

Discussion Paper

Towards a monitoring framework for the
NSW Public Health Officer Training Program



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Executive summary

The New South Wales Public Health Officer Training Program (the Program) is a multidisciplinary, competency-based postgraduate level public health training program, established in 1990 by the NSW Department of Health. Delivered in the workplace, the Program's overall aim is to contribute to the development of a workforce with the capacity to plan, implement and evaluate public health interventions. The Program employs individuals with a Masters of Public Health (or equivalent level of qualification) for three years, during which they address 11 competency areas through work in the field. This learning is supported by structured education sessions. There are approximately 70 graduates of the Program to date.

The Program is currently seeking accreditation within the higher education sector following 12 years of accreditation within the vocational education and training (VET) sector. Prompted by the shift between sectors, the Program is considering how to implement systematic measurement of the quality of its processes and outcomes that:

- complies with the monitoring requirements of the higher education;
- builds from its experience within the VET sector; and
- represents best practice in quality assurance in public health education and training.

The first step in developing a monitoring framework for the Program involved an examination of monitoring undertaken generally, within the VET and higher education sectors in Australia, and specifically, in relation to postgraduate public health education and training. The findings of this scoping exercise are summarised in the report, *Monitoring post-secondary education and training in Australia — practice and policy developments relevant to the NSW Public Health Officer Training Program* (NSW Department of Health, in press).

Towards a Monitoring Framework for the NSW Public Health Officer Training Program outlines the findings of further review of the documentation and monitoring tools used by organisations identified through the scoping exercise, with the following aims:

- to establish the foundations of a monitoring framework for the Program (with reference to

processes, broad monitoring areas, potential questions that might address key issues, indicators and reporting requirements)

- to recognise the aims, course delivery, content and existing monitoring done by the Program when considering the directions of any ongoing monitoring processes.

Findings

The Program has similar content to postgraduate public health training programs / courses within the higher education sector, thereby potentially sharing some outcomes around course content and learning. While individual postgraduate public health courses monitor course experience and graduate destination specific to public health, and these areas are relevant to some aspects of monitoring of the Program, these would need to be adapted.

The Program's development as a workplace-based training program means that it remains strong aligned with the VET sector's goals of achieving quality training that affects workforce outcomes, performance and quality. While the use of competency-based training was determined by the Program's VET sector origins, the value of competencies is now recognised more broadly in public health. Competency-based learning is being adopted by both professional organisations and the higher education sector as a mechanism for ensuring the quality of outcomes. Consequently the Program intends to retain a competency framework.

There are also elements of monitoring within postgraduate research programs in the higher education sector that relate to the activities of the Program, for example, those relating to the quality of supervision and capacity to monitor one's own progress.

As a potential higher education course, the Program would be required to address the monitoring standards set out in *The Australian Higher Education Quality Assurance Framework* (DETYA 2000). As such, it will need to have in place a range of indicators by which outcomes can be measured that meet the requirements of external audit and are reported to an independent governing body.

The Program is able to align with the general processes and structure of monitoring undertaken elsewhere in terms of monitoring the key areas of course experience and graduate destination. However, the Program's unique aims, course structure and competencies mean that in most cases, it cannot directly adopt questionnaires or questions from other postgraduate public health surveys. The Program is, however, able to reflect on and where possible adapt the monitoring tools of other courses in order to demonstrate the quality of its delivery and outcomes, in line with sector requirements.

A series of recommendations has been developed, which outline core monitoring areas that the Program might address, as well as possible survey questions and indicators that fall within these monitoring areas. Indicators to provide a basis for ongoing work towards reporting on performance and outcomes of the Program are also discussed.

It is timely for the Program to standardise monitoring activities through which it can both measure the quality of the delivery and outcomes of its training, and meet the requirements of external audit. None of the survey questionnaires developed by a wide range of organisations for monitoring education and training that were identified meet the Program's needs due to its size, aims, course structure, competencies and reporting requirements. However, the Program is able to draw from, and in some cases adapt these questions. The review has allowed the identification of core monitoring areas. This work also outlines the policy standards and general processes that are applicable to the Program in relation to developing a monitoring framework.

Recommendations

The following recommendations are made:

Developing a monitoring framework

- 1 A range of core areas — course experience, graduate destination and demographics — is monitored within an annual monitoring process.
- 2 The Program adapts or develops a range of key performance indicators used to guide its monitoring, related to the items listed under the core monitoring areas.

Developing a monitoring tool

- 3 The Program develops and administers a standardised monitoring tool (questionnaire), related to its specific aims, content and structure as well as the key performance indicators.

Administering the monitoring tool

- 4 The Program administers the monitoring tool to course completers (graduands) and non-completers annually between three and six months after exit interviews by electronic submission.

Reporting and strategic planning

- 5 The Program compiles de-identified data every three to five years, to generate a report on outcomes against the key performance indicators.
- 6 Minority groups are reported in the data where feasible and individuals are not identifiable.
- 7 The Program's advisory council, as an independent panel, reviews the report on outcomes and works with the Program to integrate the findings into strategic planning processes.

SECTION 1

Introduction

The aim of the NSW Public Health Officer Training Program (the Program) is to support the development of specialist public health professionals who have the capacity to plan, implement and evaluate public health interventions. The Program involves three years of full-time service-based learning and was accredited through the vocational education and training (VET) sector from 1994 until 2006, with graduates awarded a Graduate Diploma of Applied Epidemiology. There are approximately 70 graduates and 17 public health officers currently in training. The Program is seeking future accreditation within the higher education sector.

To enable the critical appraisal of current monitoring techniques used by the Program and inform the development of a more systematic means of measuring quality, two discussion papers have been produced. The first, *Monitoring post-secondary education and training in Australia — practice and policy developments relevant to the NSW Public Health Officer Training Program* (NSW Department of Health, in press), provides an overview of work being done around Australia to monitor and benchmark post-secondary education and training, with a specific focus on postgraduate public health training.

Towards a Monitoring Framework for the NSW Public Health Officer Training Program builds on the findings of the first discussion paper to define what the Program should consider in developing a monitoring framework that would demonstrate the quality of both its processes and outcomes. The two documents should be read in conjunction with each other.

NSW Public Health Officer Training Program

The Program promotes 'judgement ready' (PHERP 2005) professionals with the understanding and skills for advanced public health practice within contemporary Australian health settings. The entry criteria include a completed Masters of Public Health (MPH) or an equivalent postgraduate degree in public health and at least three years of health-related experience. MPH studies are essential as they provide the trainees with a context for current public health practice and a sound introduction to the theory, methodology and values of

public health, while experience of the health care system provides an understanding of disease and of the complexities associated with meeting the needs of patients and their families.

The majority of learning occurs through workplace projects undertaken in supervised work placements that are located within the health services of NSW. Placements are full-time and six to twelve months in duration, enabling between three and six placements to occur over the three-year program. All trainees are required to spend six months in a rural placement. Regular structured formal education sessions enhance the attainment of theoretical knowledge and skills across the domains of public health practice that are described in the Program's competency framework (NSW Health 2000).

Rationale for a monitoring framework for the Program

The Program is currently seeking accreditation within the higher education sector as a masters program and consequently it is timely to consider how its monitoring and evaluation capacity could be strengthened to promote strategic planning and meet internal and external standards. Improved access to a wider range of information on Program outcomes would also stimulate quality assurance activities and inform decision-making. Specific benefits would include:

- bringing ad hoc quality improvement activities together;
- standardising data collection and increasing the capacity to build a more in-depth view of the learning experience and outcomes;
- potentially facilitating research;
- attracting funding; and
- contributing to postgraduate public health developments in Australia.

The monitoring framework will help to align the Program with the current practice of other relevant organisations and ensure that external standards are adequately addressed. The process has involved reflection on both

the distinctive needs of the Program, and its potential to contribute to the field of monitoring public health workforce development. Current reporting processes and the need to integrate information into strategic planning have also been considered.

Current monitoring practice

Monitoring interventions

Currently a wide range of interventions is conducted to monitor the quality of the delivery and outcomes of training. These include a comprehensive external review of the Program every five years and the regular evaluation of assessment processes and of learning sessions. While these activities help to judge the Program's performance they do not provide an integrated information base, nor encompass the overall quality and outcomes of its training.

The NSW Public Health Officer Training Program Database

The Program has considerable day-to-day information management demands, related to managing:

- past and present trainees;
- supervisors across NSW;
- an annual cycle of proposed placements; and
- modules of learning.

Consequently the Program has established a purpose-built administrative database — the NSW Public Health Officer Training Program Database — to store readily available information. The development of the database was informed by an external review of other databases used in the higher education and vocational sectors. This revealed that there was no commercially available database that met the Program's needs and a database was therefore custom designed and built by the Public Health Training and Development Branch of the NSW Department of Health.

The database allows for the collection of consistent and comparable data describing the activity of the Program. The information included in the database is outlined in Table 1.1. A survey was conducted of all past and present trainees in November 2005 to collect information for this database. The questionnaire that was developed is now routinely administered with new cohorts of trainees.

External reporting requirements

The Program is currently required to meet a set of reporting requirements for the NSW Department of Health, and previously external ones related to

accreditation in the VET sector. For the NSW Department of Health these are:

- proportion of graduates remaining employed in the NSW health system within five years of graduation; and
- equal employment opportunity statistics (number of trainees who are: women; of non-English-speaking background; of Aboriginal and / or Torres Strait Islander origin).

For the NSW Vocational Education and Training Accreditation Board these were:

- number of trainees enrolled;
- entry-level qualifications;
- percentage of time spent on and off the job;
- trainee to supervisor ratio; and
- number of Graduate Diplomas awarded.

On request the Program also regularly provides other professional and higher education organisations with data that they use to benchmark performance. For example, the Australasian Faculty of Public Health Medicine seeks data on the progress of medically trained public health officers who are concurrently enrolled in 'advanced training' with the Faculty and the School of Public Health at the University of Sydney requests data describing the number of their MPH graduates who are recruited to the Program.

Moving towards a monitoring framework

In order to lay the foundations for the Program's monitoring framework, it was necessary to:

- review the tools used by other organisations for their relevance to the Program, with reference to processes, broad monitoring areas, questions, indicators and reporting requirements; and
- consider the specific aims, course delivery, content and existing monitoring done by the Program when outlining the directions of an ongoing monitoring framework.

The methods, results and conclusions drawn from this part of the project are outlined in the following sections of this discussion paper. A series of recommendations has been developed which outline core monitoring areas that the Program might address, as well as possible survey questions and indicators that fall within these monitoring areas.

Table 1.1 Information included in the NSW Public Health Officer Training Program Database

Information included	Main purpose	What does it tell us?
Personal details (title, name, date of birth, sex, country of birth, Indigenous status)	Day-to-day management, meet routine reporting for equal employment opportunity purposes	<ul style="list-style-type: none"> ■ Number of trainees who are: women; of Aboriginal or Torres Strait Islander origin; from non English speaking backgrounds ■ Average age of trainees
Current contact information (work / home addresses, telephone, fax / email contacts)	Day-to-day management, support alumni	<ul style="list-style-type: none"> ■ Where current and past trainees are
Status (current trainee / graduate / non-completer, stream of training, date of entry, date of exit, date of graduation)	Measure outcomes	<ul style="list-style-type: none"> ■ Retention and completion rates ■ Reasons for not completing training ■ Average length of time taken to complete training ■ Number of specialist trainees
Qualifications / employment prior to entry (qualifications held, professional background, position prior to entry, currency of medical / nursing registration)	Measure outcomes, day-to-day management	<ul style="list-style-type: none"> ■ Diversity of professional backgrounds of new recruits over time ■ Levels of qualification at entry ■ Further study undertaken during / post training ■ Number of medical / non-medical trainees ■ Current trainees able to undertake emergency management tasks where clinical qualifications are necessary
Placements (type, location and duration of placements, projects undertaken, supervisors' names)	Monitor progress, measure outcomes	<ul style="list-style-type: none"> ■ Summary of individual trainee's experiences ■ Patterns of placements / supervisors ■ Program support for emergency situations (e.g. outbreaks of infectious diseases)
Education sessions (courses, seminars, training days and conferences attended)	Monitor progress, day-to-day management	<ul style="list-style-type: none"> ■ Time spent in formal education sessions ■ Attendance at compulsory education sessions ■ Specialist training attended by specialist trainees
Other training activities (additional unpaid and paid professional development, extended leave taken during training)	Monitor progress, day-to-day management	<ul style="list-style-type: none"> ■ Burden of extra curricular activities not reflected within learning contracts ■ Number of medical trainees concurrently enrolled in training of the Australasian Faculty of Public Health Medicine ■ Extended periods of absence
Competency attainment and assessment details (assessment activities, dates, assessors, assessment outcomes)	Monitor progress, meet routine reporting requirements of accrediting body	<ul style="list-style-type: none"> ■ Summary of individual trainee's competency attainment to date ■ Consistency and academic rigour in assessment processes
Post-training employment (dates of employment, position title, organisation, field of expertise)	Measure outcomes, meet reporting requirements of NSW Department of Health	<ul style="list-style-type: none"> ■ Whether past-trainees remain employed within the NSW health system and in public health roles (up to five years post-training) ■ Uptake of rural positions post training ■ Whether specialist trainees remain within specialised field post-training ■ Level of position on completion of training compared to level prior to training ■ Diversity of professions / fields of expertise post-training

SECTION 2

Methods

The documentation and monitoring tools used by other organisations were reviewed for their relevance to the Program, from the perspective of policy standards, monitoring frameworks, content and processes. The process of identifying these organisations is described in the scoping paper *Monitoring post-secondary education and training in Australia — practice and policy developments relevant to the NSW Public Health Officer Training Program* (NSW Department of Health, in press). The principal monitoring tools identified through this process are listed in Table 2.1.

The following steps were involved:

- reviewing the content of other questionnaires and surveys to identify potential core monitoring areas for the Program and summarising the items within these;
- reviewing the monitoring tools for the information they collected against the core monitoring areas ;
- reflecting on the specific information needs as well as aims, course structure and content of the Program, in order to consider the need to expand or refine the information collected using other monitoring tools;
- reflecting on the policy standards related to monitoring by various organisations, as well as overall processes followed by other sectors to ascertain what monitoring strategy the Program is likely to be required to provide under the higher education sector; and
- developing a series of recommendations to incorporate the key findings.

Table 2.1 Principal monitoring tools of relevance to the NSW Public Health Officer Training Program

Monitoring tool	Source
ABS Survey of Education and Training and Information Technology	Australian Bureau of Statistics (2001a)
Course Experience Questionnaire	Graduate Careers Council of Australia (2005a)
Employer Satisfaction Survey	National Centre for Vocational Education and Research (2005)
Extended Course Experience Questionnaire	Centre for the Study of Higher Education and the Assessment Research Centre of the University of Melbourne (McInnes 2001)
Graduate Destination Survey	Graduate Careers Council of Australia (2005b)
Postgraduate Research Experience Questionnaire	Graduate Careers Council of Australia (2005c)
Public Health Education, Research and Practice Survey	Victorian Consortium of Public Health (2004a)
Student Outcomes Survey	National Centre for Vocational Education and Research (2003)
Survey of the Public Health Workforce	University of New South Wales (1999)
UNSW Public Health Program Evaluation Questionnaire	University of New South Wales (2005)

Source: *Monitoring post-secondary education and training in Australia — practice and policy developments relevant to the NSW Public Health Officer Training Program* (NSW Department of Health, in press)

SECTION 3

Findings

A range of possible core monitoring areas has been developed. For each area, potential questions to be used for data collection and indicators as well as processes and standards related to administering a monitoring framework are presented.

3.1 Policy standards related to monitoring

As a potential higher education course, the Program will be required to address the monitoring standards set out in The Australian Higher Education Quality Assurance Framework. As such, it will need to have in place a range of performance indicators by which outcomes can be measured that can be externally audited every five years. The Program will need in place an independent committee that includes a range of representatives from the higher education sector and professional bodies, who can advise regarding strategic directions of its monitoring framework and the means of translating results into action.

3.2 Development of core monitoring areas

The Program differs from most higher education courses in both its method of delivery, workplace-based learning, and in its main aim of achieving workforce growth and development. In this sense, it has similarities in course structure and delivery to the VET sector, where it was originally accredited, and the VET sector's monitoring program has continued relevance to the Program. However, as entrants to the Program have completed a Masters of Public Health and the Program further develops these areas of knowledge and skill, the Program and postgraduate public health courses may share similar goals with respect to course content. While some of these courses monitor course experience and graduate destination specific to public health and their practices are relevant to some aspects of Program monitoring, they also require adaptation.

There are also elements of general monitoring at the postgraduate research level within the higher education sector that relate to the quality of supervision, and

capacity to monitor one's own progress and access resources, that are applicable to the Program's delivery.

In general, the main areas monitored by the VET and higher education sectors cover course experience and graduate destination as well as employer satisfaction, although the latter occurs only within the VET sector and is not done annually. Core monitoring areas that might be included in the Program's monitoring framework are outlined in Figure 3.1.

3.3 Information needs of the NSW Public Health Officer Training Program

The NSW Public Health Officer Training Program Database has been designed to be a principal source of data to support a monitoring strategy. Table 3.1 maps the range of information stored in the database against items from the proposed core monitoring areas. This table shows that the database and other monitoring activities currently undertaken by the Program cover many of the items contained within the core monitoring areas. However some items need to be monitored in greater depth and on a routine basis. These are mainly associated with course experience and graduate destination, as only partial information is currently collected. Information stored in the NSW Public Health Officer Training Program Database will need to be updated regularly to ensure currency in graduate destination information for past trainees and course experience information for current trainees.

Figure 3.1 Core areas that might be included in a monitoring framework for the NSW Public Health Officer Training Program

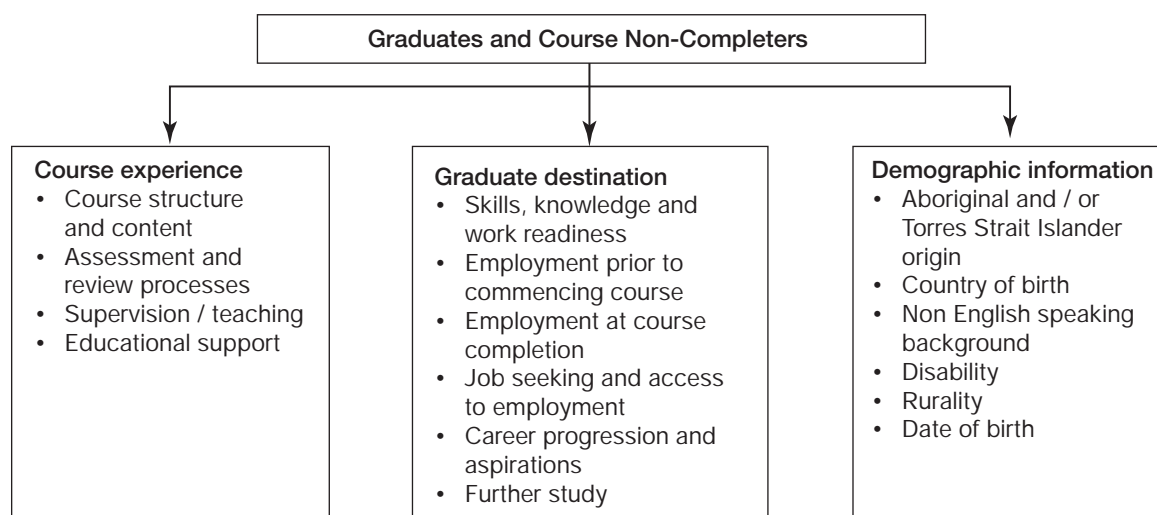


Table 3.1 Information currently collected and items that may need to be monitored in greater depth by the NSW Public Health Officer Training Program

Item	Current database stores some of this information	Collected using questionnaire or verbal feedback during exit interview	Additional monitoring in more detail on a routine basis required
Course experience			
Course structure and content	√	√	√
Assessment / review processes	√	√	√
Supervision / teaching		√	√
Educational support		√	√
Graduate destination			
Skills		√	√
Knowledge and work readiness			√
Employment prior to commencing course	√		
Employment at course completion	√		
Job seeking and access to employment	√		√
Career progression and aspirations	√		√
Further study	√		√
Demographic information			
Aboriginal and / or Torres Strait Islander origin	√		
Country of birth	√		
Non English speaking background	√		
Disability	√		
Rurality	√		√
Date of birth	√		

3.4 Review of monitoring tools used by other organisations

For ease and comparability, a monitoring framework for the Program should align with the general content, processes and structure of monitoring undertaken by other similar courses. However, the Program's unique aims, course structure and competencies mean that, in most cases, it cannot use questionnaires or the questions developed for other postgraduate public health surveys. The Program is, however, able to reflect on and, where possible, adapt these monitoring tools.

The following sections outline approaches that could be taken by the Program in developing its monitoring processes. The relevant questions from other questionnaires and potential questions that could be used by the Program are provided as paired tables for the areas of:

- course experience (Tables 3.2 and 3.3);
- graduate destination (Tables 3.4 and 3.5);
- demographics (Tables 3.6 and 3.7); and
- course non-completion (Tables 3.8 and 3.9).

Course experience

Course structure and content

The Program already monitors training content and structure to some degree through evaluation questionnaires that are completed by the trainees at the end of each learning session. These questionnaires would need to be reviewed for useful outcome measures, and re-developed in light of the monitoring strategy. In addition, an overarching question about course content and structure could be included in the course exit questionnaire since this would encompass the Program's directions towards training well-rounded public health practitioners. The Program might also consider adapting questions from other questionnaires concerning training relevance, standards of seminars and the capacity to cover competencies while on the job.

Assessment and review processes

The Program could ask a general question regarding the clarity, fairness and transparency of assessment / mid-program reviews.

The current evaluation that follows mid-program reviews asks a range of more specific questions about monitoring progress on the Program and therefore the mid-program review process does not need to be monitored further in the exit questionnaire.

Supervision and teaching

This section provides an opportunity to commence formal monitoring of supervision and will help to plan for resources to support supervisors. It has previously been discussed within the strategic planning processes of the Program that a supervisor orientation manual and training day would be both a help to supervisors and a lever for influencing quality within placements. Instituting monitoring prior to this intervention will help establish baseline data for comparison.

A number of questions from the Postgraduate Research Experience Questionnaire are likely to be of relevance. Questions about motivation and interest initiated by the supervisor might also be an important inclusion.

If it is considered too detailed to question all of these areas, a specific post-placement survey of a cohort of all supervisors in one year could be developed and a minimum set of supervision questions included at the course exit.

Educational support

This is an area that does not require extensive questioning and most questions from other surveys are very general.

As previously stated, Table 3.2 lists the type of information sought for each of the above areas by the questionnaires presented in Table 2.1. Table 3.3 identifies how the Program might use these sources to monitor course experience.

Table 3.2 Overview of information collected on other questionnaires to monitor course experience

Item	Information collected — course experience
Course structure and content	<ul style="list-style-type: none"> ■ The <i>Course Experience Questionnaire</i> asks for level of agreement with the following statements: It was always easy to know the standard of work expected; The work load was too heavy; I usually had a clear idea of where I was going and what was expected of me in this course; It was often hard to discover what was expected of me in this course; I was generally given enough time to understand the things I had to learn; The sheer volume of work to be got through in this course meant that it couldn't all be thoroughly comprehended; There was a lot of pressure on me as a student in this course. ■ The <i>Postgraduate Research Experience Questionnaire</i> asks for level of agreement with the following: I understood the required standard for the thesis; A good seminar program for postgraduate students was provided. ■ Some non specific questions about course content and structure are included in the <i>UNSW Public Health Program Evaluation Questionnaire</i>: How strongly would you recommend the course to others; Any topics you would have liked to have studied but were not offered; Any areas you consider essential to public health not included in the course. ■ The <i>Employer Satisfaction Survey</i> asks about: The need to change course content according to whether it is specific / relevant / focussed to industry needs; The need to provide more practical training; The need to keep up with technology. ■ The <i>Public Health Education, Research and Practice Survey</i> asks: Which subjects have most influenced your professional understanding, outlook and views; Which areas and subjects have most influenced your career choice. It also asks about overall satisfaction with the course.
Assessment and review processes	<ul style="list-style-type: none"> ■ The <i>Course Experience Questionnaire</i> asks for level of agreement with the following: The assessment methods employed in this course required an in-depth understanding of the course content. ■ The <i>Postgraduate Research Experience Questionnaire</i> asks for level of agreement with the following: The thesis examination process was fair; I was satisfied with the thesis examination process; The examination of my thesis was completed in reasonable time; I understood the requirements of thesis examination.
Supervision and teaching	<ul style="list-style-type: none"> ■ The <i>Course Experience Questionnaire</i> asks for level of agreement with the following: The teaching staff of this course motivated me to do my best work; The staff put a lot of time into commenting on my work; The staff seemed more interested in testing what I had memorised than what I had understood; The staff made a real effort to understand the difficulties I might be having with my work; The teaching staff normally gave me helpful feedback on how I was going; My lecturers were extremely good at explaining things; Too many staff asked me questions just about facts; The teaching staff worked hard to make their subjects interesting; The staff made it clear right from the start what they expected from students. ■ The <i>Postgraduate Research Experience Questionnaire</i> asks for level of agreement with the following: Supervision was available when I needed it; I developed an understanding of the standard of work expected; The department provided opportunities for social contact with other postgraduate students; My supervisors made a real effort to understand difficulties I faced; My supervisors provided additional information relevant to my topic; I was given good guidance in topic selection and refinement; My supervisors provided helpful feedback on my progress; I received good guidance in my literature search. ■ Similar to the <i>Course Experience Questionnaire</i>, the <i>Student Outcomes Survey</i> seeks opinions on the following: The teaching staff motivated me to do my best work; The staff put a lot of time into commenting on my work; The staff made a real effort to understand the difficulties I might be having; The teaching staff normally gave me helpful feedback on how I was going; My instructors were extremely good at explaining things; The teaching staff worked hard to make their subjects interesting.
Educational support	<ul style="list-style-type: none"> ■ The <i>Postgraduate Research Experience Questionnaire</i> asks for level of agreement with the following: I had access to a suitable working space; I had good access to the technical support I needed; I was integrated into the department's community; I was able to organise good access to the necessary equipment; The department provided the opportunities for me to become involved in the broader research culture; I had good access to computing facilities and services; The research ambience in the department or faculty stimulated my work; There was appropriate financial support for research activities. ■ The <i>Extended Course Experience Questionnaire</i> asks for level of agreement with statements about library and resources that are absent from the standard version of the questionnaire: The library services were readily accessible; I was able to access information technology resources when I needed them; I was satisfied with the course and careers advice provided; Health, welfare and counselling services met my requirements; Relevant learning resources were accessible when I needed them. ■ The <i>Student Outcomes Survey</i> seeks opinions on the following: The library resources were appropriate for my needs; The information technology in teaching and learning was effective; It was made clear what resources were available to help me learn; The study materials were clear and concise; Course materials were relevant and up to date; The library services were readily accessible; I was able to access information technology resources when I needed them; I was satisfied with the course and careers advice provided; Health, welfare and counselling services met my requirements; Relevant learning resources were accessible when I needed them.

Table 3.3 Potential questions that the NSW Public Health Officer Training Program might adapt or use to monitor course experience

Item	Potential questions — course experience
Course structure and content	<p>The Program might use the following question from <i>UNSW Public Health Program Evaluation Questionnaire</i>:</p> <ul style="list-style-type: none"> ■ Were there any areas you consider essential to public health that were not included in the Program? <p>It might consider adapting a question from the <i>Employer Satisfaction Survey</i> regarding training relevance:</p> <ul style="list-style-type: none"> ■ The course content needs to change to include more areas relevant to public health practice. <p>Further, it might request participants to:</p> <ul style="list-style-type: none"> ■ Suggest specific changes in course content. <p>It might also adapt the theme from the <i>Postgraduate Research Experience Questionnaire</i> about the standard of the off the job component. Perhaps:</p> <ul style="list-style-type: none"> ■ The off the job training supported the skills needed to complete projects on the job. <p>In addition it might be useful to know about the capacity to cover competencies while on the job:</p> <ul style="list-style-type: none"> ■ The placements provided a good capacity to cover all competencies. <p>To gain more specific information, it might be possible to adapt from the <i>Public Health Education, Research and Practice Survey</i> and ask:</p> <ul style="list-style-type: none"> ■ Which competency areas have most influenced your professional understanding?
Assessment and review processes	<p>The Program might consider using adapted questions from the <i>Postgraduate Research Experience Questionnaire</i>:</p> <ul style="list-style-type: none"> ■ I understood the requirements of assessment towards the qualification. ■ The assessment process was fair. <p>It might also consider asking:</p> <ul style="list-style-type: none"> ■ The Program appropriately monitored my progress towards completion of the qualification (or a similar question to capture the broad relevance of learning contract reviews, mid-program reviews, and other interactions with public health officers / supervisors).
Supervision and teaching	<p>Questions that could be adapted from the <i>Postgraduate Research Experience Questionnaire</i> include:</p> <ul style="list-style-type: none"> ■ Supervision was available most of the time when I needed it. ■ My supervisors tried to understand barriers or problems that were occurring in my project/s. ■ My supervisors helped provide information relevant to my project/s. ■ I was given good guidance in topic selection and refinement. ■ My supervisors provided helpful feedback on my progress. <p>The <i>Student Outcomes Survey</i> asks relevant questions about motivation and interest initiated by the supervisor, which might also be useful. Perhaps:</p> <ul style="list-style-type: none"> ■ My supervisor motivated me to work hard on the project. ■ My supervisor stimulated my interest in the project throughout the placement. <p>In addition (based on issues raised in the exit interview summary of reflections by trainees in 2005) the following questions are suggested:</p> <ul style="list-style-type: none"> ■ My supervisor met with me on a regular basis to discuss issues. ■ My supervisor generally supported the drafting, completion and signing of the learning contract. ■ My supervisor generally demonstrated an understanding of the Program competencies. ■ The standard of supervision was similar across projects. ■ My supervisor expected a reasonable level of work from me. ■ My supervisor understood my role as a trainee.
Educational support	<p>Adapted versions of questions from the <i>Postgraduate Research Experience Questionnaire</i> could be used:</p> <ul style="list-style-type: none"> ■ At all placements I had access to a suitable working space. ■ I was integrated into the Health Department community. ■ I was integrated into the area health service's community. ■ I had good access to computing facilities and services. ■ I had good access to the technical support I needed. <p>Adapted questions from the <i>Extended Course Experience Questionnaire</i> might include:</p> <ul style="list-style-type: none"> ■ Relevant learning resources were accessible when I needed them. ■ The library services were readily accessible.

Graduate destination

Skills, knowledge and work readiness

In this area, the University of New South Wales Public Health Program Evaluation questionnaire is the most relevant to the Program's competency framework. The competencies suggested in the list included in this

questionnaire could be adapted slightly. Program graduates could be asked to judge knowledge and skills in public health according to current job, the Program's contribution to these skills and competence in them. Asking about relevance to the current job would also help to judge the work readiness of graduates and the success of the workplace based training in achieving this.

Employment before commencing course

The current NSW Public Health Officer Training Program Database includes position titles prior to Program entry and whether the position was held on a full-time or part-time basis. Information is also collected about professional background and qualifications, institution, year commenced and year awarded. Professional background prior to entry to the Program could be confirmed using an exit questionnaire. Questions concerning the main tasks or duties undertaken as well as the position's main function would assist in occupational classification.

Employment at course completion

The current database includes details of the current employer for past trainees. Information is also collected on the first ten positions or at least five years of employment following the Program. An exit questionnaire could clarify the graduate's main occupation at the completion of training. Given the small network of trainees, it might be less essential to monitor employer by type (private, federal etc, since most would be identifiable). However, it might be useful to include questions about the main tasks or duties in first positions following the Program.

Job seeking and access to employment

Obtaining information about job seeking and access to employment would contribute to a profile of the range of graduate outcomes and capture those in work, those looking for work and ease in finding work.

Career progression and aspirations

The current database has no clear indicator for career progression except whether or not the trainee remained

within the NSW health system following the training, and the capability to compare pre-training employment to post-training employment (full-time / part-time) and job title. The inclusion of questions on work functions would increase the capacity to draw comparisons. It might be useful to include a question about the reasons for participating in the Program, compared with their outcome from the training, to further differentiate career progression.

The current database includes only information on initial field of work following the Program rather than information about specific areas of interest or career aspirations. There is little asked about 'area of interest' by other surveys either but this information is relevant to judging the type of practitioners the Program develops, and on what specialities they focus. There are a number of questions that could be adapted from other questionnaires to elicit information on reasons for joining the Program and career progression following the Program. Salary is likely to be an ineffective means of measuring career progression as this varies greatly across sections of public health practice.

Further study

The current database includes the option of 'student' in its list of roles since leaving the Program. It also asks for a current list of all qualifications by order of attainment by qualification level, institution, year of commencement and completion. Including a question in the exit questionnaire that specifically gathers information on further study, particularly in the field of public health, should be considered.

Table 3.4 Overview of information collected on other questionnaires to monitor graduate destination

Item	Information collected — graduate destination
Skills, knowledge and work readiness	<ul style="list-style-type: none"> <li data-bbox="304 1543 1425 1688">■ The <i>Course Experience Questionnaire</i> asks for level of agreement with the following: The course developed my problem-solving skills; The course sharpened my analytic skills; To do well in this course, all you really needed was a good memory; The course helped me develop my ability to work as a team member; As a result of my course, I feel confident about tackling unfamiliar problems; The course improved my skills in written communication; My course helped me to develop the ability to plan my own work. <li data-bbox="304 1697 1425 1816">■ Similarly, the <i>Student Outcomes Survey</i> asks for level of agreement with the following: The course developed my problem-solving skills; The course sharpened my analytic skills; The course helped me develop my ability to work as team member; As a result of my course I feel more confident about tackling unfamiliar problems; The course improved my skills in written communication; My course helped me to develop the ability to plan my own work. <li data-bbox="304 1825 1425 1944">■ The <i>Postgraduate Research Experience Questionnaire</i> asks for level of agreement with the following: My research further developed my problem solving skills; I learned to develop my ideas and present them in my written work; My research sharpened my analytic skills; Doing my research helped me to develop my ability to plan my own work; As a result of my research, I feel confident about tackling unfamiliar problems. <li data-bbox="304 1953 1425 2072">■ The <i>UNSW Public Health Program Evaluation Questionnaire</i> asks extensive questions regarding knowledge and skills specific to public health. Participants are asked to judge knowledge and skills according to importance to current job, UNSW contribution to these knowledge and skills and competence in them, using a three point scale – (not / some / very). This helps to judge skill relevance to the job. The list of skills generally follows the Program's competencies.

Table 3.4 Overview of information collected on other questionnaires to monitor graduate destination - continued

Item	Information collected — graduate destination
Skills, knowledge and work readiness (cont'd)	<ul style="list-style-type: none"> ■ The <i>Survey of the Public Health Workforce</i> and the <i>Public Health Education, Research and Practice Survey</i> ask about skills in public health, but are not as strongly related to competencies of the Program. ■ The <i>Survey of the Public Health Workforce</i> asks about specific time spent working in programs targeting priority areas e.g. mental health and hours per week on average spent in each area (management, policy and planning, administration and support, health personnel, communicable diseases, non communicable disease surveillance, clinical services, monitoring inspection, development and administration of public health law, health promotion, health program evaluation, other research, community development and advocacy, other). Participants are asked to rate their competency in the areas ticked and indicate whether additional training is needed. ■ The <i>Public Health Education, Research and Practice Survey</i> asks whether: MPH contributed to ability to develop and carry out the following with particular respect to your workplace: Project planning; Preparation for evaluation; Problem-solving; Policy development; Critical analysis; Communication; Networking across disciplines; Teamwork; Identifying and locating information; Synthesise information; Understand models of public health practice; Understand mechanisms of public health service delivery. It also asks for an overall rating of whether the MPH prepared candidates for public health practice and for level of agreement with the following: I feel that my MPH has prepared me excellently for public health practice; I feel that my MPH has prepared me adequately for public health practice in most areas; I feel that my MPH has partially prepared me for public health practice in some areas; I do not feel that my MPH has prepared me at all for public health practice. ■ The <i>Employer Satisfaction Survey</i> asks about the work ethic of graduates as well as the level of agreement that: It is more cost effective to recruit trained people than to train people on the job; On the job skills are more useful than skills obtained through formal education; VET system is providing appropriately skilled graduates; Training pays through worker productivity; VET system accounts for employer needs; Graduates have adequate literacy and numeracy skills for the workplace demands.
Employment before commencing course	<ul style="list-style-type: none"> ■ The <i>Student Outcomes Survey</i> asks about employment status in the six months prior to starting the course: Full or part-time employment; Basis of employment (wage / conduct own business etc.); Occupation; Main tasks; Kind of industry; No. hours worked; Entitlements; Whether actively looked for work. ■ The <i>UNSW Public Health Program Evaluation Questionnaire</i> asks: Employment status when enrolled; Main professional occupation before course; Setting of employment; Functions performed in job; Main function performed. ■ The <i>Public Health Education, Research and Practice Survey</i> asks respondents to describe the job they had when they started the course (occupation and setting e.g. a district nurse attached to a community health centre in Broadmeadows). ■ The <i>Survey of the Public Health Workforce</i> asks: Main occupation before started public health; Whether employed before enrolment (full-time / part-time etc.); Where employed (employer name, title of position, area of work); Sector of employment (health / non health); Type of organisation; Postcode of employment; Whether currently employed; Where employed (employer name, title of position, area of work); Type of organisation; Postcode of employment; Do you consider yourself to be part of the public health workforce; Functions performed on the job; Which is major function (e.g. management). ■ The <i>Student Outcomes Survey</i> asks about employment status as at 30 May 2003: Full or part-time employment; Basis of employment; Entitlements; Occupation; Main tasks; Kind of industry; No. people at workplace; No. people work for employer in total; Main job and hours per week. ■ The <i>Graduate Destination Survey</i> asks: Employer's name in full; Whether working in Australia, if yes, postcode, if no, country; Were you self employed; Type of employer (Education public, Education private, Government federal, Government state, Government local, Private sector, Non-profit, Other, not known); Type of business carried out by employer; Date started this job; Occupation; Main tasks or duties e.g. teaching primary school children; No. hours worked in main job in an average week; Whether employment is permanent / short term / other. ■ The <i>Survey of the Public Health Workforce</i> asks: Do you consider yourself to be part of the public health workforce; What functions do you perform on the job (Management of health services, Policy and planning advice (policy analysis, planning, consultancy), Administrative support (staff development, finance, clerical and information systems), Health personnel education and training, Public health practice (e.g. maternal and child health, community nutritionist, environmental control), Clinical services (e.g. medicine, nursing, surgery, social work), Technical services (e.g. public health laboratories, environmental engineering, toxicology), Health promotion / health education, Research, Other); Which is your major function. ■ The <i>UNSW Public Health Program Evaluation Questionnaire</i> asks respondents 'On completing coursework, what did you do?'. It also asks about current employment: Setting; Main occupation; Time spent on public health in occupation (part-time / full-time / no time); Functions performed in the job; Main function. ■ The <i>ABS Survey of Education and Training and Information Technology</i> asks: Occupation in last job; Kind of service carried out by the employer; Name of employer; Hours worked; Entitlements; Whether belong to a union.

Table 3.4 Overview of information collected on other questionnaires to monitor graduate destination - continued

Item	Information collected — graduate destination
Employment at course completion	<ul style="list-style-type: none"> ■ In regard to service description, the same survey asks: 'Is your service/ program in the: health sector / non-health sector. Please indicate the organisation within which your service is based: Federal government, State government, Local government, Area / regional health service, Public hospital, Private hospital Community health centre, Non government organisation, Other private sector, Self employed, Tertiary educational institution, School education authority (infants, primary, secondary), Industry, Other (specify). Another section of the questionnaire asks: Specific time spent working in programs targeting priority areas (e.g. mental health) and hours per week on average spent in each area (management, policy and planning, administration and support, health personnel, communicable diseases, non communicable disease surveillance, clinical services, monitoring inspection, development and administration of public health law, health promotion, health program evaluation, other research, community development and advocacy, other etc.; Rate your competency in the areas ticked and indicate whether you need additional training.
Job seeking and access to employment	<ul style="list-style-type: none"> ■ The <i>Student Outcomes Survey</i> asks: How long it took to find a job after the course; Whether actively looking for work; Whether looking for work in the same field as field of study. ■ The <i>Graduate Destination Survey</i> asks: How you first found out about this job (University career service, careers fair or information session, other university source (e.g. faculty or lecturer), advertisement in newspaper, advertisement on internet, family / friends, approached by employer directly, approached by an employer, employment agency, work contacts / networks, other); If you actively sought employment during the last year, please indicate which of the following strategies or sources of information you used (from the range of possible answers above). ■ The <i>ABS Survey of Education and Training and Information Technology</i> asks: Looking for work in the last month and means of looking; When began looking for work.
Career progression and aspirations	<ul style="list-style-type: none"> ■ The <i>Student Outcomes Survey</i> asks about sources of income during the course and, in regard to post course employment: Earnings; Job related benefits resulting from undertaking the course; Whether job is the first full-time job ever had; Relevance of the course to job. It also asks the main reason for doing course and whether the course helped achieve the main goal. ■ The <i>Graduate Destination Survey</i> asks about: Gross salary in \$ Australian (estimate if necessary); No. hours worked in main job in an average week; Whether employment is permanent / short-term / other; If job is full time, is this first full time job of any sort. ■ The <i>UNSW Public Health Program Evaluation Questionnaire</i> asks: What were the main reasons you initially enrolled (to increase chances of promotion, to increase professional competence, to commence a new career, to change career path, to expand knowledge and skills, my employer suggested it, to gain vocational accreditation or fellowship, to enter an academic career, dissatisfaction with previous professional practice, to acquire specific skills (specify), personal interest, other reason (specify); Which of these was the main reason. It later asks: How useful has the program been in achieving employment or promotion and how strongly did the program influence your commitment to career. It then asks the extent to which the course: Met expectations; Provided skills; Added to knowledge; Prepared you for public health career; Prepared you for your current job; Helped decide area of work interest; Helped promotion; Helped career change; Assisted in professional life. It also asks: Did you change job or get a new job during the course; What is the new job; It compares this to questions: Employment status when enrolled; Main occupation before course; Setting; Functions performed; Main function performed. It also asks whether in the course a specialisation is intended and the area intending to specialise in but does not ask about post course area of interest. ■ The <i>Survey of the Public Health Workforce</i> asks whether public health training helped: Prepare you well for the job; Influence career commitment; Help decide which area to work in; Help obtain a job; Help obtain a promotion or preferred position; Help make a career change; Assist in professional life; Increase understanding of public health issues. It also asks: Worked in health related area; If no, what was your occupation; What was first job on entering the health workforce; No. years work in total since leaving school; Primary work status last 5 years, 1 year, current and anticipated in 12 months time (working practising in public health and related field, clinical and other health sector area, non health related area, studying etc.); In the past 5 years, have you worked in public health overseas; Indicate countries, major areas of work undertaken; Category of main work location (city etc.); Job in health sector; Type of organisation; Main work setting. It also asks: Intending career in public health; See any obstacles in continuing to advance career (specify); Have prospects for advancement in career and reason why; What would you chose as your preferred role in 5 years time; Do you anticipate career changes in the next 5 years (specify); Undertaking or planning to do further study (specify).

Table 3.4 Overview of information collected on other questionnaires to monitor graduate destination - continued

Item	Information collected — graduate destination
Career progression and aspirations (cont'd)	<ul style="list-style-type: none"> ■ The <i>Public Health Education, Research and Practice Survey</i> asks students for: A description of career intentions and reasons enrolled in MPH. Students are also asked to indicate how the statements in the following list apply with respect to the impact of MPH: My postgraduate training has increased the number of job opportunities available to me; My postgraduate training did not adequately prepare me for my subsequent positions; I have more responsibility in my current job because of my postgraduate training; I would have secured my current job even without postgraduate training; I am on the same salary in my current job as I would be without postgraduate degree; I am able to perform my current job at a higher level of effectiveness because of my postgraduate training; My postgraduate training is not relevant to the day-to-day work of my current job; I have been asked to join groups / committees because I have postgraduate training in public health; My career path has not met the expectations I had when I enrolled for my postgraduate training in public health; The impact of my contributions to the community was enhanced by my postgraduate public health training; I have no plans to undertake further study in public health in the future; The MPH experience has broadened my view of public health; Other (specify).
Further study	<ul style="list-style-type: none"> ■ The <i>Student Outcomes Survey</i> asks: Whether enrolled in any course following this course; Level of qualification; Hours per week attend classes; Where enrolled; Full name of facility; Full name of course; Main reason for studying the qualification; Whether recognition of prior learning awarded; Whether field of study is similar to last course or current job. ■ The <i>Graduate Destination Survey</i> asks in regard to further study: Title of award; Major fields of study; Level of award; Whether attendance is wholly or mainly full-time / wholly or mainly part-time; Whether mode of study is internal / external; Name of institution; Month of beginning this award. ■ The <i>UNSW Public Health Program Evaluation Questionnaire</i> asks: Undertaking further education or training in public health; Planning to undertake more formal training in public health. ■ The <i>Survey of the Public Health Workforce</i> asks: Currently studying; Continuing education / professional development past present and intended; Difficulty undertaking further education and training relevant to current position, main reasons; Ways course can be improved to meet education needs. ■ The <i>ABS Survey of Education and Training and Information Technology</i> asks about: Level of course qualification; Main field of study; Type of institution; Reasons for enrolment; Contact hours; Methods of delivery; Main method; Recognition of prior learning; Financial support; Year commenced; Main activity in 12 months prior to course.

Table 3.5 Potential questions that the NSW Public Health Officer Training Program might adapt or use to monitor graduate destination

Item	Potential questions to monitor the Program — graduate destination
Skills, knowledge and work readiness	<p>Questions suggested in the <i>UNSW Public Health Program Evaluation Questionnaire</i> could be adapted based on a description of the 11 Program competencies. Graduates could be asked to judge knowledge and skills in public health according to current job, the Program's contribution to these skills and competence in them. The question might read as follows:</p> <ul style="list-style-type: none"> ■ The following questions pertain to skills and knowledge in public health in relation to their importance to your practice, the extent to which the Program contributed to your knowledge and skills, and your level of competence in these skills. Please circle the appropriate response in each of the three columns: <i>Importance</i>: How important is this area in your present work? (Not important 1; Some importance 2; Very important 3); <i>Program contribution</i>: How much did the Program contribute to your knowledge and skills in this area? (Very little 1; Some contribution 2; A lot 3); <i>Competence</i>: How competent are you in this area? (Not competent 1; Some competence 2; Very competent 3). <ul style="list-style-type: none"> – Operate effectively and ethically across a range of settings and with different cultural groups – Plan and manage programs; Use analytical, critical thinking, and problem-solving skills to make decisions effectively – Manage data collection and conduct basic epidemiological analysis; Critically appraise research in public health – Accesses relevant information sources to prepare reports including the descriptive presentation of data – Demonstrate effective written and oral communication in a range of contexts; Facilitate group / teamwork and operate effectively as a member of a group or team – Develop and analyse policy – Design a health promoting intervention for an individual, community or organisation – Evaluate programs and services – Interpret surveillance data and respond to outbreaks of infectious diseases – Identify, assess and manage risks – Appraise economic evaluations relevant to public health issues, demonstrating understanding of the concepts.

Table 3.5 Potential questions that the NSW Public Health Officer Training Program might adapt or use to monitor graduate destination - continued

Item	Potential questions to monitor the Program — graduate destination
Employment before commencing course	<p>The Program could use the following question from the <i>Survey of the Public Health Workforce</i>:</p> <ul style="list-style-type: none"> ■ What was your main occupation before you started in public health? (state it) <p>It could also ask:</p> <ul style="list-style-type: none"> ■ What was your main occupation before you started the Program if different to the above? <p>In terms of assisting occupational classification, it would be useful to include information about work tasks using questions adapted from the <i>Graduate Destination Survey</i>:</p> <ul style="list-style-type: none"> ■ What were the main tasks or duties usually required in your occupation prior to entering the Program, describe as fully as possible, e.g. teaching primary school children. <p>To assist with prioritising these, it might also be useful to ask:</p> <ul style="list-style-type: none"> ■ What was your main function?
Employment at course completion	<p>At exit, it would be useful to clarify:</p> <ul style="list-style-type: none"> ■ What was your first main occupation when you completed the Program? <p>It might be useful to adapt from the <i>Graduate Destination Survey</i>:</p> <ul style="list-style-type: none"> ■ What are the main tasks or duties usually required in your first occupation following the Program? (describe as fully as possible, e.g. coordinating immunisation programs); ■ What is your main function? <p>To help better classify field of work, graduates could also potentially be given a range of options adapted from the <i>Public Health Workforce Survey</i>:</p> <ul style="list-style-type: none"> ■ Do you consider yourself to be part of the public health workforce? ■ What functions do you perform on the job?: <ul style="list-style-type: none"> – Management of health services, policy and planning advice, (includes policy analysis, planning, consultancy) – Administrative support (staff development, finance, clerical and information systems) – Health personnel education and training – Public health practice (e.g. maternal and child health, community nutritionist, environmental control) – Clinical services (e.g. medicine, nursing, surgery, social work) – Technical services (e.g. public health laboratories, environmental engineering, toxicology) – Health promotion / health education – Research – Other (specify). ■ Which is your major function from those selected?
Job seeking and access to employment	<p>The following adapted questions from the <i>Student Outcomes Survey</i> and <i>Graduate Destination Survey</i> might be relevant:</p> <ul style="list-style-type: none"> ■ Are you actively looking for work? ■ If so, how are you seeking employment? (Word of mouth via the public health network, through my current employer: via a professional association, online advertisements, newspaper advertisement, other, specify). ■ Approximately how long did it take to find employment around the time of completing the Program (calculate from time started seriously looking to when job offer was accepted)? ■ How did you find out about the job? (Word of mouth via the public health network, approached by employer directly, professional association, online advertisement, newspaper advertisement, other, specify). <p>The following question from the <i>UNSW Public Health Program Evaluation Questionnaire</i> could also be included:</p> <ul style="list-style-type: none"> ■ How useful has the training been in helping you to gain employment following the Program?
Career progression and aspirations	<p>The following questions adapted from <i>UNSW Public Health Program Evaluation Questionnaire</i> could be a useful inclusion:</p> <ul style="list-style-type: none"> ■ What is the main reason you joined the Program? <ul style="list-style-type: none"> – To increase chances of promotion – To increase professional competence – To gain vocational accreditation or fellowship – To enter the department – To acquire specific skills (specify) – Personal interest – Other reason (specify). ■ Which one of these was your main reason? ■ How useful has the training been in helping you to gain a promotion? ■ How strongly did the program influence your commitment to public health? <p>The following question from the <i>Public Health Education, Research and Practice Survey</i> might also be useful:</p> <ul style="list-style-type: none"> ■ I am able to perform my current job at a higher level of effectiveness because of my postgraduate training but adapted to 'because of the workplace based training of the NSW Public Health Officer Training Program'

Item	Potential questions to monitor the Program — graduate destination
Career progression and aspirations (cont'd)	<p>The <i>Public Health Workforce Survey</i> provides some questions that could be adapted:</p> <ul style="list-style-type: none"> ■ What are your anticipated areas of work in one year and five years time?: <ul style="list-style-type: none"> – Management of health services – Policy and planning advice, (includes policy analysis, planning, consultancy) – Administrative support (staff development, finance, clerical and information systems) – Health personnel education and training – Public health practice (e.g. maternal and child health, community nutritionist, environmental control) – Clinical services (e.g. medicine, nursing, surgery, social work) – Technical services (e.g. public health laboratories, environmental engineering, toxicology) – Health promotion / health education – Research – Other (specify). ■ Do you see any obstacles in continuing to advance your career? (specify).
Further study	<p>It may be useful to adapt questions from the <i>UNSW Public Health Program Evaluation Questionnaire</i>:</p> <ul style="list-style-type: none"> ■ Are you undertaking further education or training? If yes, in public health or another field; What level of qualification? What institution? When commenced? ■ Do you plan to undertake more formal training in public health? (specify).

Demographics

The current database contains information on country of birth (COB) but not language spoken at home (LSAH), which may be a useful inclusion. Questions about place of parents' birth would also capture information about trainees born in Australia but from a different cultural background.

To ensure accurate data collection and capture the trainees who participated in the Aboriginal and Torres Strait Islander Public Health Scholarship Program, all trainees should be asked whether they are of Aboriginal and / or Torres Strait Islander origin in compliance with current NSW Health policy.

If disability is to be recorded, it would best be done simply, for the purpose of this small cohort.

The current database includes information about current address for home and work, and asks whether the positions following the Program were rural or non-rural. It might also be worthwhile including a question that collects specific information about where the trainee was located before joining the Program in order to identify intake from rural or non-rural areas.

Table 3.6 Overview of information collected on other questionnaires to monitor demographics

Item	Information collected — demographics
Language spoken at home	<ul style="list-style-type: none"> ■ The <i>UNSW Public Health Program Evaluation Questionnaire</i> asks 'Do you mainly speak a language other than English at home?' and 'Is English your first language?' ■ The <i>ABS Survey of Education and Training and Information Technology</i> asks: 'What was the language you first spoke as a child?'; 'Do you speak a language other than English at home?'; 'What language do you mainly speak at home?'; 'Do you consider you speak English very well, well, or not well?' ■ The <i>Student Outcomes Survey</i> asks whether a language other than English is spoken at home and about English proficiency. ■ The <i>Graduate Destination Survey</i> asks 'Main language spoken at home (English or other)'.
Country of birth	<ul style="list-style-type: none"> ■ The <i>ABS Survey of Education and Training and Information Technology</i> asks 'In which country was mother born?' and 'In which country was father born?' ■ The <i>Student Outcomes Survey</i> asks for country of birth.
Aboriginal and Torres Strait Islander	<ul style="list-style-type: none"> ■ The <i>Student Outcomes Survey</i> asks 'Are you Aboriginal and Torres Strait Islander?' ■ The <i>Graduate Destination Survey</i> asks 'Are you of ATSI origin?'
Disability	<ul style="list-style-type: none"> ■ The <i>Student Outcomes Survey</i> asks about disability and type of disability. ■ The <i>Graduate Destination Survey</i> asks 'Would you describe yourself as having a disability?' ■ The <i>ABS Survey of Education and Training and Information Technology</i> goes into a lot of detail about disability, using the up to date classification system. The classifications are complex and have changed over time in line with government and industry policy.
Rurality	<ul style="list-style-type: none"> ■ The <i>Public Health Education, Research and Practice Survey</i> measures rurality by postcode and place of residence. ■ The <i>Graduate Destination Survey</i> asks whether students relocated to undertake course and whether this involved an interstate move. ■ The <i>Student Outcomes Survey</i> asks in regard to the course: 'Did you move from your usual address to do this course?'; Main reason moved.

Table 3.7 Potential questions that the NSW Public Health Officer Training Program might adapt or use to monitor demographics

Item	Potential questions to monitor the Program — demographics
Language spoken at home	<ul style="list-style-type: none"> Do you mainly speak a language other than English at home?
Country of birth	<ul style="list-style-type: none"> In which country was your mother born? In which country was your father born?
Aboriginal and Torres Strait Islander	<ul style="list-style-type: none"> Are you of Aboriginal and / or Torres Strait Islander origin?
Disability	<ul style="list-style-type: none"> Would you describe yourself as having a disability?
Rurality	<ul style="list-style-type: none"> Did you move residential addresses in order to join the Program? If so rural, remote, interstate city, interstate rural, interstate remote?

Non-completion

The database could include a broader range of reasons for not completing the course. These could be classified as reasons

Table 3.8 Overview of information collected on other questionnaires to monitor non-completion

Item	Information collected on other questionnaires — non-completion
Reasons for course non completion	<ul style="list-style-type: none"> The <i>Student Outcomes Survey</i> section for non completers asks about reasons for non completion in the following way: Employment related reasons (changed job, lost job, got skills needed for job, other employment reason (specify)); Training related reasons (gained what wanted from the training completed, transferred or started other training, training no longer related to my plans, training not what I expected, training timetable not flexible enough, other (specify); Personal reasons (moved form the area, illness, family reasons, financial reasons, too many time pressures, other (specify); Any other major reason you would like to mention (specify); From list above, what is main reason. The <i>ABS Survey of Education and Training and Information Technology</i> asks: Work-related reasons (too much work, lack of employer support, little difference to work prospects, not required for job / employer, got / wanted a job / apprenticeship); Course / qualification-related reasons (did not do well, course not what expected); Personal / family reasons (own ill health or disability, caring for family members, other personal / family reasons) and; Other reasons (no time, only intended to complete part of qualification, lost interest or motivation, financial reasons, location / transport reasons, lack of computer skills /access, other).

Table 3.9 Potential questions that the NSW Public Health Officer Training Program might use to monitor non-completion

Item	Potential questions to monitor the Program — demographics
Reasons for course non completion	<p>Additional reasons for non-completion could be adapted from the <i>Survey of Education and Training and Information Technology</i>:</p> <ul style="list-style-type: none"> <i>Employment related reasons</i>: Another position (health sector), Another position (non health sector), I got skills needed to get a job, Other employment reason (specify); <i>Training related reasons</i>: Gained what I wanted from the training completed, Transferred or started other training, Training was no longer related to my plans, Training was not what I had expected, The training timetable was not flexible enough, Other training reasons (specify); <i>Personal / family reasons</i>: I moved out of the area, Illness prevented me from continuing the training, caring for family members, disability, financial reasons, I had too many time pressures, Other personal (specify); Any other major reason you would like to mention (specify); From the list above, what is the main reason?

3.5 Reporting on outcomes

Monitoring post-secondary education and training in Australia — practice and policy developments relevant to the NSW Public Health Officer Training Program (NSW Department of Health, in press) identifies the need to integrate the results of monitoring into strategic planning

in order to improve education and training. This is usually achieved through reporting to a governing body. This section of the discussion paper considers performance indicators, to provide a basis for ongoing work towards reporting on performance and outcomes for the Program.

Table 3.10 lists a basic set of indicators that the Program

would be able to report on within the suggested monitoring framework. This set of indicators starts the process of reflecting on issues around the quality and outcomes of delivering training, which can help inform debate around evidence-based strategic planning. Over and above these, it would be possible to report on a range of data to investigate associations that affect the

quality of the delivery and outcomes of training, which might contribute to more research into public health workforce development. The new governance structure for the Program includes an independent advisory council who would review these reports and provide directions regarding potential strategies to improve the quality of training.

Table 3.10 Suggested performance indicators for the NSW Public Health Officer Training Program for reporting on items within core monitoring areas

Core monitoring area	Item	Main performance indicators
Course experience	Course structure and content	Percentage of graduates reporting that the course is relevant to public health practice
	Assessment and review processes	Percentage of graduates reporting that assessment processes were fair
	Supervision/ teaching	Adequate supervision: <ul style="list-style-type: none"> ■ percentage of graduates reporting adequate access to supervisors Progress monitored: <ul style="list-style-type: none"> ■ percentage of graduates reporting supervisors monitored project progress
	Educational support	Percentage of graduates reporting access to resources to support learning (working space, computing facilities and learning resources)
Graduate destination	Skills, knowledge and work readiness	Percentage of graduates reporting the Program competencies were relevant to their current job Percentage of graduates reporting competence in skills relevant to the job for those who completed training for: Professional Practice; Management; Epidemiology and Biostatistics; Information Management; Communication; Policy; Health Promotion; Health Evaluation; Risk Assessment and Management; Infectious Diseases and Health Economics
	Employment pre and post course	Pre and post-Program occupational groupings: <ul style="list-style-type: none"> ■ Percentage of graduates working in the NSW and national or international public health system following the Program ■ Percentage of graduates moving into professional leadership/ management positions within public health following the Program ■ Percentage of graduates employed in rural areas following completion of the Program
	Job seeking and access to employment	Percentage of graduates reporting that it took less than 3 months to get a job following the Program
	Career progression and aspirations	Percentage of graduates reporting anticipated areas of work are in public health leadership positions in 1 year and 5 years time
	Further study	Percentage of graduates reporting they are or plan to undertake further education and training in public health
	Course non-completion	Main reasons for course non completion
Demographic information	Aboriginal and/or Torres Strait Islander origin	Percentage of graduates of Aboriginal and / or Torres Strait Islander origin
	Country of birth	Percentage of graduates born in another country
	Non-English-speaking background	Percentage of graduates who speak a language other than English at home
	Disability	Percentage of graduates reporting a disability
	Rurality	Percentage of graduates joining the Program from rural or remote locations
	Date of birth	Age group of trainee intake into the Program

SECTION 4

Discussion

The review of the processes, structure and content of other monitoring programs demonstrated that none of the tools used was directly applicable to the Program. While some of the monitoring surveys used by the Victorian Consortium of Public Health and the University of New South Wales regarding postgraduate public health training have the most relevance to the Program, these would still need to be adapted to meet its needs.

While the Program was accredited in the VET sector, trainees would have been eligible to participate in the Student Outcomes Survey. However it is unlikely that any would have been sampled as only 500–600 graduates are sampled nationally from private providers, and the results would not be of great relevance to the Program. If accredited within the higher education sector, the Program would be able to 'opt in' to administer the core questions of the Graduate Destination Survey and the Course Experience Questionnaire, to which it could add some of its own questions. However, to opt in would incur a cost for the Program, and due to the broad nature of these surveys, there may be little benefit gained.

The principles and policies with regard to the standardisation and growth of monitoring education and training and measuring learning, described in documents such as *Measuring Learning in Australia* (Trewin 2004), *The Australian Higher Education Quality Assurance Framework* (DETYA 2000) and *National Protocols for Higher Education Approval Processes* (MCEETYA 2000) provide a sound basis for the Program to develop a monitoring framework. Being familiar with the policy standards will help to ensure the Program's agenda is comparable and standardised, where relevant and possible, to other courses.

The higher education sector's *Measuring Learning in Australia: Plan to Improve the Quality, Coverage and use of Education and Training Statistics* (Trewin 2004) states that monitoring needs to include a stable program of key data sources, focus on outcomes, provide financial statistics, report on minority groups through holistic data analysis and maximise the use of existing information. The Program is in a strong position to achieve these aims.

To become a higher education provider, the Program will need to demonstrate monitoring standards and quality assurance processes as described by *The Australian Higher Education Quality Assurance Framework* (DETYA 2000) and *National Protocols for Higher Education Approval Processes* (MCEETYA 2000). The Program will also be required to provide detail of the strategies used to achieve their goals and the indicators used to assess their success. As such, any monitoring needs to be closely aligned to Program goals and the monitoring results need to be followed up with strategies to address arising issues.

It is timely to develop a monitoring framework for the Program, which encompasses not only the NSW Public Health Officer Training Program Database and other monitoring efforts but draws on current national policy and practice. A specific monitoring framework might include a course exit questionnaire (to include course completers and non-completers). Such a monitoring framework would enhance access to accurate information for populating the existing database, and help provide an overall picture of course experience and graduate destination. This will assist the Program with ongoing quality assurance, as well as help stimulate specific research into the quality of public health workforce training and development. In establishing a monitoring framework, the Program should adhere to national standards while addressing information needs related to the Program's small size, specific aims, competencies and course structure.

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