute; and
- Identify the unique contribution that physicians make to public health work.

¹²⁹ This letter was originally sent to position description collection contacts on the AFAPHM letterhead.

For your information a copy of the 'Project Plan' is attached. Human Capital Alliance (HCA) is the company that has been selected to undertake this project on behalf of AFPHM. Human Capital Alliance specialises in determining the human resource needs of organisations and has undertaken many public health workforce projects for the Commonwealth and State Governments. Mr Lee Ridoutt is the Principal of HCA and further information about the company can be obtained from their website: www.humancapitalalliance.com.au

The project has recently commenced and we are gathering position descriptions of jobs that are currently occupied by public health physicians. To compile a representative sample from across Australia, we have contacted State Health Authorities including the Northern Territory, Western Australia, Victoria and Queensland, as well as Area Health Services within New South Wales. Other organisations, including Aboriginal Medical Services Alliance Northern Territory in the Northern Territory and various non government organisations, will also be approached.

We would be grateful for your advice and assistance in collecting the descriptions of positions currently occupied by public health physicians within the *[insert employer organisation]*. Mr Ridoutt will contact your office to clarify a suitable point of contact. I would also like to confirm that the project was reviewed by the ethics committee that supports the RACP Deanery and was approved as a quality improvement study.

If you have any questions about the consultancy or require further information about its objectives we would be very pleased to respond. Mr Ridoutt can be contacted on 02 9484 9745 or by email on lee.ridoutt@humancapitalalliance.com.au Alternatively Dr Lynne Madden, Associate Director Public Health Medicine Training and Development can respond to your queries on lynne.madden@racp.edu.au

Thank you for considering this request.

Yours sincerely,



Professor George Rubin
President
The Australasian Faculty of Public Health Medicine

Appendix C: Critical incident interview schedule

Unique contribution of public health physicians to the public health workforce — Critical incident interview template

<p>Introduction:</p>	<p>Human Capital Alliance has been selected by the Australasian Faculty of Public Health Medicine to explore the particular competencies and experience which specialist public health physicians bring to the workplace. The outcomes of this project will assist to identify where public health physicians can and do make a unique contribution by way of their particular skills, experience, competency or knowledge of public health. This will assist the Australasian Faculty of Public Health Medicine (AFPHM) to tailor the AFPHM Training Program and Continuing Professional Development Program for Fellows to further support these roles.</p> <p>A key component of the project's methodology is to interview twenty carefully selected public health physicians using a 'critical incident interview technique'. You have been selected as one of the twenty public health physicians to be interviewed. The selection of those to be interviewed was guided by the considerations of the Advisory Group for the project (see membership attached). The critical incident interview technique is described on the next page.</p> <p>Before proceeding with the interview we need to obtain your consent to be involved in the project. To inform your decision you have been provided with a copy of the Project Plan. Please read this before providing your consent in the form below.</p> <p>I would like to confirm that the Project Plan was reviewed by the ethics committee that supports the RACP Deanery and was approved as a quality improvement study.</p>
<p>Consent:</p>	<p>THE UNIQUE CONTRIBUTION OF PUBLIC HEALTH PHYSICIANS TO THE PUBLIC HEALTH</p> <p><i>NOTE: Written consent will remain with the AFPHM / HCA team for their records.</i></p> <p>I have read the Explanatory Statement and the Project Plan which I am able to keep for my records. I agree to take part in the above project. I understand by giving my consent to take part in the project means that I am willing to be interviewed concerning the current role of public health physicians in delivering public health services in Australia.</p> <p>I understand that I may withdraw my participation in the project at any time without having to provide an explanation. Any information that I provide at any time on the [], October, 2009 will be treated in confidence, and neither my name, nor any identifiable details will be used in any reports arising</p>

<p>Definition:</p>	<p>from this study.</p> <p>Participant's name:</p> <p>Participant's signature:</p> <p>Date:</p> <p>A critical incident for the purposes of this project is defined as "... any observable activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act. To be critical, an incident must occur in a situation where the purpose of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects".</p> <p>Thus, critical 'incidents' may be short term in nature and require immediate or even urgent attention (eg a communicable disease outbreak) or much longer term in both the emergence of the issue (incident) and / or the response. Of course in such cases the consequences too may be more long term such as in the development of policy or in strategic planning.</p>
<p>Question 1.</p>	<p>We believe your position may require you to respond to situations like those described above. Alternatively, you may have witnessed incidents that involved other public health physicians and been able to observe enough of these to describe, understand and judge their actions. Again, you may have observed incidents in which neither you or any other public health physician was involved, but in your opinion a public health physician intervention could have delivered at least different and probably better consequences.</p> <p>Ideally the incidents you describe will be in the last 12 months (better recall capacity) but incidents from earlier than this are welcome.</p> <p>Could you recall and describe an incident which you consider was critical and where your action (or the action of others) may be considered as critical in the sense that it contributed to significant positive or negative consequences.</p> <p>Prompts:</p> <ul style="list-style-type: none">• What led to the particular situation or incident? How was it recognised? How was it able to be considered 'critical'?• What was the response? How was it framed? What was your (or the public health physician) role in framing the response? Were there other public health practitioners involved? What was their role? Can you identify any actions that were particularly ineffective/ effective?• Was there any 'significant' outcome/ long term effects? Was this positive or negative? Were the actions taken effective or what more effective action might have been expected? How critical was your (or the public health physician) role? Was the influence of you (or the public health physician) reduced in any way?• What were the key competencies (skills and knowledge) engaged in the response? Who do you think normally possesses these

competencies?

No specific details regarding names, dates are required.

This set of questions can be repeated until the interview subject's critical incidents are exhausted. It is unusual to get more than 3-4 incident descriptions.

Question 2.

Thinking about your incident descriptions, in your opinion what elements of the training in public health are essential in fulfilling the role of a public health physician?

Scenario 1: Development of a Child Health Plan for Central Sydney Area Health Service

Incident:

Evidence based research demonstrated a population health and health promotion approach was more effective in targeting specific groups to improve health and social outcomes. These developments called for the Central Sydney Area Health Service to reorientate and change its service approach from a centre based approach to a population health centred approach.

Response:

The *Health Gain for Children and Youth of Central Sydney: Strategic Plan* was formulated based on *Health Goals and Targets for Australian Children and Youth* with the involvement of stakeholders from government, non government and the local community. The Plan was a coordinated strategy to improve health, developmental, educational and social outcomes for children and families by using early intervention and prevention services for parents expecting or caring for a new born baby focusing on identified disadvantaged families and communities. The Plan was developed through a flexible and opportunistic approach to gaining commitment by staff. The Plan was characterised by:

- Understanding of the health issues that confront families and children
- Understanding of the differences between health and illness
- Understanding of how to describe this through population health data which allowed the Problem to be told to other people who needed to be involved to affect change and proposed some solutions (the Plan)
- The plan was evidenced based
- The plan built from where they were and what they had.

Consequences

The success has been due to the flexibility and opportunistic characteristics of the strategy during development and implementation phases. Noticeable improvement has occurred within the services of the Area Health Service including increased collaboration between departments, and a mind shift to a population health focus. Targeted priority groups had improved outcomes from earlier access to services; decreased smoking rates during pregnancy particularly in Aboriginal women; higher rates of breast feeding; lower infant mortality rates; lower youth suicide rates; lower youth crime rates and more smoke-free households. The success of the strategy is accredited to the commitment within Central Sydney Area Health Service, particularly at a senior executive level and the flexible approach guiding implementation.

(Scenario sourced from (2008) Alperstein, G., Sainsbury, P., O'Grady, S., 'Implementing a strategic plan for child health: A Sydney case study' Journal of Paediatrics and Child Health, vol. 44 pp.630-635)

Scenario 2: Senior Lecturer Appointment

Incident:

The Dean of a Medical School set up a committee to develop essential selection criteria for the appointment of a new Senior Lecturer which will lead undergraduate teaching in Public Health.

Response:

The Head of Department argues a medical degree is an essential criterion as the Senior Lecturer will have the responsibility in establishing him/herself as a role model for medical students in order to emphasise the importance of public health as a medical practitioner's function. Countering arguments arise from the Dean who argues that a medical degree should not be an essential criterion as an individual from a non medical background with public health qualifications would also be able to perform the function with the same level of quality without the associated financial costs.

Consequences

An individual with a non medical background performing the duties of a Senior Lecturer for Public Health within the Medical school, may have potential savings however medical students may not perceive public health as a core function of their role but rather as a duty performed by non medical experts.

(Adapted from Richard Heller, Peoples University)

Scenario 3: Introduction of smoke-free pubs and clubs in NSW

Incident:

Available research and landmark legal cases by bar staff against bar/ club establishments for the risks associated with exposure to second hand smoke on the job, including the development of cancer, caused amendments to the Smoke-free Environment Act 2000 to also include a smoke-free ban in any part of a premises defined as enclosed area throughout NSW.

Response:

The relevant Minister was provided with information regarding the health and financial impacts associated with exposure to second hand smoke. The legislative amendments included the establishment of a key stakeholder group to work with the NSW Cabinet Office. Various legislative models were considered to resolve contentious issues such as exemptions as well as redefining public indoor space under the Smoke-free Environment Regulation 2007. The issue was highly publicised within the public arena causing great support and opposition.

Consequences

The amendments to the original Smoke-free Environment Act 2000 were phased in by the end of 2007 throughout New South Wales. Penalties for both patrons and proprietors were publicised to deter any offences of smoking in a designated smoke-free area. Results of the policy have been reported as increased patronage to smoke-free pubs and clubs as well as high compliance and implementation of the changes by pubs and clubs.

(Adapted from Cancer Council NSW)

Scenario 4: H1N1 Influenza Pandemic NSW

Incident:

Four cases of human H1N1 influenza were confirmed on the Pacific Dawn ship which docked in Sydney on the 25th May 2009. The ship was not placed in quarantine as the ship, nor any of its passengers, had visited countries known to have the H1N1 influenza virus freely circulating.

Response:

Passengers were required to fill out a health deceleration card as they departed to declare any flu like systems and to acknowledge those passengers who were more likely to contract H1N1 influenza. Although passengers returned to their residences the NSW Health Department issued precautionary measures especially for those displaying flu like symptoms or known respiratory illnesses by issuing a preventative treatment of Tamiflu for 10 days, supported by daily contact with their local Public Health Unit. Passengers remained in quarantine for 7 days from their last point of contact with an infectious person, or 7 days after leaving the ship.

Consequences

Immediate protocol adopted was for all cruise ships arriving in NSW waters to be treated as if passengers were infected with the H1N1 influenza virus. Subsequent action was decided upon a 'case to case' basis depending on the circumstances which allowed for appropriate responses to be undertaken.

(Adapted from NSW Health Media Release 26 May 2009 & Sydney Morning Herald)

Scenario 5: NSE Public Health Officer Training Program**Incident:**

Despite significant changes in the organisation of health services in NSW during the 1980s that placed a greater emphasis on the health of the population rather than only those ill and being cared for by treatment services, most attention had been given to building the public hospital system over a public health infrastructure. Consequently there was neither an infrastructure nor an appropriately trained workforce available to respond to public health issues.

Response:

The incoming Chief Health Officer made establishing a public health infrastructure a priority. Among the structures developed were the Epidemiology Branch and a network of Public Health Units. The value of effective public health action in response to acute health problems was quickly demonstrated in the efficient management of communicable disease.

This foundation permitted further funds to be obtained from the State Government to establish the NSW Public Health Officer Training Program in 1990. Initially designed to develop the skills of physicians the training program was subsequently opened to include non medical trainees.

Consequences

These initiatives have contributed to the development of a robust and dynamic public health community that has demonstrated its repeated capacity to respond to a wide variety of public health challenges.

(Scenario sourced from Morey & Madden, NSW Public Health Bulletin 2003)

Appendix D: Senior Manager Interview Schedule

Unique Contribution of Public Health Physicians – Senior manager interview schedule

Public health, including physician, resources

Can you describe the area / unit which you manage?

Obtain understanding of broad context in which critical incident interviewee works. Is there an organisational chart? This question is seeking to help the manager to think broadly about their area of responsibility; what is the work that their team does and who does it.

What is the broad mix of staff resources? The make up of the team?

Validation and / or a different perspective on critical incidents

Can you recall a time when a public health physician (as a manager are you asking them to reflect on the actions of others - I think we need to be clear here whether we are excluding self reflection at this point) acted significantly (positive or negative) to a particular population/ public health issue or critical incident? Could you describe the circumstances?

A critical incident for the purposes of this project is defined as "... any observable activity that is sufficiently complete in itself to permit inferences and predictions to be made about the person performing the act. To be critical, an incident must occur in a situation where the purpose of the act seems fairly clear to the observer and where its consequences are sufficiently definite to leave little doubt concerning its effects".

Thus, critical 'incidents' may be short term in nature and require immediate or even urgent attention (eg a communicable disease outbreak) or much longer term in both the emergence of the issue (incident) and / or the response. Of course in such cases the consequences too may be more long term such as in the development of policy or in strategic planning.

Can you identify particular skills, knowledge and values that the public health physician brought to the table in responding to the issue? Would you say only a public health physician could have brought these, or at least was the best placed and most likely to do so? Explore.

How did the public health physician go about the task so that a good result was the outcome? Help them to deconstruct this into areas of competency both for being medical and public health.

A selection of the critical incidents identified by the manager's subordinate will be raised and described including only details of the incident itself (and not how the critical incident interviewee described the response to the incident).

The manager's perspective on the same selection of incidents (assuming they are aware of it) will be ascertained. A similar process to that used for the critical incident interview will be adopted.

Asking the manager to critique or respond to the analysis of their employee; as people tend to over or under estimate their contributions to a problem try to unpick this with the manager.

Worth of a public health physician

More generally, what do you think a public health physician brings to your team / unit / branch resources? Does the public health physician in synergy with other team members make a difference ie does their presence enhance team performance? Can you give some examples of how this might work?

If an appointee to a position which required a public health physician was filled by a non medical person what challenges as a manager might you anticipate? Would it make much difference?

Can you identify any roles that should be filled by a public health physician either within your service or more broadly within the Health system? What are the reasons for your identifying these roles?

Do you have any additional comments in relation to the project?

Appendix E: Ethics approval

Contact: Sydney South West Area Health Service (SSWAHS)
Human Research Ethics Committee – CRGH
Concord Repatriation General Hospital (CRGH)
Concord NSW 2139
Telephone: (02) 9767 5622 Fax (02) 9767 6569
Email: ethicscrgh@email.cs.nsw.gov.au

Our Ref: 2009-129 QA project



CONCORD
REPATRIATION GENERAL
HOSPITAL

25 August, 2009

Dr Lynne Madden
Australasian Faculty of Public Health Medicine
145 Macquarie Street
SYDNEY NSW 2000

Dear Dr Madden,

Re: CH62/6/2009-129
QA Project
RACP Workforce project for the Australasian Faculty of Public Health Medicine.

- Project Plan July 2009
- Covering Letter 19 August 2009

Thank you for your correspondence dated 18 August 2009 enclosing details of the above proposed project.

This was reviewed by the Acting Chairman on behalf of the Concord Hospital Human Research Ethics Committee on 21 August 2009, and approved as a Quality Improvement study.

The Ethics Committee wishes you well with the project, and would be very interested to receive a copy of final results, when available.

Please quote the above Concord Hospital File No. in all correspondence.

Yours sincerely,

A handwritten signature in cursive script, appearing to read "Virginia Turner".

Virginia Turner
Executive Officer
SSWAHS Human Research Ethics Committee – CRGH