Ministerial Taskforce on

Clinical Education and training

Final Report–March 2007

Queensland Government
Queensland Health

health • care • people

Table of Contents

Appendices

Acknowledgements

The Steering Committee for the Ministerial Taskforce on Clinical Education and Training would like to acknowledge the significant and varied contributions of the many people who supported the work of the Taskforce.

Participants often relinquished significant personal and/or practice time in order to attend meetings, forums and workshops, read and consider discussion documents, and prepare feedback. The Committee has especially been aware of the considerable goodwill, openness and passion brought to the table.

Particular thanks is extended to members of the Medical, Nursing and Midwifery, Allied Health and Oral Health Subcommittees (refer Appendix C) who presented valuable information and insights to the Steering Committee for consideration.

Additionally, the efforts of those who provided practical support to ensure the efficient and effective operation of the Taskforce–including the Ministerial Taskforce on Clinical Education and Training Secretariat and staff in regional areas–have been very much appreciated.

1. Executive Summary

The Ministerial Taskforce on Clinical Education and Training was established in April 2006 to review and make recommendations to the Minister for Health on issues relating to clinical education and training across medical, nursing and midwifery, allied health and oral health professions and disciplines.

This has been a significant undertaking. It must be recognised that the education and training of health clinicians in Queensland is multifaceted. It involves a large number of disciplinary groups with varied education and training pathways across professional pre-entry, prevocational and specialist levels; over 25 higher education institutions, private and non-government education providers; and clinical education and training providers in the public, private and non-government health and other sectors.

In addition, clinical education and training issues and the possible solutions are complicated by broader contextual factors including changing population health needs, rapidly evolving models of service delivery, workforce shortages, funding constraints and greater health consumer expectations.

It should be acknowledged, however, that Queensland is not dealing with clinical education and training in isolation. The national and State health reform agendas provide frameworks which offer some guidance to the identification and development of potential targeted strategies.

The Ministerial Taskforce on Clinical Education and Training Steering Committee was informed by three discipline specific subcommittees–medical, nursing and midwifery, and allied health and oral health. Each subcommittee undertook a process of research and consultation to document issues and develop recommendations for action. This activity was further informed by a series of regional forums which provided opportunities for stakeholders across Queensland to contribute to the process.

While each subcommittee identified issues relevant to its own interest groups, there was consensus that a number of issues were common across all groups. The common issues were identified as:

1. A lack of recognition of clinical education, training and research as core business within Queensland Health.
2. The tension between the demands of service provision and clinical education.
3. A lack of clarity regarding roles, responsibilities and accountability for clinical education and training across stakeholder groups.
4. The absence of a statewide corporate framework for the coordination of education and training, resulting in poor integration between universities, Queensland Health and health service providers.
5. Inadequate access to sufficient, appropriate, quality placements which is being exacerbated by rapidly increasing numbers of students.
6. The inadequate links between education and workforce needs.
7. The fiscal constraints within health and education sectors resulting in inadequate resourcing for clinical education and training and the required infrastructure.
8. A lack of available reliable data to inform planning, coordination and evaluation.

In response to these common findings, a set of Common Outcome Areas was developed to describe where Queensland should be in relation to clinical education and training in 5–10 years time.

These reflect the critical common issues to be addressed and are identified under the following broad headings:

1. Commitment to clinical education and training.
2. Quality of and capacity for clinical education and training.
3. Coordination and integration of clinical education and training.
4. Funding.
5. Data systems supporting clinical education and training.
6. Collaboration and Communication.
7. Workforce Planning.

For each Common Outcome Area, an overarching outcome statement and related elements have been articulated. A set of principles was also developed to guide the formation of recommended strategies.

It is recognised that a number of the required outcomes outlined are aspirational in nature, and that significant work and investment by various stakeholders is required to achieve the necessary changes. In developing its recommended strategies, the Steering Committee was cognisant of the need to prioritise and limit recommendations to ensure that the focus is on those key areas requiring action. This is to ensure that action is taken in those areas that will have the greatest impact on achieving key outcomes.

Common Outcome Area 1.

Commitment to Clinical Education and Training

Clinical education and training are core functions of Queensland Health–explicitly resourced, planned, managed and evaluated at all levels of the organisation.

1.1 Clinical education and training is more than core business, it is a foundation of a quality health system and clinical professional culture.

1.2 A clinical education, training and research culture directly contributes to a health system focussed on quality teaching, improved patient safety and health outcomes.

1.3 Students and new graduates are seen as an asset rather than as a liability in the workplace.

1.4 Clinical education and training is a central responsibility of all health clinicians.

1.5 Staff providing clinical education and training are supported, recognised, evaluated and developed as teachers.

1.6 Responsibility for coordinating and managing clinical education and training is recognised as additional to the responsibility to teach and train, and is separately resourced.

1.7 Rostering and workload management practices take into consideration required clinical teaching, education and training commitments.

1.8 Clinical education and training is included in all service, workforce and infrastructure planning across Queensland.

1.9 Queensland Health and key clinical education and training stakeholders actively participate in processes to plan the allocation of funding and student places to meet future Queensland health workforce needs.

Recommendation 1:

Queensland Health should commit to providing a number (to be determined for each discipline group) of quality assured supervised clinical placements for Commonwealth government supported places in the first instance, and an agreed number of full-fee paying professional pre-entry students, in Queensland Higher Education Institutions across the calendar year on a three year cycle. The number of clinical placements for any disciplinary group would reflect the number of educationally appropriate private, public and non-government experiences.

Recommendation 2:

A requirement to participate in clinical education and training activities should be incorporated into the job descriptions and performance appraisal and development (PADs) plans of all clinicians working in Queensland Health settings where clinical teaching is undertaken.

Recommendation 3:

The elements of clinical education and training activity should be defined and formally reported upon. Requirements for reporting on clinical education and training activity and outcomes should also be defined and embedded in reporting mechanisms. Such reporting should be, as a minimum, included in the Annual Report and existing reporting to government on the achievement of specified health service outcomes.

Recommendation 4:

Queensland Health should ensure that all new graduates employed in Queensland Health receive an organisationally consistent paid orientation to the workplace appropriate to their discipline, with a focus on patient safety and what is required to prepare them for the workplace.

Recommendation 5:

Queensland Health should ensure that staff commencing in new roles or unfamiliar settings will receive orientation to the workplace appropriate to their discipline with a focus on patient safety and what is required to prepare them for the workplace.

Recommendation 6:

Rostering practices for Post Graduate Year (PGY) 1 and 2, as additional medical graduates enter the workforce, should ensure that:

i. Prevocational learning objectives and capabilities are achieved regardless of the pattern of rostered work,

ii. The hours of the working day i.e. day, afternoon and evening shifts are reasonably distributed across PGY1 and 2 doctors.

Recommendation 7:

Clinical education and training expertise is recognised in career paths for allied health and oral health staff.

Common Outcome Area 2.

Quality of and Capacity for Clinical Education and Training.

Clinical education and training capacity is maximised in an environment that quality assures clinical education and training outcomes.

2.1 The quality of clinical education and training is able to be assessed objectively against robust standards and against commitments which have been agreed between relevant stakeholders.

2.2 Clinical placements are of a high quality and ensure contact with an appropriate range of patients/experiences and exposure to an appropriate range of health conditions and environments.

2.3 Education and training keeps pace with evolving changes in health care delivery and population morbidity and demographics.

2.4 Work readiness is clearly defined in partnership with stakeholders and used to inform the development of stakeholder training programs.

2.5 Organisational capacity to meet clinical placement requirements is clearly defined.

2.6 Criteria to determine the suitability of clinical placements for students/trainees are clearly defined, communicated and able to be understood and scrutinised by stakeholders.

2.7 Providers of clinical teaching are supported to develop high quality, situation appropriate, teaching techniques.

2.8 Clinical teachers, educators, students and trainees utilise learning tools, as appropriate, that increase the efficiency and effectiveness of clinical education and training.

2.9 Safe and affordable accommodation (onsite or nearby) is available for all disciplines so that:

i. Choice of clinical education and training learning experience in a chosen Health Service District is not limited, and

ii. Choice of a rural/remote location for career employment is not limited.

2.10 Appropriate clinical and ancillary space is available for clinical education and training in all health service districts across the state.

Allied Health and Oral Health Outcome Area

2.11 Innovative models of allied health and/or oral health staffing, such as outreach models, encourage access to high quality clinical education and training in rural and remote locations.

Medical Outcome Area

2.12 An efficient and effective prevocational medical education and training function within Queensland is:

i. Led by one or more people with a high level of formally recognised expertise in medical education,
ii. Focused on educating and training doctors to meet the health needs of the Queensland population,
iii. Resourced to a level that enables the achievement of required quality education and training outcomes,
iv. Tasked with overseeing education and training in a manner that is effectively coordinated and of a consistent quality,
v. Undertaken in accordance with an accepted educational framework,
vi. Able to be evaluated to determine its effectiveness,
vii. Able to meet the needs of all prevocational doctors rather than just PGY1,
viii. Able to meet the needs of both Australian and International Medical Graduates,
ix. Flexible in its mode/s of delivery and not limited to individual hospitals e.g. networking of facilities/services across sectors,
x. Coordinated across health sectors and not limited to the public sector,
xi. Held accountable and have clear lines for reporting,
xii. Responsible for minimising duplication in prevocational medical education and training.

Recommendation 8:

Queensland Health should ensure that clinical service delivery staff receive educational preparation to enable them to effectively teach and assess within clinical environments.

Recommendation 9:

Students should be provided with an early opportunity to reflect upon and understand their future role as clinical teachers.

Recommendation 10:

Queensland Health should implement consistent and equitable strategies to overcome disincentives to working as a clinical academic within and/or between disciplines across Queensland.

Recommendation 11:

A framework of support (e.g. accommodation, travel etc) for students undertaking outer and non-metropolitan clinical placements should be developed and consistently applied across universities and types of placements to maximise the number of placements able to be utilised. A review of currently available accommodation should be undertaken.

Recommendation 12:

Capacity Management Tool/s to assess organisational capacity for student placements should be developed and implemented to allow health sector sites to identify available clinical placement opportunities.

Recommendation 13:

Scholarships or other incentives should be used to improve the access of targeted groups and locations to clinical education and training.

Recommendation 14:

Clinical Training Networks should utilise where appropriate inter-professional learning to maximise the achievement of efficiencies in clinical outcomes that have been evidenced from this model.

Recommendation 15:

Principles should be established to guide the implementation of future public/private health sector partnerships to educate and train the clinical health workforce. These principles may vary between disciplines and professional groups.

Recommendation 16:

Electronic professional/learning portfolios should be identified and implemented as an aid to facilitate the efficient and effective delivery of clinical education and training.

Recommendation 17:

There should be clear articulation of the role and future of skills development centres within Queensland. This should recognise the role of centres and affiliate centres across sectors.

Recommendation 18:

Core training courses for Queensland Health clinicians should be developed and rolled out.

Priority areas for action in 2007 should include: preparation of doctors undertaking country relieving; advanced life support skills for Interns; emergency crisis resource management for doctors and nurses; maternity crisis resource management for midwives and registrars; and intensive care for physiotherapists.

Recommendation 19:

The Skills Development Centre should work with District Health Services and other skills development centres to ensure these programs are systematically and consistently delivered to achieve maximum effectiveness.

Recommendation 20:

A consistent approach to the accreditation of PGY2 terms should be developed. This approach should be mindful of the requirements of the National Curriculum Framework, the appropriateness of current PGY2 Accreditation Standards within Queensland, and the capacity of all relevant facilities to meet a consistent standard within a reasonable time frame.

Recommendation 21:

Positions dedicated to delivering and/or coordinating allied health and oral health clinical education and training should be established at Area and District Health Service level within Queensland Health.

Recommendation 22:

Supervision Training Packages that are to be developed and implemented for allied and oral health should be managed as a strategy within the overall clinical education and training framework.

Recommendation 23:

Specialist education for clinically based nursing and midwifery postgraduate and ongoing education activities is developed within local or regional centres, where appropriate, in response to identified clinical needs and contemporary nursing and midwifery practice.

Common Outcome Area 3.

Coordination and Integration of Clinical Education and Training

Clinical education and training is coordinated, resourced and managed within a statewide framework that ensures efficiency, effectiveness, reliability and sustainability.

3.1 Clinical education and training is coordinated through specific unit/s with designated responsibility for facilitating the achievement of critical clinical education and training strategies necessary for future medical, nursing and midwifery, allied health and oral health workforce sustainability.

3.2 There is active promotion of cross-disciplinary issues, with recognition that clinical education and training occurs across public, private and non-government health sectors and non-health sectors.

3.3 Clinical education and training strategies ensure efficient utilisation of teaching resources.

3.4 The governance structure for clinical education and training minimises the tension between education/training and service delivery.

3.5 Clinical training placements are coordinated and undertaken in a manner that considers the needs of all stakeholders.

3.6 Training occurs within a career development framework comprising specific training pathways that enable clinicians to generalise or specialise in response to population health needs.

3.7 Consistent current and evidence based frameworks or tools are available to clinicians so that they know what they are expected to teach, to whom, and how to assess competence.

Medical Outcome Area

3.8 Opportunities to effectively vertically integrate medical education and training from medical student to generalist/specialist/General Practitioner are explored and maximised.

3.9 Queensland based specialty and sub-specialty bodies and prevocational medical educators collaborate to ensure Queensland applicants are highly competitive in national vocational training selection processes.

Recommendation 26:

The coordination structures (refer Recommendation 24 and 25) should be positioned externally to Queensland Health–to facilitate a level of independence–with a reporting line to the Minister for Health.

Recommendation 27:

Clinical Training Networks across the public, private and non-government sectors should be established where appropriate. Networks should be established as collaborations between employers hosting clinical education and training and higher education institutions or speciality training bodies/colleges depending upon the nature of the individual networks.

Clinical Training Networks may incorporate Clinical Placement Advisory Committees at a statewide level.

Clinical placement co-ordinators should be a feature of networks within Queensland Health. These positions should be funded and established at the service delivery level to support the implementation of strategies oversighted by discipline/profession specific Clinical Education and Training Coordination Units.

Recommendation 28:

Universities are to clearly identify their individual clinical placement requirements in terms of both hours of supervised placement and the clinical education and training outcomes to be achieved during each placement to the training facility.

Recommendation 29:

A corporate framework should be established that informs the negotiation of local Student Deed of Agreement schedules.

Recommendation 30:

Queensland Health should support clinicians to develop advanced skills and competencies in clinical education and training. Career pathways should recognise and reward clinicians who develop higher levels of expertise in and commitment to clinical education and training.

Recommendation 31:

The prevocational medical education function in Queensland should be led by appropriately qualified medical education academic/s.

Recommendation 32:

The priority areas for the establishment of medical clinical training networks should be:

i. General medicine,

ii. Surgery (taking into consideration the implications arising from a transition from basic surgical training (BST) to pre-surgical education and training (Pre-SET)),

iii. Radiology.

Common Outcome Area 4.

Funding

Funding is sufficient to achieve quality clinical education and training outcomes.

4.1 Funding and resourcing of clinical education and training are sufficient, equitably distributed, efficiently utilised, indexed in line with costs, and reviewed regularly to ensure adequacy.

4.2 Funding contributions from different sources are negotiated and clearly documented.

4.3 Funding for clinical training placements/posts is tracked to ensure that it is utilised for clinical education and training purposes.

4.4 Jurisdictional stakeholders actively support efforts to ensure the higher education sector is appropriately funded for clinical education and training.

4.5 Specific funding is made available to provide the capital, human and financial resources necessary to improve clinical education and training capacity in regional, rural and outer-metropolitan areas.

Recommendation 33:

The methodology described in the New Funding Model Policy Papers for identifying clinical education and training effort in the New Funding Model is recognised as a starting point but should be subject to continued review.

Recommendation 34:

Future funding models should be able to respond to the diversity in current education and training models/approaches across disciplines and should also be sufficiently flexible to adapt to new models.

Recommendation 35:

The elements of clinical education and training funding and expenditure to be reported against should be defined.

Recommendation 36:

An audit of education infrastructure and resources should be undertaken and a mechanism for ensuring adequate resourcing of the clinical education and training function across networks of facilities providing clinical education and training should be developed.

Recommendation 37:

Appropriate and adequate infrastructure resources are made available to support clinical education and training. Allocation of resources should be transparent and directly linked to the specific training and education support needs of individual disciplines and training providers. Support should include but not be limited to: clinical and non-clinical space, information technology, and support staff.

Recommendation 38:

The schedule of fees relating to university contributions to Queensland Health for clinical placements should be reviewed and be consistent across both District Health Services and universities and equitable across disciplines across the State.

Recommendation 39:

Provision of recurrent funding should be provided for Nurse Educator positions to co-ordinate, market, and ensure clinical relevance for the six most accessed Transition to Practice Nurse Education Programs (TPNEP). These positions would also have responsibility for a cluster of additional TPNEP.

Recommendation 40:

The model of support and funding for refresher, re-entry and overseas trained health practitioner programs including nurses, midwives and allied health staff should be reviewed.

Common Outcome Area 5.

Data Systems supporting Clinical Education and Training

All aspects of clinical education and training are underpinned by reliable, comprehensive and valid data.

5.1 There is a standard mechanism for collecting, storing, retrieving, reporting and interpreting data on need, availability and utilisation of clinical education and training placements/posts so as to monitor demand and supply.

5.2 The mechanism:

i. Functions across health and other relevant sectors,
ii. Captures, reports and validates clinical education and training activity at a local and statewide level,
iii. Informs and provides relevant information to stakeholders,
iv. Records linkages/dependencies between different types of clinical training places,
v. Provides early indication of when intervention is needed to meet required clinical education and training quality and quantity,
vi. Supports relationships between education institutions and health facilities,
vii. Identifies a minimum data set,
viii. Describes clinical education and training activity using standard definitions and data sets for relevant disciplines,
ix. Provides a mechanism for decision making and reporting to achieve an equitable distribution of funding.

5.3 Data collection, analysis and reporting inform clinical education and training governance.

5.4 Information gathered and analysed is shared between relevant stakeholders and reported in a transparent manner.

5.5 Information gathered should be the minimum data required for decision-making.

Recommendation 41:

A Queensland Health Minimum Data Set/s for clinical education and training should be defined and adopted through a consultative process with clinical education and training stakeholders and parties with data expertise. This consultative process should formalise the methods and sources for obtaining this data.

Recommendation 42:

A Clinical Education and Training Information System and Database should be implemented that informs clinical education and training governance and equitable distribution of funding. The role of this information system in the governance of clinical education and training should be explicitly stated and supported.

Recommendation 43:

The development and implementation of a suitable information system should be adequately resourced with development, implementation, and recurrent costs fully realised.

Recommendation 44:

Prior to the implementation of a suitable comprehensive clinical education and training information system, a standardised method of recording clinical placement activity locally should be adopted. This mechanism should have a support process to provide aggregate reports as needed for governance purposes.

Recommendation 45:

Requesting and collating of clinical education and training (and other student-related) information from external sources should be consolidated, and information gathered communicated across Queensland Health as appropriate.

Recommendation 46:

A formal business cycle of obtaining and reporting on clinical education and training information should be negotiated, defined and adopted with partners.

Common Outcome Area 6.

Collaboration and Communication

Successful partnerships across academic and clinical environments, across disciplines and across organisations including relevant regulatory and professional bodies, support sustainable clinical education and training.

6.1 All clinical education and training stakeholders should as appropriate:

i. Share information in a transparent manner,

ii. Participate in consultation processes with a view to understanding and accommodating the reasonable interests of other stakeholders wherever possible,

iii. Actively collaborate to reduce duplication, increase shared learning and teaching/ education effectiveness to improve the quality and availability of the future clinical workforce in Queensland.

Recommendation 47:

Partnerships between the higher education sector, private health sector, Queensland Health and non-government organisations should be formalised and enhanced as a mechanism to improve the management of clinical placements.

Recommendation 48:

Clinical Placement Advisory Committees involving clinical placement coordinators and relevant stakeholders should be established under the relevant Clinical Training and Education Coordination Unit to facilitate collaboration.

Common Outcome Area 7.

Workforce Planning

Workforce planning guides the development of a broad range of strategies that enhance clinical education and training capabilities.

7.1 Responsibility for determining future workforce needs is aligned with the areas accountable for health service planning and provision, on the basis of the intrinsic link between the two functions.

7.2 The creation of new training placements and positions will be based on valid projected population service needs and the availability of clinical experiences that meet relevant accreditation requirements.

7.3 New clinical training positions are created where there is an identified need, to increase capacity to accommodate additional Queensland clinical graduates while ensuring quality of training is maintained.

7.4 Recruitment and selection activities recognise the need to recruit a clinical workforce able to teach and supervise across the continuum of clinical education and training.

7.5 Appropriate clinical education and training mechanisms are able to support the body of knowledge required for new and extended service provision.

Medical Outcome Area

7.6 "Service only" Senior and Principal House Officer positions–especially in rural, regional and outer-metropolitan areas–are accredited as training posts as soon as suitable trainees and skilled supervisors become available, with appropriate infrastructure support to meet accreditation standards of the relevant professional bodies, in particular the Specialist Colleges.

Recommendation 49:

Accountability and responsibility for health workforce planning in Queensland should be retained by Queensland Health and undertaken consistent with the above common outcome areas.

Recommendation 50:

Clinical education and training tasks should be allocated to appropriately skilled staff in a manner that maximises efficiency and effectiveness.

Recommendation 51:

Queensland Health should promote equitable, flexible and more accessible discipline specific pathways into the workforce for re-entry and overseas trained health professionals while ensuring professional standards are maintained and regulatory requirements are met.

2. Introduction

Clinical education and training, to be effective, must be integral to the philosophy and culture of an organisation[1].

Queensland Health has not previously systematically considered issues relating to the provision of clinical education and training across the clinical professions and disciplines. The establishment of the Ministerial Taskforce on Clinical Education and Training is an acknowledgement that clinical education and training is not only of critical concern, it is now clearly recognised as part of Queensland Health's core business.

Paradoxically, Queensland faces both current and projected future shortages of clinical staff and, at the same time, a rapid expansion of student numbers and training places. It is therefore imperative that strategies are in place to prepare those undertaking health education programs to work in contemporary health care systems and provide them with meaningful careers. By doing so, Queensland can move closer to achieving both workforce planning requirements, and ultimately the provision of safe and quality health care.

Queensland Health must "get clinical education and training right". The Honourable Mr Stephen Robertson MLA, Minister for Health, has endorsed this position at a high level through the establishment of the Taskforce, as has the Honourable Mr Peter Beattie, Premier of Queensland, in response to the Council of Australian Government's health workforce reform agenda.

The Final Report of the Ministerial Taskforce on Clinical Education and Training outlines the current context, identifies key clinical education and training issues, identifies the outcomes we need to achieve, and suggests strategies to facilitate the realisation of these outcomes.

1. *Clare, J. et al (2003) Evaluating clinical learning environments: Creating education-practice partnerships and benchmarks for nursing. AUTC final report. Adelaide: Flinders University.*

3. Establishment of the Taskforce

In April 2006, Mr Stephen Robertson MLA, Minister of Health, announced the establishment of a Ministerial Taskforce on Clinical Education and Training (MTCET).

The Taskforce was formed to examine issues relating to clinical education and training across medical, nursing and midwifery, allied health and oral health clinical disciplines, and make recommendations to the Minister for the way forward.

While it is apparent that the issues are both multiple and complex, the Taskforce was primarily created in recognition of the growing disparity between Queensland clinical health workforce requirements and the actual numbers and skill mix of available clinical staff. At the time, Queensland was making claims for additional Commonwealth government supported university student places, yet also grappling with the current increased demand for clinical placements/internships resulting from the growing numbers of students within Queensland higher education institutions.

Within this context, the Taskforce was mandated to consider the following four outcome areas:

- Professional pre-entry clinical training,
- Specialist clinical training,
- Networking clinical training, and the
- Needs of new graduates, staff new to an area of work, and those returning to the workforce.

A Steering Committee was established to determine the strategy for achieving required Taskforce outcomes in each of the four key outcome areas, and oversee progress achievement and the preparation of a report to the Minister addressing the terms of reference (Appendix A). The Committee was to also ensure linkages between Taskforce considerations and relevant workforce, education and training projects being undertaken at the national and State levels.

Significantly, the Committee was to identify opportunities to respond to issues through approaches that were consistent across professional groups. Where not possible, the rationale was to be clearly articulated.

The Taskforce Steering Committee, chaired by Professor Andrew Wilson, Executive Director, Policy Planning and Resourcing Division, Queensland Health, comprised representatives from across Queensland Health corporate and clinical services, Queensland universities, professional associations and Colleges, registration boards, industrial and student bodies (Appendix B).

Three discipline specific subcommittees relating to the medical, nursing and midwifery, allied health and oral health professions were established to inform the considerations of the Taskforce Steering Committee (Appendix C). Additionally, a series of four regional consultation forums and a videoconference forum were held in October and November 2006 to engage stakeholders around the identification of issues and potential solutions. This report documents the findings of the Taskforce Steering Committee.

4. Defining Clinicians

Optimal individual health outcomes are achieved through a client-centred approach involving close partnership between the health consumer or patient, their carers and networks, and their health care providers[2].

In Queensland, health service provision is planned, delivered, evaluated and supported by a complex infrastructure across public, private and non-government sectors and by a diverse range of skilled individuals and teams in collaborative practice. Health clinicians–those practitioners who are involved in the observation, assessment and treatment of patients–provide frontline health services and are essential contributors to a quality health service system.

Defining particular professional groups as *"clinicians"* is more a function of the policy and service context rather than an independent universal standard. While some professional groups are more obviously identified in a clinical role e.g. doctors, it is less clear when consideration is given to the diverse, complementary and valued roles of other staff involved in achieving health outcomes. Staff such as clinical support staff, direct care workers, Indigenous Health Workers, counsellors, population health staff, allied health assistants, clinical scientists, to name a few, are also integral to achieving desired health outcomes for individuals and communities.

However, for the purposes of the Ministerial Taskforce on Clinical Education and Training, the following professional groups were considered within the Terms of Reference:

Medicine	Medical Specialists/Visiting Medical Officers Registrars/Specialist Trainees/Principal House Officers Resident Medical Officers Interns
Nursing	Registered Nurses Midwives Enrolled Nurses
Allied Health	Pharmacy Medical Radiation Professions–radiation therapy, medical imaging, nuclear medicine technology Physiotherapy Occupational Therapy Speech Pathology Social Work Psychology Dietetics & Nutrition Podiatry Leisure Therapy Music Therapy Audiology Orthoptics Prosthetics and Orthotics Clinical Measurement Scientists
Oral Health	Dentists Oral Health Therapists Dental Therapists Dental Prosthetists Dental Technicians

2. *Ideally, this partnership occurs within the context of a whole of community approach to redressing the social determinants of health.*

Defining Allied Health

A definition of Allied Health, which has been used in some contexts, is:

> *"Tertiary qualified health professionals who apply their skills to maintain and/or restore optimal physical, sensory, psychological, cognitive and social function. They are aligned to each other and to their clients, and work across the health and disability systems and contexts".*

A number of additional Queensland Health job-titles have been proposed for inclusion under the allied health umbrella, for example, medical physicists and exercise scientists. At present, these titles are usually under Professional Officer Awards but are not referred to as discrete disciplines or professions. Some disciplines not employed under this award have also sought inclusion under allied health e.g. counsellors. Where there is a clinical education and training component to professional pre-entry education or ongoing learning needs for these clinical staff, then this will need to be considered in clinical education and training planning.

5. Aspects of Clinical Education and Training

The system of education for health professionals is complex. At a broader level, there are over 76 recognised health occupation groups[3] educated through a plethora of certificate, diploma, and undergraduate, graduate and postgraduate degree programs. Health professional groups may be governed or regulated through a variety of mechanisms and employed across public, private and non-government sectors. There are approximately 25 Queensland higher education institutions, which include universities and vocational education training providers, involved in delivering health education programs in this State. In addition, programs are also provided through private training organisations and other jurisdictions.

The 2005 Productivity Commission Research Report *Australia's Health Workforce* highlights the considerable changes in health workforce education which have occurred in the last decade. Specifically, there have been major modifications within university based curriculum design, course content and teaching methods, a rapid expansion of courses in allied health sciences, the introduction of graduate entry programs, and the transition of nursing and midwifery education from the hospital to university based degree courses[4].

Clinical education is commonly described as the component of health practitioner education that allows students to put theoretical knowledge into practice within the patient/client care environment[5]. Clinical education and training occurs across the spectrum from professional pre-entry to prevocational to specialist level.

The intention of clinical education is greater than acquiring additional knowledge–rather, it aims to promote deeper understanding. Gibson et al. (2002) describe learning through experience as enhancing "functioning knowledge" to complement and integrate the "declarative (knowing about) knowledge" and "procedural knowledge" primarily learned through the formal educational setting[6].

It is considered that only in clinical settings can students develop capacity for "rapid, efficient, high level clinical, moral and ethical decision-making" which cannot be attained though a classroom setting[7].

Benefits of Work Integrated Learning

The practice of learning in the workplace linked to post secondary education is not new, and is reflected in historical models of education including apprenticeships. The tradition of placements/practicum and fieldwork has been the foundation of health practitioner training for centuries.

The concept of *work integrated learning* is gaining increasing popularity in higher education circles across all programs as education providers strive to meet the personal and professional aspirations of their students and to facilitate graduate transition into the world of work. In the relationship between student, education provider and industry workplace, work integrated learning is perceived to have clear benefits for all parties.

3. *Australian Institute of Health and Welfare (2003). Health and community services labour force 2001. Available at: http://www.aihw.gov.au/publications/index.cfm/title8936*
4. *Productivity Commission (2005). Australia's Health Workforce, Productivity Commission Research Report, Canberra.*
5. *Clare J. et al. op.cit., p13*
6. *Gibson, E. et al (2002). Towards the Development of a Work Integrated Learning Unit. Division of Environmental and Life Sciences and Centre for Professional Development, Macquarie University, Australia. Available at: www.cfl.mq.edu.au/celebrate/refereed.htm*
7. *Allied Health Professions Australia (2006). Clinical Education Discussion Paper, October. Available at: www.ahpa.com.au*

Key benefits of work integrated learning for students and graduates may include:

- Working in a setting in which theory is put into practice,
- Opportunity to learn both generic and discipline specific skills relevant to professional practice e.g. communication skills, teamwork skills, research skills, project design, working to timelines etc,
- Development of an awareness of work-place culture,
- Professional socialisation,
- An opportunity to develop a range of personal attributes,
- Enhancement of employment prospects,
- Assistance in developing career strategies,
- Awareness of opportunities and development of networks,
- Development of a portfolio of work experiences.

For industry, benefits may include:

- Ability to train students with specific skills suited to the organisation,
- Enhancement of the quality of services as a result of appropriately skilled staff,
- Access to resources and facilities of the education provider,
- Opportunities to engage with enthusiastic and focussed students with new ideas to boost innovation in the workplace,
- Creation of supportive and rewarding environments that enhance recruitment and retention.

For the education provider, benefits may include:

- Enhanced attractiveness of programs to prospective students,
- Partnership with industry in achieving educational outcomes,
- Improved graduate employability and motivation for life long learning.

Placement in a work or clinical setting is not, however, intrinsically beneficial. In order for learning outcomes to be achieved, the experience must be meaningful i.e. relevant, intentional, organised, supported, and accredited by the responsible educational institution[8]. This is clearly evident in the training of health professionals, where it is recognised that a supportive practice environment involving communication and partnership between education and health sectors, a health service culture which values students' roles and contributions, and the provision of structured supports to assist in the development of knowledge and skills, is required[9].

8. *Harvey, L. et al., (1998). Work experience: expanding opportunities for undergraduates (online) Available: http://www.uce.ac.uk/crq/publications/we/zwecon.html*
9. *Henderson. A, Winch. S & Heel, A. (2006), Partner, learn, progress: A Conceptual Model for Continuous Clinical Education. Nurse Education Today 2006, 2692:104–109.*

Diversity and Innovation in Models

Within health streams, models of clinical education and training are diverse, with often considerable overlap between models and with certain benefits and shortcomings common to many. Variations occur in relation to the point in the educational/occupational timetable at which clinical education occurs, the length of training, the expected outcomes and methods of assessment, and whether specific clinical education and training experiences are obligatory or optional. Other variations relate to who delivers clinical education and training. For example, training may be delivered by clinicians and/or educators engaged by either education or health service providers through paid, part remunerated or pro bono arrangements.

Within this diversity, there is also significant innovation. A growing evidence base relating to best practice approaches to clinical education and training for particular contexts has informed the evolution of educational programs.

Inter-Professional Learning

Gathering significant interest and support is the concept of inter-professional learning, which emerged in the United Kingdom and United States of America in the 1960s and 1970s and was endorsed by the World Health Organisation in 1998 as a key area of health professional development.

Evidence shows that collaborative client-centred practice results in better health outcomes. However, an environment of increasing workloads, higher staff turnover, patient safety concerns, and the increasing complexity and chronicity of patient morbidity, further highlights the need for multidisciplinary interventions[10]

Inter-professional learning has been defined by the UK Centre for Advancement of Interprofessional Education (CAIPE), as "Occasions when two or more professionals learn with, from and about each other to improve collaboration and the quality of care"[11]. This approach is acknowledged as one mechanism to promote collaborative practice. The focus of inter-professional learning is the acquisition of "collaborative competencies" or those required for different professionals to work effectively together. These complement the acquisition of "common competencies" or those required across all health professions and the competencies required by specific disciplines.

Proponents cite this model as promoting improved communication and trust between professional disciplines, improving collaborative skills and reducing "silo" effects between professions. Critics, however, argue that respect for the specialist practice base of each profession is diminished by this approach which is perceived to encourage a move to "generic" health professionals[12].

Rigorous studies–such as the work of CAIPE–have concluded that this approach does create positive interaction and collaboration between professionals, and improves client care. However, there is less substantial evidence that inter-professional learning directly results in mutual trust and support, reduces stress or limits demands on any one profession, enhances job satisfaction or recruitment and retention, as may have been anticipated[13].

10 *Braithwaite J, Travaglia JF. (2005) The ACT Health interprofessional learning and clinical education project: background paper #1. The value, governance and context of inter-professional learning and practice. Canberra: Braithewaite and Assoc and the ACT Health Department.*

11. *CAIPE (1997). Interprofessional education: a definition. London: Centre for Advancement of Professional Education.*

12. *Braithwaite J, Travaglia JF. op. cit.*

13 *Barr, H et al. (2005) Effective Interprofessional Education: Argument, Assumption and Evidence. London: Blackwell Publishing,*

It is generally agreed that opportunities for interdisciplinary learning should be explored, and where possible facilitated, while maintaining responsiveness to the requirements and cultures of specific disciplines. For example, the Queensland Health community-based rehabilitation project (funded by Pathways Home) is using and evaluating inter-professional learning methodology.

Technologies

Recent technologies are enabling both the use of simulation in skill development and remote delivery of training via telehealth to complement traditional approaches to clinical education and training. There is a view that a more effective use of simulated learning would reduce the demand on clinical placements and improve readiness to enter the workforce. This view is based on evidence that simulations have resulted in measurable improvement in clinical competencies[14]. However, it is recognised that access to simulation training in Queensland is currently inequitable due to limited infrastructure and geographic distance.

Need for Life Long Learning

For health clinicians, maximising learning though experience located in the clinical setting is considered not only desirable but essential. The current complex and rapidly changing service delivery environment demands that clinical education and training occur within a framework of continuous lifelong learning across a broad continuum from professional pre-entry level to experienced skilled clinician[15].

Skills Based Workforce Planning

It is unlikely that increasing the workforce supply alone (where this is achievable) will be sufficient to neither manage the demand for health services nor ensure longer term financial and service sustainability for health. A rapidly evolving health care environment requires new knowledge and skills and may require changes to traditional workforce models.

Defining and reorganising workplace roles and tasks is one possible response option within a broad workforce plan. Reorganising the workforce is not a new concept and this approach has been evolving over time to meet service demands and/or to optimise the use of available resources to provide safe, quality services in the most effective and efficient way possible.

Skills based workforce planning considers that there may be capacity to reorganise available workforce resources to meet service requirements. It questions whether the skills of staff are being used appropriately and looks to ensure that the person with the most appropriate skills is providing the services.

Workforce changes should be based on the skills and competencies required to deliver services. The capacity to reorganise roles and functions will depend on the available skills and competencies and/or the capacity to up-skill staff so they may take on new functions within their scope of practice. Therefore, such workforce changes must be underpinned by relevant, ongoing education and support appropriate to the level of complexity of the role.

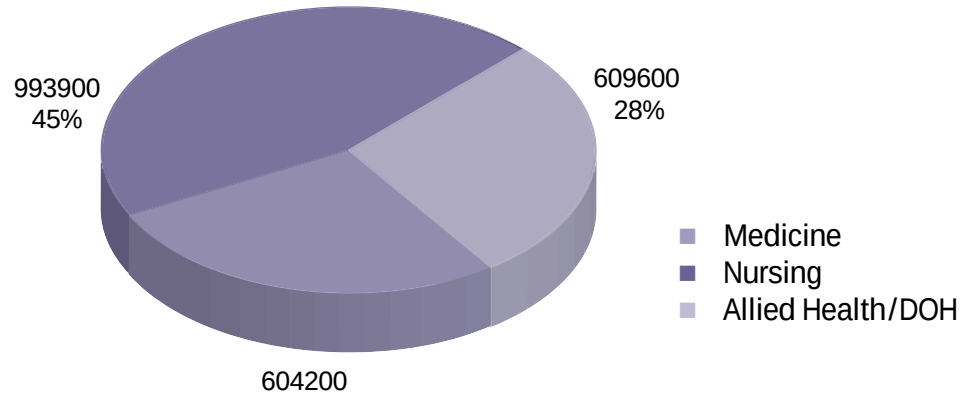
14. *Department of Human Services. (2006). Prepare Nurses for the Future. Report Phase 1. December 2005. Victoria, Aust. Available: http://www.helath.voc.gov.au/nursing*
15. *Henderson. A, Winch. S and Heel, A. op. cit.*

Queensland Health is leading current consultations relating to the development of a guiding framework for skills based workforce planning[16]. While not within the scope of the Ministerial Taskforce on Clinical Education and Training, it must be acknowledged that future planned changes to work flows, task allocation and reallocation, development of composite roles etc, will have education and training implications that must be addressed.

Queensland Health Provision of Clinical Education and Training

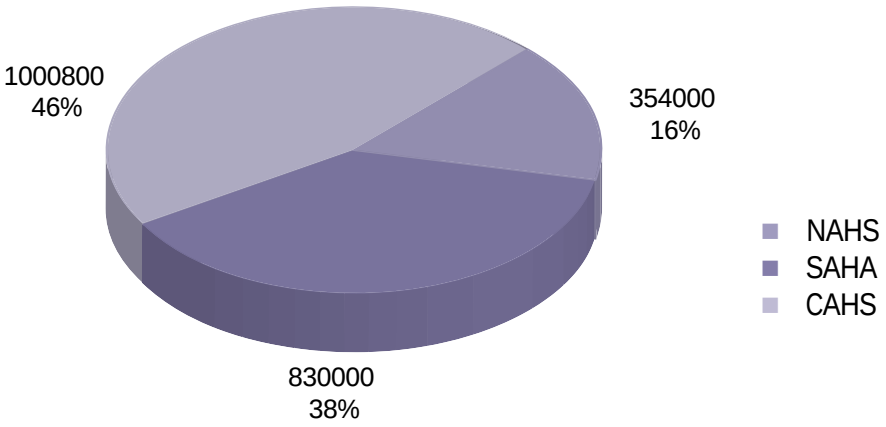
In 2005, Queensland Health hosted an estimated 55,000 weeks of student clinical placements (based on a 40 hour week) (Source: HEI survey). The distribution of these hours between the medical, nursing, and allied health and oral health is shown below.

Estimated Clinical Placement Hours by Stream



The distribution of these placements between Queensland Health Area Health Services is shown below.

Estimated Clinical Placement Hours by AHS



(Source: HEI survey responses)

16. *Workforce Design and Liaison Unit (2006). Overarching Framework for Skills Based Workforce Planning. Draft for Invited Consultation, July. (Unpublished)*

As a standard mechanism for recording student clinical placements across all disciplines is not currently in place within Queensland Health, it must be noted that these are estimates only, and are based on retrospective survey responses from HEI. This report contains several recommendations and strategies to improve clinical education and training information collection and reporting in Queensland Health. Further detail on these recommendations and strategies can be found in Section 9 of this report.

Critical Definitions

Language differences between professional groups in the description of education and training for health professionals can result in some confusion. For the purposes of the Taskforce, the following definitions have been adopted.

- **Professional Pre-entry**–training which leads to qualifications allowing entry to practice within a discipline/professional group*,
- **Specialist training**–training undertaken following the pre-entry level which focuses on the attainment of specialist knowledge and skills/competencies,
- **Networking clinical training**–the formalised and clearly defined linkage between a training program and training sites/settings which provides a relevant, effective, coordinated response to training and workforce needs.

**For Allied Health–this term includes pre-registration training year for relevant disciplines.*
For Medical–this term applies to medical students only. Medical interns are classified as pre-vocational trainees.

6. The Main Players

The important role of the public sector in the delivery of clinical education and training is clearly recognised. However, responsibility for policy, funding and delivery of clinical education and training for the Queensland health workforce is shared across a broad range of players. These include Queensland Health, the Commonwealth government, universities, Vocational Education and Training (VET) sector, colleges and professional associations, regulatory authorities, private and non-government sectors and industrial bodies.

Each institution comes with differing objectives, roles and responsibilities. To date, a "loose coalition" of interests has grown over a number of years rather than any coherent or strategic partnership across sectors.[17]

The following summarises the primary accountabilities and highlights the diverse yet interdependent roles of these main players:

Commonwealth Government

- Policy and funding of the university sector including funding for student places–Department of Education, Science and Training (DEST),
- Allocation of university student places–DEST in collaboration with the Department of Health and Aging, universities and jurisdictions,
- Specific purpose payments to Queensland to support VET sector courses,
- Funding of Australian General Practice Training (AGPT) through regional training providers,
- Engagement with jurisdictions through the Health Workforce Principals Committee (HWPC) and related sub-committees under the Australian Health Ministers Advisory Council (AHMAC),
- Review national regulation and accreditation processes under the Council of Australian Governments (COAG) reform agenda.

Universities

- Development of program design, content and length of courses in consultation with relevant professional associations/colleges and accreditation agencies,
- Delivery of academic programs at undergraduate and postgraduate levels,
- Delivery of professional development education,
- Contribution to planning numbers of Commonwealth government supported student places.

VET Sector

- Delivery of competency based programs at certificate to advanced diploma level.

17. *Queensland Health (2005). Queensland Health Systems Review. Final Report. September 2005. Available at http://www.health.qld.gov.au/health_sys_review/Find/qhsr_final_report.pdf*

Colleges/Professional Associations and Regulatory Authorities

- Govern the practice of health professionals and set competency requirements,
- Establish registration/licensing regulations and assess clinical competency to practice,
- Colleges establish for their members and trainees (if applicable): ethics of practice, continuing education standards, curricula for trainees, standards of practice and often assess competency to practice in conjunction with the registering authorities.

Private and Non-government Sectors

- Provide clinical practice placements for students (particularly nursing, midwifery and allied health),
- Provide placements for medical students and for Postgraduate Year (PGY) 1 and 2 doctors through General Practice Clinics under the (Commonwealth Government) Prevocational General Practice Placement Program (PGPPP).

Queensland Health

- Provision of clinical education and training across a range of public health settings,
- Contribution to planning numbers of Commonwealth government supported university student places,
- Funding of VET sector training places for enrolled nurses and other health workforce groups.
- Planning numbers of publicly supported VET places in line with national training priorities and targets,
- Funding of a specified range of clinical training positions and infrastructure costs,
- Funding to allied health departments for contribution to clinical education,
- Funding of clinical academic appointments and scholarships,
- Through Interest Based Bargaining (IBB), provision of specified continuing education remuneration incentives and/or renumerated recognition of postgraduate qualifications or continuing education qualifications.

Industrial Bodies

- Representation of members' interests in relation to clinical education and training needs.

7. The Broader Context

Complex Environments

The deliberation of issues relating to clinical education and training, and potential solutions, cannot occur in isolation of the broader complex political, social, health service, workforce, and funding contexts impacting the agenda.

From a health consumer perspective:

- The health needs of the population are changing with increasing prevalence of chronic and complex conditions,
- There is an increasing demand for health services–reflecting the growing and aging population,
- Health consumers have increased expectations of the nature and timing of services to be provided, have greater expectations of quality, and desire greater control and choice,
- The cost of health care to the consumer is increasing with changes to service and funding models–influencing access to services and consumer choice.

From a service delivery perspective:

- There is greater clinician and consumer involvement in the planning and evaluation of health services at strategic levels,
- Models of service delivery continue to change in line with the rapidly growing and shifting best practice evidence base,
- Service models which focus on health promotion, prevention and early intervention and chronic disease management are being enhanced,
- The roles of public, private and non-government sectors in health care delivery are changing with differences in the type and number of illnesses/conditions managed–influenced by such factors as funding arrangements, current policy, consumer choice, and service access,
- Technological and pharmaceutical advancements are influencing the type and modes of service delivery–including the remote delivery of services,
- A focus on quality and patient safety is underpinning service planning and delivery.

From a health workforce perspective, Queensland is facing:

- Increasing and, in some instances, immediate critical shortages of health clinicians and the complementary workforce,
- An aging workforce,
- Difficulties in the recruitment and retention of health professionals within the public sector,
- A changing skill mix,
- Increasing casualisation of the workforce,
- Decreasing participation in the health workforce as a result of a desire to reduce working hours and increase part-time employment,

- Increasing specialisation of roles and associated skills,
- Increasing higher education student intakes,
- A significant lead-time needed to implement required changes to education and training, the workforce and the workplace.

From a funding and resourcing perspective:

- The costs of health care are escalating within defined budgets,
- Industrial relations changes, resulting in improved remuneration and reward for health professionals, are impacting the health care budget,
- The relative responsibilities of the Commonwealth/State in relation to funding health care are shifting,
- Queensland Health is striving to facilitate equity and transparency of funding through the development of new funding models.

The National and State Agendas

The imperatives to ensure sufficient, appropriate, and quality-assured clinical education and training have been acknowledged nationally (and internationally). Several key national and State initiatives have informed or are currently informing responses to the clinical education and training agenda and should be acknowledged in this report.

National Health Workforce Strategic Framework 2004

The National Health Workforce Strategic Framework 2004,[18] was endorsed by the Australian Health Ministers Conference–and more recently by COAG–as the guide for national health workforce policy, planning and investment in the health workforce. The framework has been adopted by all jurisdictions, which have committed to report against the achievement of outcomes under the 7 guiding principles. The Ministerial Taskforce on Clinical Education and Training has been cognisant of the principles and the proposed strategic directions specifically related to the education and training of the health workforce. These are:

Principle	Strategic Direction
No.1. Ensuring and sustaining the supply of the health workforce	■ Align education and training supply with projected workforce requirements and health service needs to achieve long-term national self-sufficiency or supply.
No.2. Workforce Distribution	■ Target training and education where there is greatest need.
No.4. Ensure the workforce is sufficient, skilled and competent	■ Identify formal mechanisms for the effective engagement of the health, education and training sectors. ■ Align education and training programs with health service needs. ■ Develop new and innovative ways to deliver health education and training, which facilitate accelerated entry and flexible delivery. ■ Promote initiatives that encourage practitioners to maintain level of skills, knowledge and competence that aligns with evolving health consumer needs and changes in service delivery.

18. *Australian Health Ministers' Conference (2004), National Health Workforce Strategic Framework, May 2004, Sydney. Australia*

Productivity Commission Report 2005

Significant work has previously been undertaken at national level in relation to discipline specific workforce issues and related approaches to education and training. The comprehensive review of the Australian Health Workforce by the Productivity Commission in 2005, at COAG's request, constitutes the most substantial recent initiative in this area.

The research study examined the issues impacting on the health workforce, including the supply of and demand for health workforce professionals, and proposed solutions to ensure sustainability of quality health care services over the next 10 years.

Key recommendations were put forward in the areas of:

1. Workforce innovation.
2. Education and training.
3. Accreditation.
4. Registration.
5. Payment mechanisms.
6. Workforce planning.
7. Rural and remote issues.
8. Addressing special needs.

Chapter five of the final report detailed some significant gaps in the delivery of health education and training and proposed solutions at the national level. Despite the expansion of health related university and VET sector places, it was identified that there are still insufficient student places to address health workforce shortages. The length of education programs was seen to also reduce capacity of the system to quickly respond to shortages.

It was suggested that education and training courses have not kept up with changing health care needs and service models, and that pathways between VET and university sectors impede movement between enrolled and registered nursing.

Lack of access to clinical training–with particular concerns for allied health and medical specialties–was identified as a major difficulty with both the Australian and State/Territory governments seen to be falling short of providing adequate support.

Other identified contributors to the access problem were the failure to consider the clinical education and training implications of policy to boost student numbers, the tradeoff between service delivery and training in a constrained budget, changing casemix within public hospital settings reducing the breadth of training options in this sector, and impediments to training in the private sector.

Issues of poor coordination between DEST and States/Territories in regard to funding universities, between health and the higher education sectors, and between different aspects of the health system were identified as major barriers. These issues were exacerbated by customs and practices that serve to retain current roles and responsibilities, and hence, spheres of influence and power.

In its conclusion, the report recommended strategies to increase the role of government health sectors in the allocation of university places, for facilitating changes in health education and training models (through a Health Education and Training Council), and creating more sustainable clinical education and training capacity (supported by comprehensive data systems and explicit clinical education and training funding).

Council of Australian Governments (COAG) Health Workforce Initiatives

In February 2006, following consideration of the *Productivity Commission Report*, COAG referred several key workforce reform and innovation recommendations to Health Ministers for further consideration. These included work relating to the number and distribution of training places, the organisation of clinical education and training, the consideration of national accreditation of health education and training and a national registration process.

At that time, COAG lifted the cap on full fee-paying medical places for domestic students from 10% to 25%, on the agreement that these places should not displace current places or future increases in Commonwealth funded places. Potentially, this change could significantly increase the numbers of medical student intakes.

At its 14 July 2006 meeting, COAG agreed to progress seven key areas. The Commonwealth's contribution to the package of reforms was identified as $300 million over four years.

The key reform areas currently under consideration by jurisdictions are:

- Establishment of a Health Workforce Taskforce,
- Establishment of a single national registration scheme to facilitate workforce mobility, improve quality and safety and reduce administrative complexity and burden,
- Establishment of a single accreditation scheme for health and education training to simplify and improve consistency of current arrangements,
- Clarification of the relationship between the above and existing state arrangements for accrediting private non-university higher education courses,
- Establishment of a system for medical specialist trainees to undertake rotations through an expanded range of settings beyond public hospital settings,
- Strategies to increase the number of specialist trainee positions,
- Possible expansion of education programs in rural and remote areas,
- Service models which promote recruitment and retention in rural and remote areas e.g. walk-in/walk-out or fly-in/fly-out facilities and services,
- A national process for the assessment of overseas trained doctors,
- Possible establishment of a high-level taskforce on clinical training for health disciplines.

Health Workforce Principal Committee

Following a review of its committees in 2005–2006, the Australian Health Ministers' Advisory Council (AHMAC) initiated changes to its workforce committee structures. This has led to the establishment of a Health Workforce Principal Committee (HWPC).

The HWPC is a committee of senior officials, which reflects the interests of governments as major employers of the health workforce, providers of health services and key funders of health care, education and training systems.

This committee has responsibility for considering the needs of the whole health workforce across the spectrum of occupations and roles, has a multidisciplinary/inter-professional perspective, and ensures better engagement with the private sector. It provides a forum for reaching agreement on key national level health workforce issues requiring collaborative action, and hence takes major carriage of the COAG health workforce initiatives.

Key tasks and responsibilities include:

- Overseeing the implementation of the National Health Workforce Strategic Framework,
- Advising AHMAC on key issues and priorities such as innovation, regulation, planning and data, engagement between health and education,
- Advising on the allocation of national resources to health workforce projects,
- Advising AHMAC on the establishment of various subcommittees and working groups.

Commonwealth Initiatives in relation to Student Numbers

COAG has acknowledged the significant investments undertaken by the Commonwealth and States/Territories to address health workforce shortages. In mid 2006, the Commonwealth announced funding of a major increase in university student places relating to health.

These included:

- An additional 605 medical school places (150 to Queensland–175 short of the requested 325 places),
- An additional 1,000 higher education nursing student places (205 to Queensland),
- An additional 573 other health-related places (185 to Queensland).

Additional capital funding–matched by Queensland Health–was allocated to support medical school infrastructure at the University of Queensland and James Cook University.

In relation to these increases, Queensland has agreed to guarantee the provision of high quality clinical placements and intern training for Commonwealth funded medical and nursing students.

Queensland Smart State: Health 2020

In providing a vision and strategic directions for promoting the health and well-being of Queenslanders and management of the Queensland health system to the year 2020, the document *Smart State: Health 2020* acknowledged the changing workforce patterns which would challenge future health service delivery. It drew attention to the need to address future pressures on the health system and many positive initiatives have flowed from this vision.

The vision included the ongoing development of a "dynamic, quality health workforce" which was positioned to take advantage of technologies and the changing health needs of the Queensland population[19].

Achieving this vision was seen to require–among other strategies–consultation with universities, training authorities, health providers and the community to ensure that clinical and health training programs target anticipated health service needs.

Bundaberg Hospital Commission of Inquiry (Morris Inquiry)/ Queensland Public Hospitals Commission of Inquiry (Davies Inquiry) 2005

The year 2005, witnessed three significant proceedings directly related to both the management and delivery of health services within Queensland Health. The inquiries into events at the Bundaberg Hospital and other public hospitals highlighted issues relating to:

- The shortage of doctors in Queensland,
- Reliance on International Medical Graduates (IMGs),
- Inadequacies in processing area of need medical registration,
- Inadequate implementation of credentialing and clinical privileging processes, and
- Lack of provision of appropriate supervision and performance management for medical practitioners.

In tabling these findings, Commissioner Davies acknowledged that deficits in the budget allocation model and in complaints and incidents management had exacerbated these issues.

19. Queensland Government 2002. Smart State: Health 2020. A vision for the future

Queensland Health Systems Review September 2005 (Forster Review)

In parallel, the *Queensland Health Systems Review 2005* was established to review administrative, workforce and performance management systems and to recommend how Queensland Health could provide better health services and health outcomes for Queenslanders.

Aspects that were specifically considered included recruitment and retention, training, clinical leadership, and measures to improve the availability of clinicians.

The final report provides a comprehensive snapshot of the workforce issues faced by Queensland Health, and identifies a range of recommendations in relation to the training and development of medical, nursing and allied health clinicians.

The report found that increasing service demands were impacting on the quality and level of education and training available in the public health system. In addition, systems maintained to keep track of the education and training of the clinical workforce were considered underdeveloped and poorly maintained. It was deemed that significant effort was required to ensure that Queensland Health could meet its obligation to teach and train its clinical workforce and that Queensland Health faced major challenges in terms of coordination of efforts.

Overarching general recommendations included that Queensland Health should ensure:

- A strong commitment to education and training,
- Protected time for senior clinical staff to undertake teaching and to provide adequate support and supervision to junior staff,
- Resourcing for backfilling to enable staff to access training and professional development.

Key recommendations for the medical profession:

- Expand the number of medical specialist training positions to address skills gaps,
- Develop clinical training networks that link teaching hospitals with non-teaching hospitals across metropolitan and non-metropolitan centres,
- Promote greater private sector involvement in education and training,
- Review the apprenticeship model of training to cope with increasing numbers of medical graduates and to fast-track training programs,
- Review the membership and operation of the Queensland Health Education Council to strengthen its role in providing strategic direction and advice,
- Seek support from the Commonwealth and the State to increase the level of funding to support the teaching and training of students on placement,
- Explore opportunities with Colleges to consolidate teaching and development time linked to competencies,
- Implement a new training model for international medical graduates.

Key recommendations for the nursing profession:

- Support to provide paid refresher courses,
- Funding to support growth in training to support transition into clinical practice and specialty areas,
- Provide all new nurses with an induction program,
- Immediate negotiations with universities to ensure relevant course content for nurse practitioner master degrees,
- Take a proactive role in influencing undergraduate nursing education,
- Strengthen relationships with universities through adjunct/joint appointments and review the role of clinical facilitators,
- Negotiate with the Department of Employment and Training (Queensland) and the Commonwealth Government to increase the level of funding for enrolled nurses, assistants in nursing and other certificate based health workers,
- Seek support from the Commonwealth and State government to increase funding available to support clinical education and training of nursing students within Queensland Health,
- Support nurses undertaking postgraduate study through scholarships and/or paid study leave,
- Expand transition to practice programs,
- Establish an ongoing education and training program linked to service delivery needs that addresses skills gaps and supports advance practice roles,
- Review the number of nurse educators in the system and provide adequate resourcing and support for them to undertake their roles,
- More support for nursing students and new nursing employees through the provision of preceptors and supervisors with dedicated time.

Key recommendations for allied health disciplines:

- Better linkages with the tertiary education sector and professional associations to develop long term education, training and professional development programs,
- Ensure the provision of clinical placements is coordinated and able to cope with increases in student numbers,
- Negotiate with the Commonwealth and State to address the issue of inadequate teaching and support environment during clinical placements,
- Develop funding models to reflect clinical education and training costs,
- Identify areas of skills shortages amongst allied health professional staff and consider providing financial subsidies in areas of post-graduate study.

Forster reasoned that these recommendations could not be implemented without addressing organisational and funding issues. The establishment of a central coordination point for training and education within the organisation was advocated to:

- Facilitate better linkages with external agencies,
- Establish the overall strategic directions for training and skill development across the State based on future service needs, and
- Provide input into curriculum development to ensure sufficient levels of practical experience in undergraduate programs.

Also seen as essential was the promotion of a learning culture across Queensland Health through such mechanisms as providing equity of access to programs, standard entitlements to ongoing training, expanding assistance (under Study and Research Assistance Scheme and subsidising Higher Education Contribution Scheme student fees), and streamlining approval processes for study leave.

In relation to resourcing, it was recommended that Queensland Health should also review the level of funding available for clinical education and training across the organisation, seek increased support from the Commonwealth government and provide Districts with dedicated budgets linked to student and staffing numbers.

Queensland Health Action Plan October 2005

Quickly responding to these findings, the Queensland Government announced the *Action Plan: Building a Better Health Service for Queensland* in October 2005. This initiative was buoyed by an injection of a $6.367 billion in funding over five years to 2010–2011.

Encompassing substantial increases for service provision across a range of specialty areas, the Action Plan also provided for additional resources for education and training.

Specifically, funding was provided to expand Queensland Health's nurse transition to work programs, including upskilling programs for 1,500 nurses, training 1,000 additional nurses as preceptors, refresher programs for 200 nurses in specialty areas, and establishing an additional 60 nurse educator positions.

The funding of 235 bonded medical training places at Griffith University over five years at a cost of $60 million was highlighted, as was the announcement of an additional 55 specialist registrar training positions.

Funding to facilitate the support, supervision, training and development of the allied health workforce has been distributed to the Area Health Services. This includes increasing the number of centrally funded indigenous allied health cadetships from three to nine. Two million dollars has been dedicated to increasing the number and value of scholarships available, with particular emphasis on attracting employees to rural and remote areas and other particular areas of need, and supporting postgraduate education. Supernumerary positions for the completion of a pre-registration/conditional registration year in pharmacy, radiation therapy, nuclear medicine technology and medical imaging have been introduced.

Queensland Health Strategic Plan 2006–2011

Looking forward, the *Queensland Health Strategic Plan 2006–2011* unmistakably identifies education, research, training and development as core functions of the organisation that enable staff to provide safe, quality patient care. This commitment has previously not been so clearly articulated.

The establishment of the Ministerial Taskforce on Clinical Education and Training is identified as a key strategy in achieving this goal. Queensland Health commits to ensuring that clinical education and training is coordinated, and to working with the education sector to make certain that courses develop the competencies needed for the present and future health workforce. Queensland Health plans to provide better clinical education and training with clear statements of desired competencies, and continue to develop clinical environments that foster and encourage research and innovation.

Skills Development Centre

"To provide high quality training through simulation and scenario based learning with a view to improve patient safety and quality of care".

The Queensland Health Skills Development Centre was officially opened on 23 September 2004 as a Smart State initiative. The Skills Development Centre is one of a number of branches that formed the Reform and Development Division in late 2005. It is aligned with the Patient Safety Centre (PSC), Clinical Practice Improvement Centre (CPIC), Workplace Culture and Leadership Centre, Data Reporting and Analysis Centre (Secretariat–Patient Safety and Quality Board), Health Information Centre and the Health Systems Development Unit.

A number of successful partnerships have been established with a range of stakeholders at State and national level with government, non-government and private sector organisations. The Centre continues to explore ways of improving its variety and volume of courses and curriculum through relationships with universities, Colleges and Industry (e.g. manufacturers of simulation equipment).

The Centre offers courses for a broad cross-section of healthcare providers from newly qualified graduates to experienced professionals within several domains.

Surgical and Psychomotor Skills

This domain comprises a virtual reality laboratory and a surgical skills laboratory. The virtual reality laboratory houses a comprehensive range of surgical and interventional simulators which have a set of programs that allows the operator to practice a range of minimally invasive surgical and other procedures and enhance skills.

Procedural Skills

The Skills Development Centre has three dedicated procedural skills laboratories. The laboratories have a variety of simulators, including paediatric and neonatal models, allowing participants to practice resuscitation and airway management techniques on adults, children and infants.

Scenario Based Learning

This involves utilising a highly immersive environment. A range of courses are provided which can include reasonably simple scenarios involving a 'pause and discuss' approach, to highly complex crisis scenarios.

Communications

These courses are designed to enhance the communication skills of all healthcare staff. Techniques of both verbal and non-verbal communication are taught utilising the communication suite as an environment for teaching and assessment.

Trauma and Disaster Preparedness

In recognition of the need to be disaster-ready, the Centre has a dedicated trauma and disaster preparedness domain. This domain is supported by the Black Spot Zone which is a purpose-built training area. Through the use of a realistic road mock-up, scenarios involving multiple agencies can be played out and recorded. Incorporated within the domain is the Pre-Hospital Trauma Life Support course.

Product Development and Evaluation

The Skills Development Centre has some world-class clinical simulation training equipment supported by award-winning audio-visual infrastructure. Courses are carefully developed and evaluated by clinical and training experts before being offered. The product development and evaluation domain invests sessional time of leading clinicians to keep the curriculum current and relevant.

E-Learning

Based on Internet technologies, the e-learning training platform is user-friendly and allows participants to learn at their own pace, place and convenience. This flexibility provides those constrained by time or location for example healthcare professionals in remote and rural locations, and overseas professionals or consultants, to have access to learning previously only available in the larger cities.

Rural and Regional Arrangements

Transport and logistic issues often do not allow healthcare professionals in rural and regional areas time off to up-skill or attend further training in Brisbane to enhance their skills. The Centre has capacity to take the courses to these staff.

Commercial Services

Activities in the domain include conference suite hire, product testing, film location, facility hire, product development, intensive in-service education, and consulting.

Courses

Courses are of two types and include:

- Foundation–which are deemed mandatory for various categoriesof clinical staff (at no cost to participant),
- Enhancement–suite of courses available (variable cost recovered through participant fee).

Key directions for 2007

The Skills Development Centre has identified key directions for 2007, including:

- Increase the number of foundation courses to Queensland Health staff (participant fees not required),
- Increase utilisation of virtual reality equipment,
- Establish key research and development projects,
- Increase volume of literature published from the Skills Development Centre,
- Establish robust evaluation processes for all courses and include in quality improvement activities,
- Support the establishment of affiliate centres across Queensland,
- Increase the instructor pool,
- Take a leadership role in the overall direction of simulation in healthcare,
- Establish an e-learning presence.

8. Funding for Clinical Education and Training

As previously noted, a variety of sources contribute funding for clinical education and training. This section highlights the contributions made by the Commonwealth government, Queensland Health and students.

Commonwealth

Higher Education Providers receive core funding from the Commonwealth government via the Commonwealth Grant Scheme (CGS). The CGS is a part of the Higher Education Support Act (2003). This Commonwealth funding for universities is further supplemented by additional (Commonwealth provided) student loadings (e.g. medical student loading) as described in the CGS guidelines, and student contributions/HECS etc. The amount of core funding to be provided to universities under the CGS is determined by Funding Clusters.

Funding cluster	Commonwealth contribution amounts for 2006	Commonwealth contribution amounts for 2007
1. Law	$1,499	$1,528
2. Accounting, administration, economics, commerce	$2,466	$2,515
3. Humanities	$4,156	$4,239
4. Mathematics, statistics	$4,908	$5,006
5. Behavioural science, social studies ■ Social Work ■ Psychology	$6,598	$6,729
6. Health (Computing, built environment) ■ Pharmacy ■ Radiography ■ Nutrition and Dietetics ■ Speech Therapy ■ Physiotherapy ■ Occupational Therapy ■ Audiology ■ Podiatry ■ Orthotics and Prosthetics ■ Orthoptics ■ Paramedical studies	$7,349	$7,495
7. Foreign languages, visual and performing arts	$9,037	$9,217
8. Engineering, science, surveying	$12,232	$12,476
9. Dentistry, medicine, veterinary science	$15,332	$15,638
10. Agriculture	$16,299	$16,624
National Priority–Education	$7,251	$7,396
National Priority–Nursing	$9,692	$10,189

(a)Figures are for equivalent full time students undertaking units in indicated discipline. Commonwealth contribution amounts will increase by 5% in 2006 and 7.5% in 2007 for providers that comply with the National Governance Protocols and workplace relations policies.

(b)This contribution represents the case amount provided to institutions for students. The total Commonwealth funding supporting students is much greater that this and includes other funding provided for operating and research purposes.

The clusters are defined by the Field of Education (FOE) under the Australian Bureau of Statistics (ABS) Standard Classification of Education (ASCED).

While medical and nursing disciplines have funding for clinical training embedded in the Commonwealth cluster funding for student places, there are many disciplines for which there is no explicit funding. In the case of medical students, funding is in the order of $1,500 per EFTSL per annum (equivalent full time student load, funded places only), and for nursing students $1,000 per EFTSL. In the case of allied health students, there is no separately identified clinical training component.

Of current concern by allied health professionals is the recognition that under existing arrangements overall Commonwealth funding for allied health undergraduates is only half of that for medicine. Allied Health Professions Australia, as the peak body representing allied health disciplines, has recently called for the Commonwealth government to review the funding clusters for allied health courses (Clusters 5 and 6).

Student Contributions

The table below gives the ranges within which providers may set student contributions for units of study in 2007 for new students commencing on or after 1 January 2005.

Student contribution band	2007 Student contribution ranges		
	Post–2005 students	Pre–2005 Students	
		Commenced Post 1997	Commenced Pre 1997
Band 3 (law, **dentistry, medicine,** veterinary science)	$0–$8,333	$0–$6,665	$0–$3,001
Band 2 (accounting, administration, economics, commerce, mathematics, statistics, computing, built environment, **health**, engineering, science, surveying, agriculture)	$0–$7,118	$0–$5,694	$0 –$3,001
Band 1 (humanities, **behavioural science, social studies**, foreign languages, visual and performing arts)	$0–$4,996	$0–$3,998	$0–3,001
National priorities (education, **nursing**)	$0–$3,998	$0–$3,998	$0–$3,001

** Student contribution amount per unit = Student contribution set by provider x EFTSL value of unit.*

Students also meet much of the cost of post-graduate training e.g. in allied health, nursing and midwifery areas. Vocational specialty trainees also make a contribution to their clinical education and training through payments to relevant colleges to support the administrative costs of oversighting training programs and assessing trainees.

Queensland Health

Within current systems, it is extremely difficult to identify specific funding for clinical education and training that has been historically allocated and since subsumed into global budgets. With the development of a new funding model, Queensland Health is seeking to identify a notional cost of a limited number of specific clinical education and training activities as a starting point for future planning and reporting.

Queensland Health–New Funding Model

The *Queensland Health Systems Review* identified a number of weaknesses in Queensland Health's funding and budgeting systems. These included:

- Lack of transparency,
- Inequity in budgets (historical budgets),
- Centralised budget control,
- Lack of responsiveness,
- Weak link with services planning and performance.

In response, the Government via the *Health Action Plan* committed to develop a funding model comprising population and casemix (output) based funding. A two-tier system has been developed with a Resource Allocation Model (RAM) providing the basis for allocation to Area Health Services, and a casemix funding model determining the allocation method to hospitals in-scope. The prevailing objective of the population based funding model is to equalise the distribution of funding for health care services in accordance with community needs. It allows for adjustments according to socioeconomic and demographic factors, and other factors such as private hospital usage.

A critical element prioritised for the new funding model was the establishment of a strong link to support clinical education. A benefit of incorporating clinical education in the funding model is providing funding recognition for increased clinical education effort. Such recognition does not exist in existing historical funding arrangements, to the detriment of some providers. In the first instance, the current objective is to recognise and separately report a notional cost for clinical education.

Based on the draft policy approved for consultation by the Queensland Health Executive Management Team on 8 November 2006, it is proposed that funding for clinical education be allocated to Area Health Services (AHS) via allocations from the Resource Allocation Model's Non-Population Funding Pool (rather than funding for specific programs). This is based on a view that the costs of these activities are more closely related to the mix and levels of staffing, rather than to Area Health Service populations and their health needs. Similarly, the funding model at the casemix (health facility) level proposes to separately recognise a payment for clinical education based on the same methodology.

For the purposes of the new funding model, clinical education is defined as an activity where the primary aim is to transfer clinical knowledge for ongoing professional development via a teacher or mentor to a student or candidate in a recognised program/course that will result in either:

- Qualifications that may meet registration requirements, or
- Other admission to a specialised discipline where the right to practice in that discipline requires completion of the program or course *(National Hospital Cost Data Collection).*

Other states and territories have adopted this definition of clinical education for the purposes of funding models. However, it is noted that this definition is relatively narrow in scope–excluding general professional development and in-service training. The focus for the first iteration of the model is to establish a base from which to investigate ways of expanding and refining the scope of clinical education in the context of what is measurable.

Based on this definition, the notional funding of clinical education under the first version of the new funding model will be allocated based on the following four types of positions/activities:

- Salaried employees in a specified range of training positions e.g. medical interns–based on a recognition the occupants of these positions require considerable levels of ongoing clinical education,
- Undergraduate and postgraduate student clinical placements,
- Scholarships offered by Queensland Health for a specified range of undergraduate and postgraduate clinical courses, and
- Joint university/hospital appointments to clinical academic positions.

From a broader perspective, obtaining reliable data on all four types of clinical education positions/activities that are to be funded under the RAM was problematic, as there is no established system for collecting this data on a statewide basis. This is a barrier to Queensland Health's ability to plan for the development of its current and future workforce.

It must also be noted that the currently proposed arrangements for clinical education exclude support for the education of students and employed clinicians working in the Promotion, Prevention and Protection and Primary Health Care Programs. This exclusion occurs as a result of the funding for the currently proposed arrangements being drawn solely from the hospital setting.

However, in recognition of Queensland Health's need to balance its investment along the health continuum, it is proposed that further work will be developed on the provision of allocations in respect of clinical education for other Programs outside the hospital setting. This will be a priority on the future work program.

Funding for Specific Queensland Health Initiatives

Scholarships

Queensland Health currently offers 21 scholarship and grant programs supporting students and staff completing health education programs at a total cost of over $16 million per annum. (Appendix D).

These incentive programs vary considerably in terms of purpose, eligibility requirements, terms and conditions, level of payments and recipient obligations e.g. bonding. The quality of program evaluation also varies, with uncertainty regarding the impact of the scholarship or grant on factors such as recruitment and retention.

It is recognised that processes need to be established to improve program coordination, streamline implementation, support robust evaluation and improve access through targeting marketing approaches.

Bonded Medical Scholarship Program

In recognition of the shortfall in the number of Commonwealth government supported medical student places for Queensland universities, Queensland Health is funding an additional 235 places over five years through the Griffith University at a total investment of $60 million. These places are being funded as employer reserved places which are additional to Commonwealth funded places. The first cohort of 35 student commenced in 2006, with a further 50 students commencing annually over the next four years.

These students are bonded for a period of 10 years including the four-year medical degree. Graduates will be required to work in an Area of Priority Service that could mean any geographic location in Queensland, and/or a field of practice, in either the public or private sector within Queensland as determined by Queensland Health. This requirement enables Queensland Health to work with students and graduates to ensure employment in areas of workforce shortage including rural and remote communities.

Clinical Academic Appointments

The appointment of clinical academics or joint appointments between higher education providers and Queensland Health is currently managed through local processes. There are a variety of remuneration arrangements in operation, some of which include a high level of subsidy by Queensland Health irrespective of the percentage of services provided or based on historical agreements.

These include the State Loading payment paid to the University of Queensland (UQ) (and positions transferred to James Cook University (JCU) after 2001) for agreed clinical academic positions existing in 1988, and the State Supplementary Payment (also known as the Clinical Services Payment) introduced in 1997 and to date only available to UQ and JCU.

The State Loading (1988) payment is a payment of $24,898 by Queensland Health for each medical clinical academic staff position performing approved clinical services in public hospitals and health service facilities as at 1988, irrespective of the percentage of time worked for Queensland Health. Where these positions exist, the District contains the funding within District Health Service base budgets and pays directly to the university.

"Joint" positions negotiated after 1988 were not subsidised in this manner, with the university and each Queensland District Health Service reaching agreement about level of remuneration and how payment would be split, usually reflecting the quantum of service provided to Queensland Health.

The State Supplementary Payment (1997) is an additional payment by Queensland Health to supplement the salaries of medical clinical academics of UQ and JCU. These funds are currently managed by the Statewide and Community Services Branch, Queensland Health, and payable on invoice. The total value of funds allocated by Queensland Health for this scheme is $960,000.

These subsidies reflected early recognition by Queensland Health of the disparity between Queensland Health and university salaried medical officers which, unless minimised would adversely affect the recruitment of clinical academics and therefore also adversely impact on Queensland Health's ability to deliver health services.

However, as noted in the following issues section (refer section 10), increasing salary discrepancies across university and public health sectors for all disciplines has resulted in a major barrier to the recruitment and retention of staff to clinical academic positions.

9. Data Systems to Support Clinical Education and Training

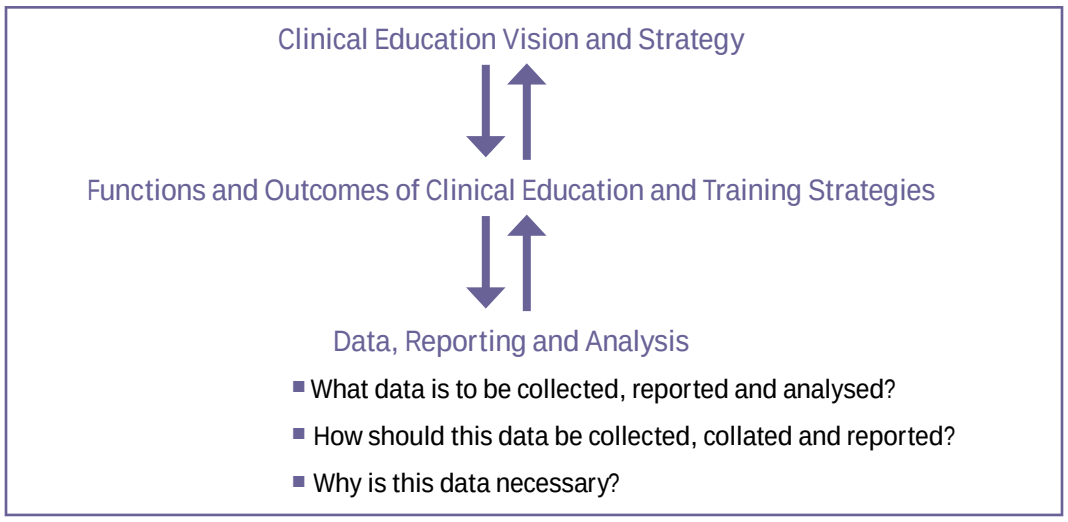
As this report identifies, clinical education and training in Queensland Health is complex and occurs in various ways across the organisation. For clinical education and training to be explicitly planned, managed, recorded and evaluated, valid data of sufficient quality and quantity must be readily available. The need for information of this quality is further required to support the collaborative approach to clinical education and training between Queensland Health and its stakeholders, and the link between clinical education and training and workforce planning.

Currently, no standard mechanism exists within Queensland Health to collect such clinical education and training information in a system-wide manner. This is especially relevant to student clinical placements, where the lack of system-wide tracking of placements hinders efficient matching of placement demand to available capacity. Governance of clinical education requires accurate benchmark data for measuring the effects of implemented strategies.

Given the increasing importance of quality clinical education and training information to inform analysis and planning, and the scope of clinical education and training activity within Queensland Health, a standard Queensland Health information system is required.

Information Systems

An information system that informs clinical education and training governance and facilitates clinical placements is best defined by the proposed functions and desired outcomes of clinical education and training strategies, and how data should support and validate those outcomes.



Data collection and analysis can be resource-intensive, and the benefits of improved information must clearly outweigh the associated tangible and intangible costs. The role and benefits of quality and valid data in informing clinical education governance must be explicitly stated and supported, and any introduced mechanisms to capture and manipulate information must be adequately resourced on an ongoing basis.

As stated, no standard mechanism currently exists to collect clinical placement and additional education and training information. The Queensland Health Student Deed Schedule is currently the only standard process that attempts to record student clinical placement activity in Queensland Health facilities across all disciplines educated within the university sector.

However, several information systems are currently operating within Queensland Health, collecting clinical education and training information to meet specific needs. Examples of these systems include:

- Queensland Health Transition to Practice Nurse Education Program Information System,
- LATTICE–(main data source for workforce planning)–maintains human resource details, including medical workforce profile, collects skills, licensing and qualifications information,
- The Prince Charles Hospital Clinical Placement Database,
- The Townsville Area Health Service Staff Education Database,
- The Queensland Health Rural Health Training Units 'Wise.net'–Learning Management Database,
- Queensland Health Resident Medical Officer (RMO) e-recruitment database.

These information systems vary in scope, source code, data definitions, reporting capabilities, related discipline, and general functionality. Unfortunately, none of these are able to collect a complete clinical education and training data set of sufficient quality to inform system-wide planning. Local informal databases may exist within Queensland Health District Health Services and facilities to record clinical training activity, but these are not uniform across Queensland Health.

Related Initiatives

The barriers and driving issues around Queensland Health's clinical education and training information management are not unique. Large-scale electronic information systems have been, or are in development, in health organisations overseas and in Australia in response to an identified need for improved and consolidated clinical placement and data management.

Canada

In 2001, the Council of University Teaching Hospitals in Canada (now the British Columbia Academic Health Council) identified a number of key student placement issues:

- Lack of access to sufficient/appropriate placements,
- Poor linkages to support the shift of placements from metropolitan to alternative (e.g. rural and remote) settings,
- Student saturation at existing placement settings,
- Some programs unable to provide students with sufficient placements, preventing graduates from becoming licenced/registered practitioners,
- Preceptor burnout,
- Clinicians mostly organising placements via the manual processing of paper requests,
- Inadequate communication and coordination within health districts,
- Lack of system data,
    - Organisations used varied types of information systems to track placements,
    - No data for assessing placements, linkages, bottlenecks etc,
    - No system wide data tools.

The British Columbian Ministry of Health Services provided nonrecurrant funding to develop a province-wide system for coordinating and streamlining student clinical placements. The funding was used to design and build the Health Services Placement Network (HSPnet), which was launched in July 2003.

HSPnet is an online, email-based system for coordinating student placements electronically. I n addition to the administrative benefits gained by replacing manual paper processing of student placements, all placement activity is recorded centrally within the HSP database, and can be recorded at an aggregate level by a user with sufficient system access. Placement 'bottlenecks' and unused placement capacity are able to measured by the HSPnet sytem.

Victoria

More recently, the Department of Human Services (Victoria) is developing an information system for health services and training bodies to meet the need for a statewide planning process for clinical placements. This web-based system will manage student clinical placement information, as well as medical labour force data, specialist training data, and allied health early graduate information. The system will inform workforce policy and planning within the Department of Human Services.

Queensland Requirements

Clearly, to support governance of clinical education and training in Queensland Health there must be a standard mechanism for collecting, storing, retrieving, reporting and interpreting relevant data from appropriate sources. This must include data on the availability and utilisation of clinical education training placements/posts to identify bottlenecks and unused capacity.

A unified electronic information system and database system would be best suited to meet these needs. This system must be flexible enough to facilitate clinical placements at a local level and support local relationships, in addition to capturing system-wide data that informs clinical education and training governance.

Given the scale of its potential utilisation, the gathering and analysis of information must be transparent and explicit.

A consultative process between appropriate stakeholders must begin to determine the specifications, technical requirements, scope and supporting infrastructure of this system. This process should be guided and informed by the Queensland Health Information Directorate, and consider the cost-benefits of:

1. Importing (and potentially modifying) an identified external clinical education and training information system.
2. Expanding an identified information system which is currently utilised within Queensland Health.
3. Creating a new Queensland Health information system.

The information systems of external health departments should be thoroughly assessed for transferability into the Queensland Health environment. This transferability must be weighted against the option of redeveloping an information system currently utilised by Queensland Health, or creation of a new system.

The development and implementation of a suitable information system must be adequately resourced with development, implementation, and recurrent costs fully realised.

Finally, the implementation of a clinical education and training information system should occur with consideration to the incoming whole-of-government Human Resource solution, and in particular the SABA component (targeted at Employee Performance, Training and Development).

Information Collaboration

Clinical education and training planning and delivery in Queensland Health involve a large group of external and internal stakeholders. A complete information database, which informs both workforce and clinical education planning, will also rely on data held by stakeholders external to Queensland Health. These stakeholders include:

- Universities (Queensland and interstate),
- Vocational education providers,
- Department of Education, Science and Training (DEST),
- Specialist Medical Colleges,
- Queensland Health Practitioner Registration Boards,
- Queensland Tertiary Admissions Centre,
- Professional bodies,
- Queensland Community Services and Health Industries Training Council.

Currently, a standard mechanism for the collection and reporting of data from external stakeholders does not exist. This has the potential to result in a duplication of information and repetition of effort, especially in the absence of a coordinated gateway for receipt and distribution of this information. External stakeholders report that identical or similar requests for clinical education information and data are received from representatives of Queensland Health throughout the year. These Queensland Health representatives may be located in different Districts and unaware of any preceding requests for similar information. To avoid "information request burnout" and the duplication of Queensland Health resources, external information requests should be consolidated and a communication tool developed to make the information available to relevant Queensland Health users.

Data Sets, Definitions and Reporting

Essential to determining the scope, specifications and technical requirements needed for a clinical education and training system is the need for clearly defined minimum data sets. No standard Queensland Health minimum data sets for clinical education and training currently exist. Standard minimum data sets will provide the foundation for a Queensland Health clinical education and training information system. Therefore, resources must be allocated to this process.

Clinical education and training occurs in various ways, therefore it is vital the elements of an adopted data set are fully defined in a way that is easily collectible. External stakeholders report that the absence of a defined minimum data set results in information requests based on differing definitions (for example, may request student headcounts vs. EFTSL, or total number of student placements vs. total number of hours of placements).

This is especially relevant for student clinical placements in Queensland Health facilities– depending on the particular programme of study the placement may be for four days per week for 13 weeks, or 1.5 days for five weeks. Number of hours per day may also vary between placements, therefore analysing or comparing these placements requires a robust definition of how placements are to be measured. These data sets should be able to drill down to situation and activity specific levels.

Minimum Data Sets must satisfy the analysis and planning functions of Queensland Health workforce planning, and be compatible with workforce modelling tools used.

Importantly, progress made towards defining and implementing these data sets must be compatible with the Council of Australian Government's (COAG) Health Workforce reforms and decisions, and be shared transparently with the National Health Workforce Principal Committee.

As the quality of clinical education and training information improves, so too will the ability to use this information for reporting and governance. Reporting cycles and outcome measures should be identified, allowing scrutiny and analysis of clinical education and training.

10. Background

The Professions and Education Pathways

It is projected that the approximate national medical school intake will increase from 1,660 in 2000 to 2,866 by 2011 (173% increase). Using an Australian Government projected attrition rate of 3.5%, the number of graduates will therefore increase from 1,195 in 2000 to 2,766 in 2015 (an increase of 231%)[20]. In comparison, and using similar modelling and attrition rates, Queensland will have an intake that will increase to approximately 838 by 2011 (288% increase) and a graduate number of approximately 795 by 2015 (404% increase).

An overview of the number of expected medical graduate completions, based on current information available from medical schools in Queensland, is included in Appendix E of this report. (There is a variance of 28 for the 2015 graduating cohort numbers from the national modelling figure, due to uncertainty of Bond University final intake numbers at this stage). Should all universities choose to maximise their ability to take on domestic full-fee paying students, this will increase the number of domestic graduates beyond these projections.

Number of Consultant, Registrar, Prevocational and Intern Positions Currently in Queensland Health

Medical staff (salaried and Visiting Medical Officers–VMOs) currently constitute approximately 8.5% of the Queensland Health clinical workforce.

As of January 2007[21]

Category of Medical Staff	Occupied Full Time Equivalent (FTE) *	Head Count
VMO, Visiting Oral Surgeon, Visiting Specialist	267.73	874
Medical Senior Officer	274.40	312
Medical Staff Specialist	1144.35	1256
Medical Officer with Right of Private Practice (MORPP)	17.0	19
Medical Registrar/Principal House Officer (PHO)	1618.37	1657
Medical Superintendent	89.54	92
Resident Medical Officer (RMO)	1054.5	1063
Medical Officer–Public Service	14.06	15
TOTALS	**4,479.95**	**5,288**

** Occupied FTE positions only–does not include identified vacancies.*

New industrial agreements under Enterprise Bargaining (EB6), resulted in improved conditions and wages for medical staff and, coupled with an effective international recruitment drive for medical staff, has seen a steady increase in headcount and occupied FTE numbers.

Queensland Health, in its commitment to building a sustainable medical workforce for Queensland consumers, has recently established an additional 55 specialist registrar positions[22].

20. *Information from Committee of Deans of Australian Medical Schools*
21. *Source: Data reporting and analysis centre, Reform and Development Division, Queensland Health.*
22. *Queensland Health (2005). Action Plan: Building a better health service for Queensland, October 2005. Queensland Government.*

Status of Medical Practitioner Registration (Including Special Purpose Registration)

The latest public data available from the Medical Board of Queensland (MBQ) is for 2005–2006 (Appendix F). During this time there were 12,252 general registered doctors in Queensland, of whom 4,222 additionally had medical specialist registration. Four hundred and ninety-two (492) were registered as specialists only.

General Registered doctors are free to practice within Queensland, according to their level of experience, without restriction (unconditionally registered), except where Specialist College jurisdiction regulations may take precedence.

Special Purpose Registration is a conditionally registered category. It is a category for registering medical staff with strict provisions of practice under the categories within this section of the Medical Practitioners Act. This registration is generally for registering medical graduates from overseas medical schools (International Medical Graduates, IMGs), who have not passed the Australian Medical Council (AMC) clinical exams. On the whole, IMGs who pass the AMC clinical exams are usually granted general registration without condition/s. In some cases, for example, where an IMG may have limited exposure to practice in Australia, there may be supervision and assessment restrictions on their general registration for a limited time after passing the AMC clinical exams.

One of the Special Purpose Registration categories is Area of Need. Area of Need relates to a Queensland Health facility, usually in a non-metropolitan, regional or rural area, that cannot recruit appropriately qualified general registered doctors to medical vacancies. These unfilled positions are matched with a suitably qualified IMG, who is then conditionally registered to work in that position. Area of need status is determined by the MBQ.

At the end of the 2005–2006 reporting period, there were 1,851 conditionally registered doctors under the categories of Special Purpose Registration, of which there were 1,212 area of need registrations (65% of all conditional registrations).

Medical Clinical Education and Training Pathways

Medical education and training occurs across a continuum with a broad range of stakeholders. Unlike other health professions, the bulk of medical graduates will undertake formalised post-graduate vocational specialty training.

Typically, medical education commences with completion of a graduate entry or undergraduate university qualification. Within Queensland there are currently four medical schools accredited by the AMC. These include:

- University of Queensland–UQ (mix of post-graduate entry HECS, domestic and international full-fee paying students),
- James Cook University–JCU (mix of undergraduate entry HECS, domestic and international full-fee paying students),
- Griffith University–GU (mix of post-graduate entry HECS, domestic full fee paying and State funded bonded positions), and
- Bond University (undergraduate or post-graduate entry domestic and international full-fee paying students).

Prior to registration as a doctor, a graduate must complete a compulsory internship year in an Intern Training Hospital accredited by the Post Graduate Medical Council of Queensland (PMCQ). The MBQ has delegated its responsibility to accredit Intern Training Hospitals to the PMCQ and funds them to undertake this function.

The pre-vocational training years or postgraduate years (PGY 1–3) collectively represent an important stage in the career development of medical practitioners. This is achieved through a range of experiences and learning, by actively preparing them for the future and to inform/ guide them in their career choices as either a specialist, general practitioner, rural generalist, or non-specialist hospital medical officer.

Nationally, there are three sources of Interns or PGY1s from basic medical education. Approximately 80% are domestic medical school graduates, 10% are graduates from either New Zealand medical schools or are on a temporary resident visa, and another 10% are IMGs who have passed the AMC exams. There is also a cohort of international full fee paying Queensland medical school graduates.

Once the internship (PGY1) is completed, most doctors undertake PGY2. A number of these doctors enter straight into Basic Surgical or Physician Training, or accept General Practitioner (GP) vocational trainee posts whilst completing a generalist PGY 2 year. Most Colleges recognise the importance of the PGY 2 year as providing a valuable foundation for future learning and training needs and have a compulsory completion requirement of this year as part of their training pathway.

Those doctors who wish to specialise and access rebates from the Medicare Benefits Schedule (MBS), complete a recognised vocational training program by following the training pathway of the appropriate College. Entrance to most advanced vocational training requires completion of a basic vocational training period.

Once accepted into vocational training, the medical practitioner works as a Registrar or GP Registrar Trainee until their training is complete. Vocational training is generally between three to six years in length. On achieving fellowship of the recognised specialty, the medical practitioner may practice unsupervised in any location (except for IMG).

There is a small group of doctors that do not enter vocational training and choose to work as a hospital non-specialist. Often these doctors are Senior Medical Officers (SMOs) within Queensland Health Emergency Departments.

10.2 Nursing and Midwifery Professions Clinical Education and Training Pathways

The nursing profession in Australia has two professional levels:

- the registered nurse and midwife, and
- enrolled nurse.

The enrolled nurse is prepared through the vocational education and training (VET) sector, while the registered nurse is prepared through the higher education sector. Midwives are currently educated at the post-graduate level.

Within the registered nurse domain, a high level practicing specialist nurse role is developing throughout Australian states and territories, namely the Nurse Practitioner. Nursing regulatory authorities in each state and territory grant licences to Nurse Practitioners according to their criteria for endorsement. Preparation is usually through the higher education sector with postgraduate masters level qualification.

Registered and enrolled nurses are regulated health care workers. An annual licence to practice as a registered or enrolled nurse is governed by the Queensland Nursing Council (QNC). Currently, individual states and territories regulate nurses in each of their jurisdictions. All State Nursing Acts and/or regulations require that the enrolled nurse be supervised by a registered nurse, thus defining the professional reporting relationship.

An unregulated health care worker also exists and in most instances is referred to as the Assistant in Nursing (AIN). The AIN may or may not have any formal preparation, however it is currently recommended that they possess a Certificate III through the VET sector. The AIN functions under direct supervision of the registered nurse.

The education pathway for nurses is extensive and increasingly specialised. A report by *The National Nursing and Nursing Education Taskforce* has provided a framework to consider clarifying and classifying national clinical specialities[23] in line with the clinical specialisation of the health workforce. The education pathway for nursing and midwifery in Queensland extends from the Assistant in Nursing (AIN), encouraged to obtain a Certificate III, which can then articulate with a Diploma of Pre-Enrolment Nursing, which can then again articulate with an undergraduate Bachelor of Nursing or Midwifery Program. Scaleable qualifications (i.e. receipt of a qualification following part completion of another course) within the nursing profession are based on individual application and are difficult to generalise particularly as, for example, the education models of Registered Nurse preparation (critical thinking) and Enrolled Nurse preparation (competency based training) vary.

Post-graduate specialist education for nurses has largely drifted from hospital-based certificates into postgraduate programs at universities, with many of these being delivered on a cooperative basis[24]. Postgraduate qualifications for the Registered Nurse and Midwife include certificates, diploma, masters, and doctoral level qualifications. Nursing and midwifery clinical education and training continues throughout the professional period and may include orientation, continuing education, corporate staff development, in-service clinical educational activities, and nursing and midwifery professional development, and are requirements for all streams.

23. *The National Nursing and Nursing Education Taskforce (2006) A National Specialisation Framework for Nursing and Midwifery: Melbourne: National Nursing & Nursing Education Taskforce.*
24. *Dept. of Education, Science & Training. (2002). National Review of Nursing Education 2002. pp.62. Commonwealth of Australia. Available at http://www.dest.gov.au/archive/highered/nursing/pubs/duty_of_care/default.html.*

While university programs may skill students on particular procedures in laboratory and classroom settings, the actual exposure to nursing and midwifery in its various settings is essential to gaining understanding as well as skill development[25]. To this end it can be said that the preparation of specialist practitioners occurs through collaborative arrangements between universities and health care facilities[26] An example of this collaboration is the Transition to Practice Nurse Education Programs (TPNEP) provided by Queensland Health.

Current funding models within education pathways have seen Queensland Health support to the TPNEP programs. The Queensland Health Nurses Public Hospital Award supports clinical education and training with the allocation of three paid days for professional development and training, and may be used, for example, to attend mandatory training and competency training. The Nurses (Queensland Health) Certified Agreement (EB6) 2006 process has resulted in the introduction of recurrent professional development allowances within the Nurses Award and can be accessed, for example, to attend conferences, training or credentialing programs.

Models of Clinical Support and Placement Requirements

Clinical supervision is currently provided in a variety of forms. Clinical Facilitators can enter a health care facility as an employee of the higher education institution (HEI) under a Queensland Health/University Deed of Agreement (refer section 11.4). Under this arrangement, the clinical facilitator takes a supervisor role with a cohort of eight students. HEI Clinical Facilitators need only be conversant in one practicum assessment tool that relates to the facility they represent.

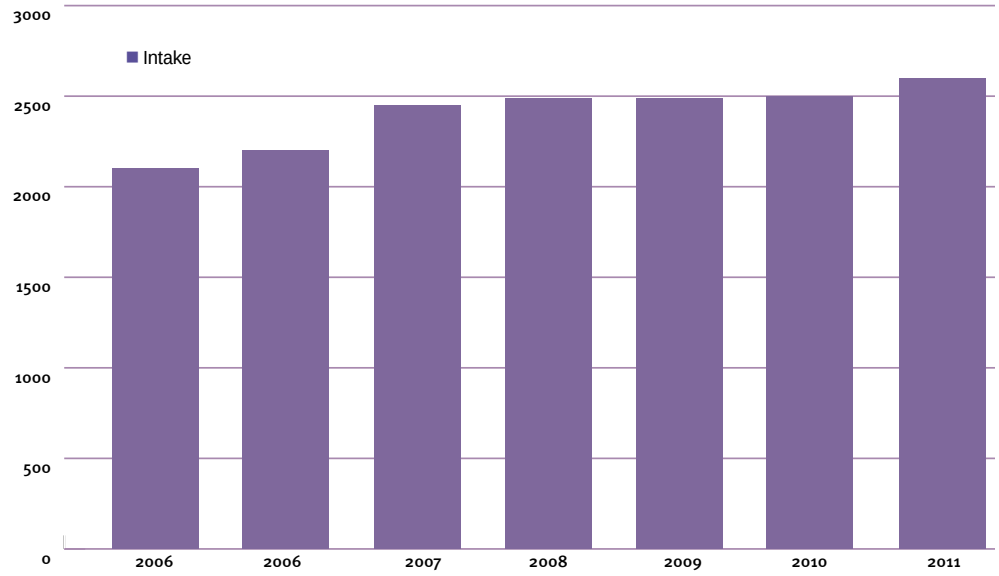
Alternately, clinical facilitators can be seconded from Queensland Health by the HEI during clinical practicum periods, but remain Queensland Health employees. Under this arrangement clinical facilitators remain within their local institutions and are paid by Queensland Health, with the HEI contributing to staff wages via the Deed of Agreement and associated schedule. Queensland Health supported clinical facilitators need to be conversant with a variety of practicum assessment tools specific to each university.

Students may also be allocated a preceptor during clinical practicum periods. The preceptor is usually a registered nurse within a clinical area. The preceptor role assumes a one-on-one clinical support and supervision role. This is the most utilised role for clinical education and teaching, requiring high levels of staff.

The demand for facilitation and supervision is expected to increase with increasing student enrolments to nursing courses. There is currently no mechanism to recognise this type of clinical education and training role, and thus it becomes additional to the clinical care role of staff. Figure 3 below depicts a projected increase of 28% in enrolments to undergraduate nursing education courses within Queensland from 2005 to 2011. It should be noted that the data in the table below are estimates only, based on survey responses from HEI.

25. Ibid.p59
26. Ibid.p.63

Pre-Registration Nursing Intake 2005–2011



The weight of facilitated clinical placements includes Midwifery programs. In 2005 student enrolments to the postgraduate Diploma of Midwifery course was 16; requiring 12,600 hours of clinical placement of which 6,400 hours were hosted within Far North Queensland Health facilities. Projected enrolment numbers to this course predict 25 program participants by 2007. The total clinical placement load would increase proportionately to 20,000 hours.

Queensland Health facilities hosted approximately 920,000 hours of pre-registration nursing clinical practicum in 2005. This represents approximately 65% of pre-registration clinical hours. With current enrolment projections, the clinical practicum requirement for 2011 is likely to require an additional 20% Queensland Health clinical practicum support.

Total Clinical Placement Hours by Stream

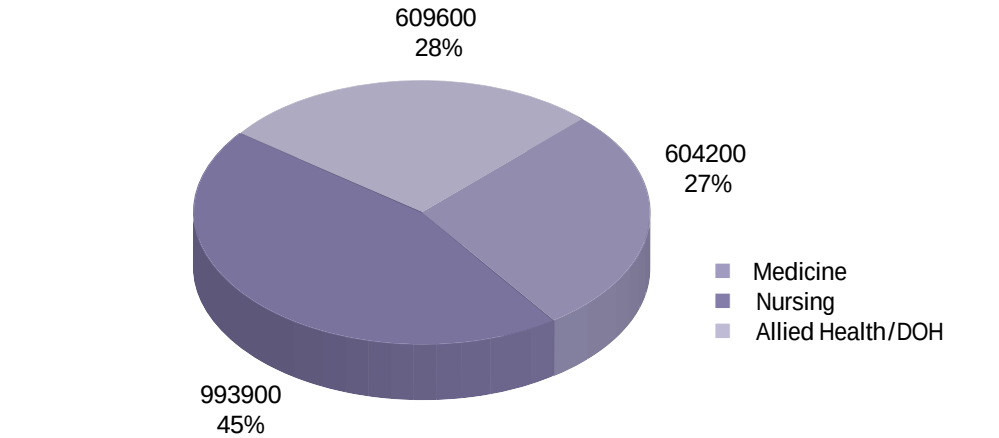


Figure 1. represents the hours of clinical placements within Queensland Health facilities in 2005 across disciplinary streams.

A Changing Environment

The changes within the workforce are well documented with many countries sourcing professionals from other countries. The nursing and midwifery shortage in hospitals has consequences not only for patient outcomes but also for achieving education outcomes for future students. The challenge is how to continue clinical education and training in this environment and ensure positive education and learning outcomes, as well as maintain high standards of care delivery. The Council of Australian Governments (COAG) has engaged an agenda for workforce reform, and provided a significant investment to address health workforce shortages, with the announcement in April 2006 of higher undergraduate education nursing places[27]. This commitment includes increased levels of funding to support clinical training per full-time student.

The health delivery environment is also changing. Providing access to clinical training and education opportunities outside of traditional public sector areas will facilitate the achievement of educational imperatives. Chronic disease management has a focus on prevention and promotion, and community treatment, and therefore, students also require access to community sites and facilities as clinical placement opportunities.

State Influences

Considerable research has been undertaken within the nursing and midwifery profession that reviews issues around clinical education and training. At a jurisdictional level this includes, but is not limited to:

- The 2005 *Queensland Health Undergraduate and Pre-Enrolment Nursing and Clinical Placements Project* which reviews and makes recommendations for undergraduate clinical placement allocation,
- The 2005 *Queensland Health Systems Review* which makes recommendations for system reform pertaining to clinical education and training[28] (refer section 7),
- The 2005 *Re-Birthing Report of the Review of Maternity Services in Queensland* also identifies the need to assist carers with enhanced education and training that is appropriate and accessible to remote practitioners.

The 2005 Queensland Health Undergraduate and Pre Enrolment Nursing and Clinical Placements Project identifies difficulties within the Queensland context specifically relating to the pre-registration area and suggests contributing factors are multifactorial. The report highlights those contributing factors as:

- Developments in models of clinical education that require a greater amount of clinical placement hours,
- The increasing number of undergraduate and pre enrolment nursing placements,
- Clinical staff–under increasing pressure to meet higher workloads–are required to mentor and support students in addition to their clinical duties[29].

27. *Council of Australian Governments communiqué (April 2006)*
28. *Queensland Health Systems Review: Final Report, September 2005*
29. *Ibid, pp.21–25.*

Difficulties have arisen with the escalating cost of student facilitation and supervision alongside budget constraints and workforce shortages. The true cost of student placement and supervision is largely undocumented. In addition to this report, previous reports have also acknowledged the varying ability within facilities to identify their capacity to accommodate student placements. It has been suggested that student placements opportunities could be maximised by spreading clinical placements across all shifts, and weekends, over the calendar year[30].

Post Registration Clinical Education and Training

Queensland Health documents relating to nursing and midwifery post-registration clinical education and training include, but are not limited to:

- The *Queensland Health Nursing Staff Development Framework* that outlines orientation, transition, and continuing and ongoing Education,
- The *Queensland Health Education Standing Committee: Standards for Queensland Health postgraduate nursing education programs.*

A discussion paper prepared for the Ministerial Taskforce Nursing and Midwifery Sub-committee highlights the current direction of Queensland Health nursing education in relation to the post-registration key outcome area[31]. Queensland Health has a history of developing nursing education in an ad hoc manner in response to Area Health Service, facility and individual imperatives. Work to address this has seen significant developments in resources to support statewide generic nursing education requirements.

Nursing education in Queensland Health is developing a coordinated approach for the provision of staff development for nurses. This is achieved through the Queensland Health Nursing Staff Development Framework (QHNSDF) (Appendix G).

The broad intent of the QHNSDF is in line with strategies identified in *Health 2020* to achieve the best use of scarce workforce resources (including reshaping health careers and training consistent with the dynamics of Queensland's changing health care needs and service requirements, and removing barriers to workforce mobility within the Queensland Health sector). The QHNSDF was first endorsed in 2001 as a result of recommendations of the Queensland Health Ministerial Taskforce on Nursing Recruitment and Retention (1999). An initial focus for this coordinated direction was the implementation of the Transition to Practice Nurse Education Programs (TPNEP). These resources were developed to address the transition needs within the nursing workforce and form collaborative networks between industry and the higher education sector.

TPNEP provide nurses new to a clinical specialty with the knowledge and skills necessary to practise competently and safely in a new environment. Programs progress along a continuum from basic skill and knowledge acquisition, to development of adult learning practices, and clinical reasoning. This is achieved through a phased approach from orientation, initial knowledge and skill development, preceptorship and continuing development.

Articulation to post-graduate study in the higher education sector has been used as a recruitment and retention strategy with successful completion of many of the available TPNEPs equating to two subjects of a Graduate Certificate. Acknowledgement also needs to be given to the efficacy of other generic education and support programs that include the Succession Planning and Mentoring Framework.

30. *Ibid, pp.21–25*
31. *Queensland Health Discussion Paper: Post-registration; Education Support and Workforce Issues Prepared by Angela Bertram in Consultation with Queensland Health Nursing Directors (Education)*

Re-entry, Refresher and Overseas Trained Clinicians

Both the *Productivity Commissions Report 2005: Australia's Health Workforce* and the *National Review of Nursing Education: Our Duty of Care 2002* discuss issues around the new and returning clinician support key outcome area. For the purposes of this Taskforce, the Nursing and Midwifery Subcommittee focus was that of the re-entry, refresher and overseas trained practitioner needs within the Queensland context.

The Transition to Practice–Nursing Refresher Program was developed in 2001 and updated in 2006 to reflect the contemporary health care environment and professional nursing issues. The focus of the program is to update clinical nursing skills and provide a supported transition to the acute care environment. It aims to recognise and build on an individual's previous nursing experience by providing an introduction to the contemporary requirements of the nurse as a critical thinker who incorporates evidence and outcomes based approaches to providing best practice, patient-focussed nursing care.

The program is designed to promote a consistent approach to participant learning and development across Queensland Health, while providing the flexibility to adapt to local and individual needs. Many issues already raised are also relevant to this area and include access to placements, and the need for clinical supervision and support. The demand for clinical placement and supervision for returning practitioners is often at the same time as demand for undergraduate students requiring placement within health care facilities.

The process for re-entry and overseas trained clinicians to enter the workforce requires applicants to engage with the Competence Assessment Service (CAS) after referral by the Queensland Nursing and Midwifery Council (QNC). The CAS model is the only mechanism to assist returning practitioners to the workplace in Queensland. The CAS program incorporates theoretical and clinical competence assessment processes that are based on the Australian Nursing and Midwifery Council national competency standards.

The assessments are administered by the CAS on a fee-for-service basis to applicants. Depending on the option adopted by a CAS participant the cost range is $746–$4,406. Facilitation support costs incurred during clinical placement are passed onto the CAS participant.

As with new practitioners, clinical education and training facilitation and support are intensive for returning practitioners to assist them to assimilate to a changed clinical environment. Ongoing support, supervision and development are required to assist re-entry and overseas trained nurses to adapt to the local health care context. Facilitators of re-entry and overseas trained nurses must be conversant with the clinical assessment tool of the education provider.

National Influences

At a national level, issues of clinical education and training have been captured in documents which include, but are not limited to:

1. The 2002 *National Review of Nursing Education: our duty of care* reviews both nursing and midwifery education and workforce,
2. Australian Health Workforce Officials Committee (AHWOC) review of jurisdictional developments in clinical education highlighting clinical placement principles,
3. The Council Of Australian Governments (COAG) agenda (refer section 7),
4. The 2002 *Senate Community Affairs Reference Committee Report: The Patient Profession–Time for Action,*
5. The *Productivity Commission's Research Report: Australia's Health Workforce* 2005 recommends action within the health industry workforce education and training (refer section 7),
6. The 2006 *Mental Health Nurse Education Taskforce* reviewing nurse preparation to the speciality of Mental Health Nursing.

The National Review of Nursing Education 2002 identifies that, like other professional groups, nurses are expected to engage in 'continuous skilling and lifelong learning'. Nursing and midwifery are seen as 'practice disciplines' and therefore clinical education is regarded as an integral and essential component of the professions' development[32]. This report also identifies that transition between roles will be an increasing feature of the workplace of the future as knowledge and technology change, and as nurses move between roles, and leave and re-enter the workforce. This suggests that transition processes and support will become part of normal operation and will require investment in educational infrastructure and expertise. These recommendations have been applied to the development of the Queensland Health *Preceptor Program* and TPNEPs.

International Influences

Within the international nursing and midwifery arena, there is a plethora of literature relating to clinical education and training reviews, some of which includes but is not limited to:

- The United Kingdom Nursing and Midwifery Council,
- The 2005 *Fitness for practice at the point of registration report*, which reviewed the core competency skill, set that nurses graduate with in readiness for industry employment.
- A 2002 *Nursing education: a statement of principles report*, which highlighted the integration between of undergraduate nursing education, continuing professional development and lifelong learning throughout the nursing career.
- The 2000 *Policy Framework for Education of Health Professionals*[33] working paper identifies the need to align education and industry and the need for partnerships to successfully achieve this through the spectrum of career learning.

The Nursing and Midwifery Subcommittee acknowledges those works–both listed and not listed here–that contribute to the development of the nursing and midwifery professions.

32. *Dept of Education, Science and Training (2002): op.cit.p.12*
33. *Canada (2000). Policy Framework for Education of Health Professionals: Working Paper. Council of University Teaching Hospitals, Vancouver.*

10.3 Allied Health and Oral Health Professional Groups A Snapshot of Allied Health and Oral Health Disciplines in Queensland Health

In January 2007, a total of 4,603 allied health and 432 oral health staff were employed within Queensland Health services.

Approximately 33% of allied health positions in Queensland are based within Queensland Health. Queensland Health employs approximately 20% of allied health new graduates each year, although within this there is considerable percentage variation per discipline. The relative percentages of each discipline compared to the total allied health workforce are approximately:- audiology 2%, dietetics/nutritionists 6%, music therapists 1%, occupational therapists 9%, prosthetists 1%, pharmacists 8%, physiotherapists 18%, podiatrists 1%, psychologists 9%, radiation disciplines 19%, social work 18% and speech pathology 8%.

In oral health disciplines, graduate figures have varied due to the transition to a new curriculum. There are between 50-60 graduates per annum in dentistry from the University of Queensland. The first cohort of 46 are expected to graduate from Griffith University in 2008. In 2002, Queensland Health employed 15 dental graduates. Following a concerted recruiting campaign, 22 graduates were employed in 2005.

Pre-Entry Level Education for Allied Health and Oral Health

There is increasing diversity and complexity in the methods of pre-entry level training in Queensland for the allied health and oral health disciplines. The traditional Bachelor level of undergraduate training is increasingly being supplemented by graduate-entry courses. A broad picture is provided in the tables below.

A graduate-entry student of an allied health profession/discipline is enrolled in an accelerated program of study that results in a masters-level degree as the primary qualification for clinical practice and/or for registration by the appropriate regulatory body. To be eligible for a graduate-entry professional qualification the student must hold a prior undergraduate degree in a course that included content areas deemed to be appropriate pre-knowledge for the profession. For example, to become an audiologist a student must complete an undergraduate degree accepted by the university and then commence a Masters degree in audiology. The graduate is then eligible to be employed as a base grade clinician.

Allied Health

Discipline	Queensland Universities	Bachelor Degrees	Graduate Entry	Course length
Audiology	UQ	No	Masters	2 yrs
Dietician/nutritionist	QUT x 2 UQ Griffith	Yes Yes	 Masters	3 -4 yrs 3 yrs 1.5 yrs
Medical Radiation – Diagnostic – Therapies	QUT QUT	Yes Yes		3 yrs + 1 professional development 3 yrs + 1
Occupational Therapy	JCU UQ UQ	Yes Yes	 Masters	4 yrs 4 yrs 2 yrs
Psychology	ACU CQU Griffith Griffith JCU QUT	Yes Yes Yes Yes Yes	 Masters	3yrs 3-4 yrs 3-4 yrs 1 yr 4 yrs 3-4 yrs
Physiotherapy	Griffith Griffith JCU UQ UQ	Dual degree Yes Yes	 Masters Masters	5 yrs 2 yrs 4 yrs 4 yrs 2 yrs
Pharmacy	Griffith Griffith JCU QUT UQ	Yes Yes Yes Yes	Masters	3 yrs 1.5 yrs 4 yrs 4 yrs 4 yrs
Podiatry	QUT	Yes		4 yrs
Speech Pathology	JCU UQ	Yes Yes		4 yrs 4 yrs
Social Work	ACU CQU JCU JCU Griffith UQ UQ	Yes Yes Yes Yes Yes	 Masters Masters	unknown 4 yrs 4 yrs 2 yrs 4 yrs 4 yrs 2 yrs
Music Therapy	UQ	Yes		4 yrs
Prosthetics & orthotics	None in QLD			

Oral Health

Discipline	Queensland Universities	Bachelor Degrees	Graduate Entry	Course length
Dentistry	UQ Griffith	Yes Bachelor Dental Science	 Grad Dip Dentistry	5 yrs 3 + 2 yrs
Dental/Oral Health Therapist	Griffith UQ	Yes Yes		3 yrs 3 yrs
Dental Prosthetist	Griffith		Masters	1 yr

The diversity of pre-entry level courses is made more complex by the range of requirements for clinical education. Some courses have identified hours required for accreditation of the program (e.g. 1,000 hours for physiotherapy) and others are less specific (e.g. 20 weeks professional placement).

Pharmacy and the medical radiations professions require a paid pre-registration year, and clinical psychology requires 2 years of practice supervised by an accredited, trained supervisor to become registered. These training requirements for full registration are currently assisted in varying degrees by scholarships and support from Queensland Health.

Support for the pre-registration years, training positions and new-graduate positions are strong priorities for allied health and oral health. However, within the Taskforce, these were identified as areas requiring intensive planning and development that was not able to be adequately addressed in the timeframe available to the Allied Health and oral Health Subcommittee.

Student numbers are difficult to estimate accurately due to the capacity in allied health disciplines to undertake dual degrees, to study part-time, etc. There were approximately 1,276 students commencing an allied health course in 2006 and this is expected to increase by 30% by 2011. In oral health disciplines, the intake was 188 students in 2006 and this will increase by 25% by 2011.

When the number of students with clinical placement/education requirements is tallied across all course years, the estimate is 5,165 allied health students in 2006–which is likely to rise to 6,832 in 2011. Oral health has 538 students requiring clinical education and training in 2006–likely to become 906 in 2011.

It is important to note that much of the clinical education in allied health disciplines is conducted in non-Queensland Health contexts. This includes clinical education and training provided through the private, non-government and other government sectors.

Clinical Education and Training Post-Entry to the Profession

Specialty education and clinical training networks are not well developed in allied health and oral health disciplines. They are emerging themes in any exploration of clinical education and training and are a strong focus of the issues and themes identified by the subcommittee for continuing consideration. The issues will be covered in the following section.

Re-entry to allied health and oral health professions is currently characterised by lack of standardisation (except in pharmacy) and by the development of programs in various sectors (professional associations, universities, employers) as need arises. A coordinated approach to re-entry is a critical need.

Review of Models of Clinical Education Delivery and Governance for Allied Health and Oral Health

Models of clinical education may target a specific discipline or may encompass groups of disciplines. Models are either specific to a component of clinical education, such as a model for providing effective organisation of placements, or more multidimensional–such as a model of clinical education and training to underpin safe re-entry to the profession after a sustained absence. Some of the models for allied health and oral health clinical education and training are presented below.

Queensland Perspectives–Models and Related Initiatives

Efforts to construct new models of clinical education practice have been identified in Queensland.

The Queensland Occupational Therapy Fieldwork Collaborative (QOTFC) comprises occupational therapy academics, clinicians, employers and professional bodies and aims to look at issues impacting on fieldwork opportunities for entry-level students. The QOTFC has a vision "to integrate professional ownership between universities, professional bodies, major employers, and individual occupational therapists to meet occupational therapy fieldwork placement needs". Their *Position Paper on Fieldwork Education August 2004*[34] sets out six recommendations for collaborative action. The QOTFC has developed a three-year action plan, and has secured funding to evaluate outcomes.

A draft position paper proposing a *Model for Student Dietician Practical Placements and Supervision in Queensland*[35] is being developed with the aim of ameliorating some of the current difficulties for this profession. These difficulties are grouped into two broad areas–work readiness of students at graduation and the management complexity of supporting students undertaking either of two university courses that differ in design.

Psychology faculty from a number of universities meet regularly at informally coordinated meetings to collaborate, where possible, on accessing and standardising placement experiences for psychology students. The range of psychology courses and the supervision requirements for registration create a degree of complexity requiring a coordinated approach.

In some disciplines, complexity arises with the requirement of a postgraduate year (or more) of supervised clinical practice. This is the case in pharmacy, medical radiations and psychology. In these cases, the issue is more that of training positions than student placements.

The then Health Advisory Unit, Workforce Reform Branch, Queensland Health (2004–2005) commissioned a literature review of models of allied health clinical education focusing on physiotherapy. This review resulted in two reports–one exploring models of supervision in traditional clinical education practice[36] and a second exploring innovative educational approaches for clinical education[37].

On the basis of primarily qualitative research, five models of supervision applicable to therapy disciplines were articulated. The second review identified some innovative approaches using simulated/standardised/mock and virtual teaching practicums. However, there was insufficient data to make conclusive recommendations.

34. *Queensland Occupational Therapy Fieldwork Collaborative 2004. Position Paper on Fieldwork Education*
35. *Model for Student Dietician Practical Placements & Supervision in Queensland–draft position paper (2005). Unpublished paper.*
36. *Part 1: The Centre for Allied Health Evidence. (May 20 2005), An exploration of models of supervision within the sphere of traditional clinical education practice, Queensland Health.*
37. *Part II: The Centre for Allied health Evidence. (May 30 2005), An exploration of innovative educational approaches for the purpose of clinical training, Queensland Health.*

Across the range of allied health and oral health disciplines, there are plainly a variety of models of clinical education. Where more than one university supplies an entry-level course (and sometimes two courses per university with the commencement of graduate-entry masters) the complexity is enhanced. At District Health Service level, local variation of clinical education and training is evident due to influences of geography, staff retention, staff experience and other factors.

National and International Perspectives

Other Australian jurisdictions and other countries face similar pressures on clinical education to those in Queensland. These jurisdictions are developing responses to these challenges.

As an example, the Australian Capital Territory has developed a framework and implementation plan for inter-professional learning and clinical education[38]. The aim is to address safe practice in clinical settings from the start of clinical education. The project will be evaluated under an Australian Research Council grant, and so will contribute to future evidence. The long term goals of inter-professional education in health disciplines are to contribute to improved safety, quality, morale and outcomes for patients, staff and students in a health system.

The Policy and Strategic Projects Division, Department of Human Services, Victoria, commissioned a report into international approaches to undergraduate clinical training[39]. It found that most innovative approaches have focussed on taking students away from the workplace near patients/clients to simulated experiences etc. The authors also noted that Australia was not well represented in the international research in clinical education.

Developments and the changes to clinical education and training occurring in the United Kingdom are often perceived as paradigms that could translate to the Australian context. The Physiotherapy Placement Information and Management Service (PPIMS) is an example of an allocation system for student placements aiming to reduce the complexity and interpersonal conflict that arises in organising clinical placements when education and health systems are both under stress. This service was developed at Hertfordshire University and services 10 universities, 13 programs, 2,000 students and 450 clinical sites.

Likewise, Canada has proven to be a valuable example for Queensland and Australia as the issues arising from distance and geographical remoteness face both countries. HSPnet is a Canadian online placement service for nursing, psychology, pharmacy and rehabilitation students. An associated advantage of these electronic systems is the capacity for generating accurate reports about the volume of work and time associated with providing clinical education.

In Sweden, an innovative model has developed in the Centres for Clinical Education[40]. Medical, nursing, occupational therapy and physiotherapy students have undertaken integrated clinical education in three environments. A Clinical Training Ward without patients is where students learn and are videotaped performing skills e.g. communication. A Clinical Education Ward is a small orthopaedic ward staffed and run by students. A Multidisciplinary Team, comprising educators from across disciplines, plans and manages opportunities for students from different disciplines to learn together.

38. *Braithwaite J., & Travoglia, JF. (2005) Braithwaite and Associates and the ACT Health Dept. Background Papers#1–#5, 2005–2006.*
39. *Bagot et al. (2005) International approaches to undergraduate clinical training. Commissioned by Policy & Strategic Projects Division, Dept. of Human Services, Melbourne.*
40. *Morgensen et al. (2002). Centres for Clinical Education (CCE): Developing the Health Care Education of Tomorrow–A Preliminary Report. Education for Health, 15, p.10–18*

10.4 Aboriginal and Torres Strait Islander Clinical Workforce

Data reported in June 2006, identifies the Indigenous workforce within Queensland Health as 2.37% of the total workforce.

Queensland Health Statewide Workforce Comparison

Occupation	Indigenous	Non Indigenous	No Response	Total
Managerial and Clerical	262	5,329	3,072	8,663
Operational	576	6,463	3,998	11,037
Trade and Artisans	6	272	116	394
Professional	64	4,121	2,170	6,355
Nursing and Midwifery	313	16,371	6,678	23,362
Medical	24	2,454	1,489	3,967
Visiting Medical Staff	6	506	384	896
Technical	74	718	374	1,166
General	0	1	1	2
Total	1,325	36,235	18,282	55,842

Workforce Analysis & Comparison Application (WACCA) as at June 06 Qtr
HR Informatics Unit, Data Reporting and Analysis Centre, Reform and development Division Queensland Health

Occupation Percentage of Indigenous Staff across Streams

Occupation	Indigenous	Non Indigenous	No Response	Total
Managerial and Clerical	3.02%	61.51%	35.46%	100.00%
Operational	5.22%	58.56%	36.22%	100.00%
Trade and Artisans	1.52%	69.04%	29.44%	100.00%
Professional	1.01%	64.85%	34.15%	100.00%
Nursing and Midwifery	1.34%	70.08%	28.58%	100.00%
Medical	0.60%	61.86%	37.53%	100.00%
Visiting Medical Staff	0.67%	56.47%	42.86%	100.00%
Technical	6.35%	61.58%	32.08%	100.00%
General	0.00%	50.00%	50.00%	100.00%
Total	2.37%	64.89%	32.74%	100.00%

Workforce Analysis & Comparison Application (WACCA) as at June 06 Qtr
HR Informatics Unit, Data Reporting and Analysis Centre, Reform and development Division Queensland Health

The above information is derived from Equal Employment Opportunity (EEO) survey data and may not reflect a true and correct count of the Indigenous health workforce. Queensland Health staff are not compelled to identify their Aboriginal and Torres Strait Islander or South Sea Island origins and incumbents contribute their personal information by choice. The EEO survey data is strictly confidential and currently not a mandatory requirement. Contributing factors influencing their choice may include (and are not limited to) cultural safety concerns and historical experiences with government departments. It is also unconfirmed whether or not the information provided in EEO surveys is pertaining to Indigenous Australians or staff who are Indigenous to another country. This anomaly may bring into question the accuracy and validity of the current data collection processes.

Indigenous Workforce Percentage by Area

Area Health Service (AHS)	% of Total Employee AHS FTE
Southern Area Health Service	1.76 %
Central Area Health Service	1.63 %
Northern Area Health Service	5.68 %

Data Collection: Factors for Consideration

The challenges around current data collection to establish an accurate Indigenous Australian workforce profile are complex, and more so with the Indigenous Health Worker Career Structure under which the majority of Health Workers are employed. The career structure is predominately in the Operational Stream with opportunity for some Health Workers according to qualification to be employed in the Technical Officers stream.

The current methodology for calculating Indigenous employee numbers in the Operational Stream does not differentiate between Nutritional/Catering/Cleaning, Operational and Enviro/ Porterage services and Health Workers employed under the Indigenous Health Worker Career Structure. The former is distinctly operational and the latter spans across clinical and non-clinical dependant upon the location of the Health Worker.

Career Progression from Indigenous Health Workers to Clinicians and Providing Effective Learning Pathways

The opportunity exists to progress Indigenous Health Workers into clinical professions from allied health through to nursing and midwifery and medicine. The challenge is to provide the training in a location that can be accessed without being away from kin and country. TAFE and universities are formidable and frightening places to be for someone originally from a rural and remote area. It is through adopting a pathway along a learning continuum that career progressions can be facilitated.

This contemporary approach to partner education and training into employment in health is a key change in focus in the delivery of education to skill the workforce for the future. The development of career pathways and points of articulation for Indigenous Health Workers provides a framework to ensure seamless flow of workers in health from certificate level into diploma and degree based courses and promotes career pathways with viable entry and exit points that can be tailored to fit with individual needs. This also promotes the utilisation of current skills in the workforce whilst learning new knowledge to gain further qualifications. An example of this may be a pathway through the VET sector to university for allied health assistants into occupational therapy, physiotherapy, or alternatively from welfare certificate to diploma courses into a social work degree. Students are able to gain a series of qualifications in stages at a pace suitable to their situation.

Current innovation in growing the Indigenous clinical health workforce in rural and remote settings includes provision of allied health and nursing cadetships. The proposed 'Rural and Remote Nursing Pathway' creates access into nursing studies and addresses the shortage of nurses in rural and remote areas, simultaneously increasing Indigenous Australian nursing numbers in Queensland Health. The pathway would be one that encompasses all qualifications from Certificate III in Aged Care, to Assistant in Nursing, to Enrolled Nurse, to a Bachelor of Nursing.

The development of flexible education to employment pathways with articulation between courses is possible through true partnerships between health, the VET and university sector. Key outcomes for industry include increased access to learning options for the current and potential Indigenous health workforce and flexibility in up skilling staff working in areas of need such as rural and remote communities.

10.5 Rural and Remote Clinical Workforce

Queensland Health provides support and incentives for clinicians who aim to or are currently working in rural and remote areas. These initiatives are managed through the Office of Rural Health, and include:

- The Queensland Health Rural Scholarship Scheme (QHRSS),
- The Queensland Health Medical Bonded Scholarship Scheme (QHMBSS),
- The Queensland Health Pharmacy Assistant Subsidy Scheme (QHPASS), and
- The new Allied Health Scholarships which include:
  - Additional 20 allied health scholarships to the QHRSS totalling 32 QHRSS Allied Health Scholarships,
  - Establishment of 20 undergraduate Area of Need Scholarships,
  - Establishment of Continuing Professional Development Scholarships,
  - Establishment of Clinical Placement Grants.

In 2006, the Office of Rural Health is provided case management support to:

- 216 undergraduate QHRSS scholarship holders,
- 126 post graduate QHRSS scholarship holders,
- 80 undergraduate QHMBSS scholarship holders.

The Queensland Health Rural Scholarship Scheme provides scholarships in dentistry, medicine, nursing, pharmacy, physiotherapy, podiatry, psychology (clinical masters), occupational therapy, radiography, social work, speech pathology and oral health.

The Queensland Health Rural Scholarship Scheme aims to:

1. Establish for Australian students, premier career pathways to rural health practice in multiple disciplines from tertiary to postgraduate education/training and service placement.
2. Increase supply of health professionals exceptionally fit to practice in rural and remote Queensland.
3. Provide preparation, training and support of such high standard and value to the scholarship holder that bonds become inconsequential to them.
4. Commit to match personal, family and career needs and aspirations with organisational and community requirements through indicative planning.

Following graduation, Queensland Health employs scholarship holders in rural health care facilities throughout the state, providing rural communities with essential health services. Anecdotal evidence has highlighted issues of isolation and lack support experienced by scholarship holders in rural facilities, the need for advice regarding a career in rural practice and the transition from undergraduate to a rural clinical practitioner.

As part of a reform process, a support network is being implemented which will provide a structured process to support scholarship holders in their placements in rural and remote health facilities. This support aims to increase recruitment and retention through the Queensland Health Rural Scholarship Scheme to rural practice.

Additionally, strategies to specifically address the needs of Indigenous health professionals, the QHMBS scholarship holders and the new Allied Health Scholarships will be developed to maximise recruitment and retention within Queensland Health.

Recent new initiatives such as the Rural Generalist Training and Career Pathway Program, the recognition of Rural Generalists as a speciality, the recognition of practice reform, and Credentialed Practice and the Salary Classification Reform are factors impacting on many of the current and future scholarship holders. It is therefore important that the current objectives and management processes reflect the necessary modernisation which will be required for our medical scholarship holders.

The first stage of the reform has been implemented for the medical scholarship holders and is aligned to the implementation of the Rural Generalist Reform. Progress is continuing regarding the other scholarship disciplines with full roll out of the reform in 2007.

The number of available medical scholarship holders to be placed in rural facilities in 2007 comprises:

- 18 Interns–Placed in the selected host hospitals to undertake the 2 year prevocational training in 2007,
- 15 Post Graduate Year 2 Medical Scholarship Holders remaining in their current locations to complete the second year of prevocational training in 2007,
- 6 Post Graduate Year 3,
- 7 Post Graduate Year 4,
- 5 Post Graduate Year 5,
- A further 15 medical scholarship holders are currently on deferral undertaking advanced skills training.

At August 2006, the support network was seen to contribute to a significant reduction in the number of medical scholarship holders breaching their contract, and an increased number of applicants (which has resulted in a 50% increase in the number of medical scholarships offered). Early indicators reflect an increase in the retention rate of medical scholarship holders remaining in rural communities following the completion of their scholarship.

Work is continuing to progress the reform concerning case management, career planning and support for the remaining disciplines of nursing and allied health. A nursing workshop has been held to identify nursing career pathways. Allied health career pathways are in various stages of design as per discipline. All allied health scholarship holders will undertake a rural preparation course conducted by the Southern Workforce Unit Cunningham Centre prior to the appointment to positions in January 2007.

Rural Generalist Pathways

The Queensland Health Rural Generalist Pathways is an initiative not only to retain the current senior experienced rural generalists but also to train the future generation to meet the needs of the rural and remote communities. The Rural Generalist Pathways provides a defined career pathway for doctors commencing day one of internship through to senior rural generalist. The model has been designed to be flexible and enables lateral entry utilising recognition of prior learning.

Queensland Health is collaborating closely with the Australian College of Rural and Remote Medicine (ACRRM), the Royal Australian College of General Practitioners and General Practice Education and Training (GPET) to develop the pathways. One of the principles of the program is to provide a training pathway, which results in a qualification that enables the doctor to obtain a provider number with access to Medicare benefits.

There are six hospitals that are supporting the delivery of the prevocational curriculum– Toowoomba, Townsville, Cairns, Ipswich, Rockhampton and Mackay. Initially the priority areas for advanced skills training are obstetrics, anaesthetics, surgery and Indigenous health.

Individuals will be provided with individual case management through out their training and maintained as a senior rural generalist, both professionally and personally.

11. Subcommittee Methodology and Summary of Issues

11.1 Medical Profession

Medical Subcommittee

The membership of the Medical Subcommittee comprised representation from the Australian Medical Association of Queensland–AMAQ (including Registrar and RMO representation), Australian Salaried Medical Officer Federation–Queensland (ASMOFQ), Queensland Public Service Union (QPSU), College representatives, medical students (all Queensland medical schools represented by an elected representative), Deans of Medical Schools (all Queensland Medical Schools represented) and Queensland Health (Appendix C).

The Medical Subcommittee during its consultations and discussions identified a number of common themes in relation to the current status of clinical education and training in Queensland. These were:

- Queensland will experience increased student and graduate numbers, translating eventually to an increased number of doctors requiring vocational training,
- There is a lack of coordination across the spectrum of medical education and training. Work needs to be undertaken to understand the numbers of placements/positions required, when placements occur, the level of supervision and clinical teaching obligation required, and future workforce requirements,
- Clinical education and training receives minimal amounts of specifically identified funding and this is constantly at risk of erosion from the pressure to provide services,
- There is no strategic plan in relation to how Queensland will achieve clinical education and training outcomes necessary for a sustainable workforce in the future,
- There is poor communication between stakeholders across the medical education and training continuum,
- Tension exists between service delivery and clinical education and training, for both clinical teachers to provide the teaching, and trainees to attend teaching sessions,
- Deficiencies in funding and structural support in clinical service delivery impact on the ability of the public hospital system to provide adequate and appropriate training experience.

Subcommittee Methodology

The Subcommittee reviewed a range of existing reports, papers and findings of specific committees and other bodies to assist its deliberations.

These included:

1. National

- Medical Specialist Training Steering Committee,
- Prevocational Training Review,
- Australian Health Workforce Committee (various projects),
- Medical Training Review Panel (MTRP),
- Council of Australian Governments (COAG) Health Reform Working group,
- Productivity Commission Health Workforce Study,
- Australian Health Ministers Advisory Committee (AHMAC) initiatives,
- College (National level) documentation and reports,
- Department of Health and Aging (DoHA),
- Department of Education Science and Training (DEST),
- Australian Medical Council (AMC).

2. Queensland

- (Refer Section 7 of this report).

3. Interstate

- NSW–Institute of Medical Education and Training (IMET), vocational training reviews in relation to Clinical Training Networks and a recent prevocational training and coordination review,
- Postgraduate Medical Councils (various publications),
- Department of Health (interstate) publications and reports.

4. International

- Investigation of international jurisdictions deliverance of Clinical Education and Training,
- CanMed (Royal College of Physicians and Surgeons of Canada),
- United Kingdom (UK) Deaneries,
- Clinical Training Agency (NZ),
- Postgraduate Medical Education and Training Board (UK).

In addition, this work was supplemented by:

5. Literature Reviews

- Published Scientific and Professional Literature,
- Unpublished Studies.

6. Consultation

- Subcommittee Meetings,
- Invited workshop,
- Guest speakers.

These were developed from the latest literature available on contemporary approaches to the identified broad issues in medical education and training.

- Medical student clinical training
- Prevocational training
- Vocational training
- Vocational training flow diagram,
- Expanded vocational training in the private sector
- Overview of current national and international models for the planning, coordination and evaluation of clinical education and training
- Current training models (Australia)
- Clinical Training Networks.

Workshop of Key Stakeholders

A workshop involving key invited stakeholders was held in Brisbane on 21 October 2006 (refer Appendix H). The aim of the workshop was to engage stakeholders in deliberations about strategies to address the critical issues associated with medical student clinical placements and training, prevocational training and vocational medical training.

Specific concerns were identified for each cohort but there was also a consensus on the common issues that needed to be addressed across the education and training continuum.

The workshop also debated strategies which could address the above issues. The overarching strategies put forward by participants included:

- Clinical education and training becomes part of the public health sector outcomes against which Queensland Health reports,
- An "agency" is established with the mandate to coordinate, plan and evaluate clinical education and training and placements of medical students, prevocational doctors and vocational trainees,
- Medical clinical education and training is recognised as core business for Queensland Health, given high priority for funding, rewarding clinical teachers, and providing support for clinical teaching to improve teaching and assessment of doctors,
- A plan/model is developed and implemented to address the increase in student numbers and subsequent trainees in the public system and is appropriately funded and resourced (including possible private sector placements),
- A process that will improve communication and cooperation between universities, health sectors, government, professional/regulatory bodies and universities is established,
- Queensland Health provides regional and rural hospitals with accommodation and increased infrastructure for the placement of student and vocational trainees to these facilities.

Key Findings and Issues

Many of the issues identified for medical student, prevocational and vocational phases of medical training were recognised as common across the continuum of medical training.

Coordination and Implementation Issues

Coordination and implementation issues were identified as:

1. Increased student and graduate numbers requiring substantial coordination and management across training facilities.
2. Poor overall systematic coordination of student, pre-vocational and vocational placements that has led to sometimes significant human and financial gaps in resourcing.
3. Lack of effective coordination and governance at a state jurisdictional level overall, not just at the level of Queensland Health.
4. Poor coordination of strategies to meet the learning needs of students and doctors.
5. Lack of consistent frameworks and competencies (or other tools) to guide clinical teachers.
6. Clinical education and training not seen as core Queensland Health business.
7. Lack of protected time for salaried doctors to attend clinical education and training programs resulting in a large 'out of hours' clinical education and training load.
8. Little or no 'back fill' available for salaried doctors to participate in or provide clinical education and training.
9. Difficulties in utilising the private sector as an alternative for clinical education and training placements.
10. Systems perceived as slow to respond to the ever-changing demands of the health care system and emerging new contexts of demographics and morbidity.
11. Poor access to reliable student number and future workforce needs data.

Service Delivery Issues

Service delivery issues were identified as:

1. Tension between service delivery and clinical education and training requirements.
2. Lack of sequestered teaching time in a clinician's day contributes to this tension.

Training Gap Issues

Training gap issues were identified as:

1. Unmet training needs in some areas of, and specialties within, the health system.
2. Regional/rural/outer metropolitan areas lack facilities (including available accommodation) and resources to provide adequate clinical training and education.

Pre-Vocational Medical Training–Key Issues

In addition to those issues identified as common across the continuum of training, the following key issues have been identified specifically for pre-vocational training:

1. Clinical training and education occurring outside of an educational framework i.e. lack of specific competencies to be achieved for this cohort.
2. Lack of consistency and equity in resourcing prevocational clinical education across the state.
3. Fragmentation of pathways to access training providers outside of training hospitals.
4. Lack of recognition of the workload and resource intensity required in supporting the assimilation of IMGs within the workforce.
5. Intern training and release of Interns for training and education has precedence (over releasing JHO/SHOs for clinical education) as Intern training given legislative priority over other pre-vocational doctors.
6. Difficulty in taking a mandated approach to training for core organisational requirements e.g. staff orientation, patient safety, risk management etc. because of service demand and resource limitations.
7. The need to focus on clinical skills development and the fostering of medical professionalism means there is not support for formal written assessment of prevocational trainees.
8. The Skills Development Centre is not seen as a viable training resource for this cohort outside the metropolitan teaching hospital network as is viewed as costly and inaccessible.
9. Clinical education and training of the prevocational cohort is mainly limited to the teaching hospital environment.
10. Overarching emphasis on PGY1 at the expense of PGY2 and PGY3 doctors i.e. inconsistent approaches to assessment and accreditation of terms by PMCQ.
11. Process for accreditation of terms currently viewed as repetitive and unwieldy.

Vocational Medical Training–Key Issues

In addition to those issues identified as common across the continuum of training, the following key issues have been identified specifically vocational training:

1. Vocational trainees are an integral part of service delivery in public hospitals (particularly out of hours) and this has led to a tension between service delivery and training needs for many trainees.
2. The impact of deficiencies in funding and structural support in clinical service delivery on the ability of the public hospital system to provide adequate and appropriate training experience.
3. Twelve Colleges with more than 65 specialty training programs and limited intercollegiate coordination and sharing of approaches to common areas of training.
4. Variable and sometimes inconsistent levels of feedback and interaction between Colleges and Queensland Health, especially at a jurisdictional level.
5. Queensland Health funds specialty training registrars' salaries yet considers it has had little direct involvement in how training operates within its hospitals.
6. The Skills Development Centre not seen as a viable training resource for this cohort outside the metropolitan teaching hospital network as is viewed as costly and inaccessible.
7. Access to accredited training opportunities is a key driver for recruitment and retention within health services, hence difficulty in attracting applicants to "service only" positions.
8. Difficulty in taking a mandated approach to training for core organisational requirements eg. staff orientation, patient safety, risk management etc because of service demand and resource limitations.
9. Ongoing cycle whereby regional, provincial and some outer metropolitan hospitals are unable to have service-only posts accredited for training because they do not have suitable college fellows to supervise, yet the fellows are not attracted to the location because it does not have vocational trainees.
10. Limited infrastructure resourcing available to create training posts in many regional, provincial and some outer metropolitan hospitals.
11. Concern that some regional, provincial and outer metropolitan hospitals are limited by the experiences they can offer a trainee.
12. Practice of outsourcing some public services to the private sector has led to trainees being exposed to working in the private sector.
13. Training at Greenslopes Private Hospital has proved a positive training environment for trainees but continuation is at risk as the Department of Veterans Affairs winds down funding.
14. Limited training in the private sector exists in some specialities.
15. Vocational trainees play a large part in the on-the-job training of junior doctors/medical students and their assessment but are often not equipped to adequately teach or assess.

16. Loss of quality pre-vocational doctors to other States with greater vocational training opportunities.

17. Some college selection processes mean that Queensland applicants may be ranked lower than an interstate applicant and thereby miss out on a Queensland training post.

18. Need to maximise access to vocational places by doctors who want to stay in Queensland.

19. Service provision and clinical education and training exist as silos with little integrated planning and delivery of these core health system functions.

20. Availability of sufficient vocational training posts to accommodate expected numbers of additional medical graduates in Queensland.

21. Lack of certainty around capacity of system to create additional training posts in some specialties–limited by the availability of College supervisors and available service and clinical education and training infrastructure in some health services.

22. Creation of new vocational posts has been mainly ad hoc and generally not based on reliable projected population service needs.

23. The Australian Competition and Consumer Commission (ACCC) review of the Royal Australasian College of Surgeons (RACS) and the Specialist Medical Colleges Project is resulting in significant changes to some College training policies and processes and the way that Colleges are expected to relate to jurisdictions.

The Imperatives for Expanding Medical Education and Training Settings

Increased Student Numbers

With the anticipated increase in pre-entry student numbers across disciplines, there is a need to look beyond traditional approaches to clinical education and training i.e. hospital based, to accommodate these increases in the future medical workforce. Expansion into non-traditional areas will help alleviate the increasing teaching burden of clinicians in the public sector, improve the quality of training and education generally, and improve readiness to work (of graduates).

Changes to the Health Delivery Environment

As previously mentioned in section 10, the health delivery environment is changing. These changes as they relate to medical clinical education and training are:

- The identification of clinical gaps in the current training system ("casemix gaps"),
- "Mixed sector clinical pathways", where a patient's journey can occur across a range of settings (private, public and non-government),
- Chronic disease burden is focusing health care on prevention and promotion and community treatment,
- Differing types of surgery being undertaken within the public and private sectors –public surgery tends to be for longer complicated procedures compared to minor/day surgery performed in the private sector,
- Access to clinical training and education opportunities outside of traditional public sector areas.

These changes mean that consideration needs to be given to placing students and trainees in community and private hospital settings, in order that their educational imperatives and required workforce skills can be attained.

Diversification of Training to Meet Training Objectives

Although the private sector offers a wealth of educational opportunities not available to the public sector, other untapped opportunities still exist within the public sector -especially in regional areas where service profiles are quite different to those that exist in tertiary teaching hospitals.

Planning for Expansion

Expansion into non-traditional clinical training areas, coupled with the increased number of students across disciplines and hence trainees within the Queensland Health workforce, necessitates that methodologies or models to plan, coordinate and evaluate the spectrum of training requirements that will be needed, are reviewed and agreed upon. Service delivery and training are inextricably linked, and training will need to be appropriately managed in the future in order to be sustainable within the service delivery context.

Indemnity Arrangements

It is unclear who should indemnify prevocational doctors and vocational trainees when placed in the private sector and if indemnity can be transferred across settings. In the past, Queensland Health has offered indemnity to trainees participating in formalised trials of training in the private sector.

Work by the Commonwealth

The Department of Health and Ageing (DoHA) has established a Medical Specialist Training Steering Committee (MSTSC), to identify and review current flexible training options for vocational training, other options for expanding clinical training settings and to provide some costing models for expansion. The Committee reported to the Australian Health Ministers in October 2006. The Australian Health Ministers Conference have agreed that the report should be used as a resource and that it may be used to inform further relevant work to be undertaken by jurisdictions and the Department of Health and Ageing (DoHA).

Incentives

The private sector could accrue a number of benefits through utilising trainees. These benefits might include:

- Trainees bringing latest medical academic knowledge into the hospital/practice,
- Doctors on site or close call 24/7 (depending upon Specialist College accreditation requirements),
- Improved patient safety because of close medical scrutiny,
- Potential improved patient satisfaction with consultant “assistants” (Registrars or RMOs) available the majority of the day,
- May encourage specialists to under take regional practice if a registrar can assist them and thus enhance profiles of regional private hospitals.

Queensland Health and individual doctor benefits may include:

- Comprehensively trained and competent registrars through exposure to disease management and surgery/procedures that are not common in the public sector e.g. infertility treatment,
- Expanded environments to provide for extra clinical placement numbers and subsequent graduates, creating a bigger “doctor pool” for Queensland,
- Prevocational doctors and vocational trainees acquire insight into private practice.

Disincentives

The private sector may have a number of concerns about adopting vocational trainees. These concerns may include:

- Issues about supervision. Private hospitals may be concerned that specialists may not wish to be allocated a trainee. If a trainee is allocated to a specialty area rather than an identified doctor/s, the specialists involved in that area may not wish to undertake training and supervision requirements,
- Private patients may only wish to be treated by their specialist rather than a trainee,
- Additional administration costs (Medicare reimbursement, reimbursement to Queensland Health etc) and potential impacts upon productivity i.e. supervision of trainees will slow the specialist's pace of work,
- Indemnity arrangements, such as determining the agency responsible for indemnifying the vocational trainee, and whether this can be transferred across settings,
- Infrastructure costs of training. Current training facilities may be inadequate e.g. teaching venues, trainee offices, and access to libraries etc. Private hospitals will be reluctant to fund these costs if additional benefits are not realised in the long term,
- Existing Medicare arrangements do not accommodate trainees in private practice settings.

Queensland Health and individual doctor concerns could include:

- Potential substantial public funding allocated to meet private sector infrastructure costs relating to the establishment of suitable environments for placing prevocational doctors and vocational trainees in privately owned hospitals,
- Queensland Health has limited involvement in private sector business and there may be a need for complex contracts to cover all contingencies adding to costs,
- Complexity of medical indemnity if training expanded into the private setting,
- Lack of clarity regarding the agency responsible for paying salaries when Queensland Health employees are providing service delivery in the private sector,
- No current mechanisms for follow up of trainees by Queensland Health clinical teachers,
- Public hospitals could be depleted of funds that are used in private patient care,
- Potential disincentive for doctors to work in the public system if they can also teach and do research in the private health system.

11.2 Nursing and Midwifery Professions

Nursing and Midwifery Subcommittee

The Nursing and Midwifery Subcommittee during its consultations and discussions identified a number of common themes in relation to the current status of clinical education and training in Queensland. These were:

- Queensland will experience increased student and graduate numbers, leading to an increased number of nurses requiring vocational training,
- There is a lack of coordination across the spectrum of nursing and midwifery education and training,
- Clinical education and training receives minimal specifically identified funding and this is constantly at risk of erosion from the pressure to provide services,
- There is no strategic plan to guide how Queensland will achieve the clinical education and training outcomes necessary for a sustainable workforce in the future,
- There is poor communication between relevant stakeholders across the nursing and midwifery education and training continuum,
- Tension exists between the delivery of services and the provision of clinical education and training,
- Deficiencies in funding and structural support for clinical service delivery will impact on the ability of the public hospital system to provide adequate and appropriate training experience

In 2005, work was undertaken within Queensland Health to identify the number of placements/ positions required into the future and to map when placements occur over the calendar year. Further work is needed in relation to determining the level of supervision and clinical teaching obligation required, and future workforce requirements.

Nursing and Midwifery Subcommittee Methodology

The Ministerial Taskforce on Clinical Education and Training Terms of Reference defined the scope of activity and work of the Nursing and Midwifery Subcommittee (Appendix A). The subcommittee included representation from the higher education sector, vocational education and training sector, Private Hospitals Association of Queensland, Queensland Health, Queensland Nursing and Midwifery Council and the Queensland Nurses Union.

Consultation was undertaken by means of subcommittee meetings, feedback from stakeholders, small group discussions, workshops and presentations. Consultation opportunities also included the wider regional forums (refer section 11.4).

As part of wider stakeholder engagement, a nursing and midwifery clinical education and training forum was held on 10 November 2006 to enable stakeholders to comment on the nurse educational preparation and suggest possible solutions to the key issues. Representation at the forum included non-government organisations, rural and remote health, midwifery, and mental health as well as subcommittee members.

The Nursing and Midwifery Subcommittee recognises the enormity of the project undertaken by the Ministerial Taskforce on Clinical Education and Training, and the limited time frames in which to make strategic recommendations. The subcommittee suggests ongoing consultation occurs with higher education and industry stakeholders.

A review of the literature, related reports and briefs was undertaken to inform an analysis of previously identified issues and strategies and to assist in the identification of further directions (refer section 10.2).

One of the principle problems in analysing available nursing and midwifery workforce and education data was its limitations and lack of reliability. For example, obtaining course enrolment numbers at a time other than at the commencement of the academic year and course graduate numbers was problematic.

Pre-Registration Outcome Area Issues

Consultations identified several key areas of concern relating to pre-registration clinical education and training. These in summary are:

- Lack of policy/overarching framework for clinical education and training,
- Access to and capacity for placement,
- Funding models to support clinical teaching,
- Communication/coordination issues,
- Clinical placement/facilitation support,
- Lack of systematic data.

Lack of Policy/Overarching Framework

Currently, there is no policy or framework for clinical education and training within Queensland Health. Individual education providers make local agreements with health service providers, and there is minimal relationship between public and private sector providers of training. The Queensland Health Nursing Education Standing Committee has developed a set of principles to guide clinical placements, however this needs to be strengthened.

Access to and Capacity for Placements

Currently, each education provider makes local arrangements with service providers–and in some instances across many service providers–to ensure students obtain clinical placement opportunities. Most providers have primary partnerships but often need to approach secondary and tertiary partners to meet all student needs. There is increasing demand by the higher education sector for placements, but at the same time, public health service facilities have no agreed capacity management tool to measure its maximum student capacity.

Funding Models to Support Clinical Teaching

Both education providers and health service providers claim that the current funding model is insufficient to support current clinical training, regardless of the method of teaching. Traditionally, universities provide one training facilitator for every eight students. There are numerous models of student placement funding operating, and it is considered that it would be desirable to have consistency in approach.

Communication/Coordination Issues

Communication usually occurs between the education provider and health service providers at coordinator level. The education provider may deal with multiple health service placement coordinators in order to place all students, whilst the health service coordinator may have to field many placement requests.

Clinical Placement/Facilitation Support

There are a variety of models of student placement and support, and anecdotal reports suggest that current support is not adequate. The health industry is experiencing unprecedented demand on its health workers to provide clinical care. Staff indicate they are burnt-out and cannot teach and provide care at the same time.

Changing skill mix has also shifted the teaching load onto a lesser number of skilled staff. There is currently also no agreement on the role of the enrolled nurse in teaching registered nurse undergraduates.

Lack of System Data

There is a lack of data to support forecasting of demand for clinical placement and the capacity for teaching in the clinical setting. There is no consensus on 'capacity to teach' in nursing and midwifery e.g. the number of students which could/should should be placed on a ward, over what period of time in the week, and the number of weeks in the year. Agreed determinants that provide a framework for capacity load are required as well as better data systems to ensure effective planning and coordination of clinical training.

Post Registration Outcome Area Issues

Subcommittee consultations identified key issues relating to the area of post registration clinical education and training. In summary these are:

- Higher education institution and industry collaboration,
- Multiple education and training requirements,
- Funding models to support post registration clinical education and training,
- Lack of systematic data.

Higher Education Institution and Industry Collaboration

Currently, education and training and professional development are offered through a variety of providers including hospitals, the tertiary sector, professional colleges, regulatory authorities and private providers. Closer collaboration is required to ensure the skill sets, content, and outcomes of courses meet stakeholder needs. A mechanism that allows health service and education providers to identify issues around post-registration education and training needs to be developed. Both partners need to collaborate to ensure learning and education reflects workforce need and to ensure a better understanding regarding skill development for nurses.

Multiple Education and Training Requirements

Current education and training demands include mandatory training, in-service, professional development, hospital based speciality education and training (TPNEP), and tertiary sector generic/specialist postgraduate education. These programs are occurring in a climate of reduced staffing levels, increased hospital activity and concentrated resource allocation. A review of current education and training delivery processes could identify methods for the streamlined delivery of education. Possible options may include alternate delivery mechanisms such as inter-professional learning and e-learning. Dedicated clinical facilitation support to units, wards and community settings would assist with professional development programs, in-service programs, and student support, as well as assist nurse educators in their role.

Funding Models to Support Post Registration Training

Education and training have not previously been recognised as core business for Queensland Health. Previous funding arrangements resulted in difficulties in securing resourcing for education, training and staff development and no quarantining of budgets. Appropriate funding support could include backfilling to enable quarantining of time for clinical education and training which has been historically difficult.

Lack of System Data

As with pre-registration data, information relating to post registration education within Queensland Health is currently difficult to obtain. Currently the state-wide system is perceived to be inadequate, with little or no compatibility between databases.

Clinical Networks Outcome Area Issues

Currently health service and high education providers operate as entities for the provision of education pathways, learning opportunities, education, training, and professional development. Current mechanisms for collaboration within Queensland Health include the Nursing Education Standing Committee and the Education Directions Committee which include membership from Queensland Health, higher education institutions, and the Vocational Education and Training sector. These committees do not include representation from private sector and non-government organisations.

For nursing and midwifery to be promoted as attractive professions for the future, improved mechanisms for coordination should be developed–including the establishment or enhancement of clinical training networks. This approach would engage higher education, private and public health service providers in providing direction, leadership and strategic planning to clinical education and training.

Refresher, Re-entry and Overseas Trained Entry Outcome Area Issues

The subcommittee further identified issues around overseas trained entry, Australian re-entry and refresher programs. Overseas trained entry applies to people with nursing and midwifery qualifications gained outside Australia. Australian re-entry nurses are applicants with previous registration in this country and greater than five years absence from clinical practice. Australian refresher nurses are applicants who have maintained registration but are seeking to update acute clinical skills. Issues in relation to these groups are:

- Overseas trained application processing,
- Access and capacity for placements,
- Training time frames,
- Clinical supervision and support.

Overseas Trained Application Processing

Currently, applications for registration from overseas trained nurses and midwives are received through the Queensland Nursing Council. Applications may take some time to be processed and delays may result should the candidate not supply all the required information. Delays may also occur, for example, during course credentialing or language competence assessment.

Access and Capacity for Placements

Re-entry programs require the completion of clinical placement under supervision and a Clinical Competence Assessment Process. Individual providers of education make local arrangements with health facilities to secure these clinical placements. Facilities need to be able to determine if adequate clinical placement requirements are accessible as overseas nurses, refresher and re-entry nurses are in competition for clinical placements occupied by undergraduate students.

Training Time Frames

Currently, re-entry application is via a Competency Assessment Service (CAS). The CAS comprises a challenge test and education modules. The timeframe for the module style learning may be expedited, and hence a return to the work environment, with skills escalators and the use of simulated learning. Limited funding assistance is available for re-entry candidates through scholarships which are either Commonwealth funded and administered by the Royal College of Nursing Australia, or State funded and administered by the Nursing Workforce Advice and Co-ordination Unit, Queensland Health.

Clinical Supervision and Support

Local sites arrange clinical supervision and support for re-entry and refresher nurses. The timeframes for supervision and support are individualised to the needs of the nurse, their level of confidence and their assessed competence. Feedback is provided in a timely manner via meetings, usually comprising the nurse, preceptor, and nurse educator/nurse unit manager. Ongoing clinical supervision and support are required to ensure continued learning, professional development, and assimilation into the workplace. Within the current climate of workforce shortages and the increasing demands of staff to provide clinical care the appropriate support could best be achieved through the presence of clinical specialists in ward areas, for example, clinical facilitators. The clinical facilitator would assume the clinical teaching role in addition to the preceptor.

11.3 Allied Health and Oral Health Professional Groups

Scope of Allied Health and Oral Health Subcommittee

An Allied Health and Oral Health Subcommittee was established to inform the work of the Taskforce. The term 'allied health' is poorly defined, and as such, allied health disciplines vary according to jurisdiction.

In Queensland Health, the currently included disciplines/professions are audiology, clinical measurement scientists, dietetics and nutrition, leisure therapy, medical imaging, music therapy, nuclear medicine technology, occupational therapy, orthoptics, orthotics and prosthetics, pharmacy, physiotherapy, podiatry, psychology, radiation therapy, social work and speech pathology.

These disciplines were recognised in the scope of the subcommittee. A number of other disciplines are not formally aligned with any of the three traditional subgroups (medical, nursing and midwifery, allied health /oral health) but are seen as most logically fitting within allied health–for example, exercise scientists and counsellors.

Oral Health is an entity which has been pragmatically linked with allied health for the purposes of this Taskforce, due to common interests and workforce characteristics. There are several disciplines within oral health. These are dentists, oral health therapists, dental therapists, dental prosthetists and dental technicians.

The subcommittee considered issues relating to the above professional groups and also remained alert to any intersection with effects on complementary roles such as clinical support staff, direct care workers, indigenous health workers and others. Indigenous Health Workers are currently employed under a Technical Officer award yet clinical roles are undertaken at times. Recommendations made by the subcommittee took into account emerging roles and education. Queensland Health has introduced cadetships for Indigenous applicants wishing to become allied health practitioners and positive support for these initiatives was covered in scope (see Section 11.4).

Issues for Allied Health and Oral Health Identified by Subcommittee

Issues relating to clinical education at professional pre-entry level, specialty level, and re-entry to the profession were identified at the initial Allied Health and Oral Health Subcommittee meeting. The issues raised by members were similar to those identified in the literature, with the addition of a strong perceived link between the need to 'get clinical education right' and the potential to improve recruitment and retention practices in Queensland Health.

Issues identified by the subcommittee at the initial meeting included:

- The tension between the differing expectations for competency development held by clinical service providers, education facilities and registration bodies,
- Current clinical education models are not able to adequately cope with the variability between courses, the number of students and service delivery workloads,
- Physical resources for clinical education are inadequate,
- Accessibility for students to placements and courses is inequitable geographically with respect to travel and accommodation,
- Communication between stakeholders is informal and sometimes reactive rather than planned,
- Patient safety requirements and a litigious environment are adding stress to clinical education environments,
- There is a need to recognise and plan clinical education for specialty areas in allied health and oral health,
- Work readiness at graduate level and at professional re-entry is currently poorly supported by clinical training opportunities,
- The need to provide effective training to disciplines that are employed in a number of sectors–i.e. not only in health–is a particular issue of relevance for allied health disciplines.

A table of identified issues and related objectives, strategies, critical enablers and outcome measures (see Appendix I) was used to focus discussion at subcommittee level and also to provide consultation material.

Although the identification of issues common to most disciplines allows for a shared approach to directions and strategies in clinical education, it is recognised that there are also important differences in clinical training between disciplines. The presence of a pre-registration year of supervised work for pharmacists and medical radiation professionals to complete their training, while physiotherapists, occupational therapists and speech pathologists undertake their clinical training during their degree years is one case in point.

Some disciplines also have a substantially fixed and inflexible undergraduate course (e.g. physiotherapy), while others have substantial variation and flexibility (e.g. psychology and social work). This level of variability in courses creates significant challenges for the group of allied health and oral health disciplines to deal with through a collaborative approach.

Proposed Broad Directions for Change

A number of broad directions for change were proposed, guided by of an Issues Paper[42] prepared by Professor Andrew Wilson, Executive Director Policy, Planning and Resourcing, Queensland Health, the issues identified at the initial subcommittee meeting, and the literature and models previously reported.

Subsequently, a draft set of Principles for Collaboration on Clinical Education and Training was agreed. The subcommittee endorsed these draft principles as the basis for focused and limited consultation to occur at Area Health Service level.

Draft Principles

There is a mutual interest in establishing a partnership between providers of education and Queensland Health to develop a workforce competent to deliver the services required by Queensland Health to provide safe and effective care. Any such partnership would promote and act by these principles:

1. Clinical education becomes an accepted, accessible and funded component of Queensland Health core business, with the over-arching aim of improving the safety of and access to clinical services.
2. As a core business requirement, the need for clinical education will be included as a key component of service, workforce and infrastructure planning within Queensland Health.
3. A governance structure is required to sustain a statewide partnership that provides the overarching framework for providing clinical education, and ensure that it remains a key priority. The governance structure should aim to support formal, collaborative, open and timely mechanisms for accessible clinical education and training.
4. There is capacity to use a variety of models of clinical education tailored to specific contexts (e.g. discipline, location, tertiary education provider) and flexibility to change models according to research evidence, stakeholder evaluations and/or data generated by formal reporting mechanisms.
5. Inter-professional education is seen as desirable and achievable as one component of clinical education at both professional pre-entry and specialist level.

Area Consultations–Methodology and Findings

The methodology chosen for consultation was limited by the restricted timeframe available for the Taskforce. The need to ensure all disciplines had an opportunity to be involved also limited the pace of consultations.

Methodology

The Allied Health and Oral Health Subcommittee determined that consultation should be conducted at the Area Health Service organisational level and be limited in the early stages to feedback about the draft broad principles. Although it was recognised that allied health disciplines work and are educated in other sectors, consultation was limited to Queensland Health staff and the Universities providing training.

42. A. Wilson (27 June 2006) Clinical Education and Training Taskforce, Issues Paper Version 1.Policy, Planning & Resourcing Division, Queensland Health

Aims

The consultation was planned so as to gather two specific types of feedback:

1. Indication of the benefits and concerns arising from the Draft Principles.
2. Suggested directions for high level strategies which could implement these principles and could ensure appropriate allied health and oral health perspectives.

The consultation was limited to a consideration of professional pre-entry level education. Any comment about the other three outcome areas was accepted, but time restrictions mandated one topic for primary focus. Focus groups were held in Townsville, and the Royal Children's Hospital and the Princess Alexandra Hospital in Brisbane.

Participants

Invitations to attend were extended to:

1. Clinicians who had experience in clinical education as identified by the Chair, Area Allied Health Workforce Advisory Groups,
2. Oral health representatives identified by the Acting Director, Oral Health, Queensland Health,
3. A Head of School/Department/Division of each allied health discipline at James Cook University, the University of Queensland, University of Southern Queensland, Griffith University, The Queensland University of Technology and Bond University.

The full representation achieved at each consultation is provided in Appendix J. Most disciplines were represented by at least one participant.

Summary of Findings about Draft Principles

The dominant themes of feedback about the Draft Principles are presented below.

The benefits were identified as:

- A positive direction overall,
- Clinical education and training as core business of Queensland Health was strongly supported but only if additional specific funding accompanied this commitment,
- The potential to benefit recruitment, career paths and job satisfaction if these directions were implemented,
- The potential to positively affect sharing and teamwork through inter-professional learning,
- The potential to reduce duplication across disciplines in some components of clinical education (e.g. orientation activities for students) once operationalised,
- The 'openness' feature was applauded,
- The emphasis on research evidence was strongly supported.

Concerns were presented thoughtfully and are summarised as follows. While the first issue relating to funding was seen as most important, the remaining issues are in no order of priority.

- Any strategies, initiatives and associated outcome expectations should be appropriately funded. Appropriate funding should be provided prior to delivery rather than retrospectively and to the 'department on the ground level',
- An emphasis on quality of clinical education, of clinical educators, and of the services provided to clients, should be included in the principles,
- More discussion and clarity about the extent and function of a 'governance' structure was needed,
- More clarity about the type of data to be collected, the purposes for which it will be used, and the effort needed to record it was required,
- Clearer definitions are needed to reduce confusion–for example, clinical education, inter-professional learning, training etc,
- Whether continuing education and training of current Queensland Health employees in the delivery of training is included in the scope and expected outcomes of the Taskforce (particularly with the advent of new equipment and technology) should be clarified,
- A focus on each profession be retained so no profession-specific issues are lost, and to capture the large variability in training across allied health disciplines,
- Allied health and oral health should have the same priority as medicine and nursing in this process,
- Physical infrastructure e.g. accommodation, teaching space, facilities, consumables, and support staff (e.g. dental assistants, administrative support), should be included in funding calculations,
- Clinical education and training skill and experience should be a pathway for clinical progression in awards and working conditions,
- Communication about the commitment to clinical education should be directed to all levels of management to ensure support,
- Clinical education models need to be culturally respectful,
- Emerging practice areas and projected health care needs should also be listed as drivers of models of clinical education.

Consistent calls were made for Queensland Health to recognise that that clinical education must be supported with appropriate allied health staffing levels. Recommendations of the Forster Report relating to appropriate allied health staffing levels were identified as a pre-requisite achievement to any meaningful introduction of clinical education as core business within Queensland Health.

Establishing Mechanisms

Support was expressed for the idea that planning and coordination mechanisms should be established from the "ground up" (starting with clinical educators), then across sectors and areas, to an overall statewide governance body. A formal consultation mechanism should be embedded in governance and support communication vertically across levels of coordination. Any mechanism must leave room for change based on research and innovation.

There was strong suggestion that two levels of mechanisms were required for most aspects of clinical education–and that this might be the basis of clinical education and training networks. The mechanisms needed a combination of both discipline specific and multi/interdisciplinary organisation, and also a combination of regional and statewide organisation. At state level, standards and resourcing could be determined and at regional level, district student clinical coordinators should manage the coordination of clinical placements across all disciplines. An inter-disciplinary coordinator was seen as positive for increasing clinical, educational and assessment collaboration.

Mechanisms for training educators in supervision and training skills should be interdisciplinary and across sectors where possible. Training networks could support students and clinicians.

It was considered essential to take the market and funding restrictions affecting universities into account in planning and establishing coordination mechanisms. There was support for the suggestion of a central allocation model for student placements to decrease competition between universities for placements and encourage learning about workable structures across disciplines.

Increased Range of Settings

Universities have been accessing placements for some disciplines across a range of sectors for a number of years. For other disciplines, innovative models involving an across sectoral approach have been trialled more recently. The Queensland Occupational Therapy Fieldwork Collaborative (QOTFC) is a case in point. It has been linking universities, public sector employers, private practitioners, non-government employers, the Registration Board and the professional association.

During consultations, participants identified innovative ideas for clinical education and training, for example, using 'Fit for Surgery' sites for physiotherapy training in basic skills. The West Moreton District Health Service was identified as currently implementing innovative clinical education in psychology. General practitioners, the Division of General Practice and psychologists are collaborating to provide a much needed service to local clients with anxiety and depression, and at the same time provide the supervised practice clinical psychologists need to become eligible for registration.

The limited number of courses/places for radiography and sonography training in Queensland, and the absence of any training for orthotists and prosthetists in Queensland were identified as associated issues.

Feedback from Services for Rural and Remote Allied Health (SARRAH) supported the promotion of rural clinical placements and educational opportunities. The most effective incentives for students to participate in rural placements were seen to be the provision of safe and comfortable accommodation for a reasonable cost (preferably free), and the provision of supervision by a clinician who was professionally experienced, had been a rural clinician for some time, and who was supported and confident in their educational skills.

Agreement of Roles and Responsibilities

There was consistent comment that the Queensland Health Student Deed of Agreement and schedule needs to be easier to use, be able to be developed for a full year cohort of students rather than be renegotiated for each change of students, and be readily responsive to requests from interstate students.

Several issues/scenarios were seen as benefiting from formal agreements between Queensland Health and universities, including:

- Processes for managing difficult or failing students especially with respect to accountabilities, responsibilities, extra time and support to educate and repeat,
- Arrangements for full-fee paying students,
- Training for educators in developing and maintaining standards of knowledge and skill,
- Funding arrangements,
- Minimum competencies/standards,
- Benchmarks of capacity per site for placements per discipline.

It was identified that there should be collaborative responsibility for the quality of graduates, with the different sectors responsible for certain aspects. Any formal agreements were seen by some participants to need binding weight or penalties for non-compliance.

Resourcing

A common theme raised was that resourcing for clinical education and training should be adequate, recurrent, able to be quarantined and rolled-over, and managed as locally as possible.

While there were suggestions that resourcing should be based on ratios of clinical educators to student numbers within a particular context, there were also strongly held views that levels of resourcing should reflect each discipline's different requirements.

Certain aspects of clinical education and training were highlighted as requiring essential funding, such as student accommodation, teaching space, information technology resources, equipment, consumables, support staff and travel. There was some variation in the priorities expressed for each discipline. For example, dentistry students are placed in clinics for 40 weeks of the year, raising the priority for relevant equipment, support staff, space and consumables for this professional group.

Residential accommodation was the single most consistently expressed need across all non-metropolitan District Health Services. There was also a firm opinion that equity in priority of access to available accommodation across the medical, nursing and midwifery, allied health and oral health disciplines was essential.

Additional structures and activities that were seen to require consistent funding were mechanisms to retain high quality clinicians as educators, training educators, the creation of clinical academic positions in Queensland Health, and reimbursing students for their extra expenses.

More limited support was given to a proposal to remunerate students in later year placements and to review career structures to reward clinical experience through private practice privileges in order to retain experienced clinicians in the workforce.

Research and Innovation

Research was seen as inseparably linked to education and training, and therefore should also be the core business of Queensland Health. Research into best practice models of clinical education and training was seen as essential. Evaluating types of educational supervision, use of simulation and virtual methods of training, level of pre-clinical preparation for placements, and inter-professional education and practice could be the focus of research activities.

The establishment of a statewide information and communication technology infrastructure to provide seamless access to data collection, reporting and research initiatives across sectors was identified as a primary requirement. Reliable data is essential to quantify and benchmark resource needs for student clinical education, practice and supervision.

Career paths and partnerships were also raised as areas necessitating innovation. Links between career paths and clinical education expertise were deemed essential, with a specific path the rural and remote context a possible option. All participants in the consultations raised the issue of ongoing training for clinicians to keep abreast of new technologies.

Formal partnerships were seen as the mechanism to promote research and innovation between universities and clinical departments, Queensland Health and indigenous organisations, and private practitioners with Queensland Health and universities, among others. Specific suggestions for joint Queensland Health and university clinical academic positions were made.

Student scholarships that provide sufficient incentive to undertake rural or remote placements, including a buffer against loss of income from jobs when students travelled away from metropolitan areas for placements, were proposed. Regional coordinators of clinical education within Queensland Health were also a suggested strategy.

11.4 Regional Forum Consultations

To complement the work of the subcommittees, the Taskforce scheduled 4 regional forums and a video-conference forum in October and November 2006. The purpose was to further engage stakeholders across sectors in identifying issues related to clinical education and training and their potential solutions.

Forums were held in Cairns, Townsville, Rockhampton and the Gold Coast. The videoconference forum engaged stakeholders in 20. regional rural and remote sites across the State, as well as approximately 50 participants in Brisbane. A full summary of consultation findings is outlined in Appendix K.

However, several key themes emerged. These included:

1. Limitations to accessing clinical placements:
   - Availability of staff to teach,
   - Lack of ability to currently identify organisational capacity,
   - Growing number of programs for which clinical education and training placements within Queensland Health are sought from
2. A review of current models of clinical education and training is needed in relation to:
   - Creation of work readiness, including skills for working in non-acute non-hospital settings,
   - Use of simulation,
   - Establishment of clear and appropriate roles for students,
   - Establishment of a development continuum from undergraduate to post graduate training,
   - Encouragement of inter-professional learning.
3. The range of settings in which clinical education and training is provided should be expanded including the:
   - Utilisation of non-hospital based settings,
   - Engagement of the private sector–requiring incentives and strategies to address issues such as indemnity etc.
4. Networking is required to:
   - Encourage rotation of students across settings to ensure a broad range of experiences,
   - Create opportunities to train across public and private sectors.
5. The issues for rural and remote areas include:
   - Lack of capacity in rural and remote areas,
   - Difficulties relating to access and quality of supervision and teaching e.g. staff are often sole practitioners and unable to obtain backfilling,
   - Greater cost associated with clinical education and training in these areas for students and services,
   - Lack of residential accommodation for students.
   - Rural and remote practice is seen as a specialty area which requires specific additional skills.

6. Funding:

- Additional funding and resourcing required,
- Quarantined and transparent accounting should be linked to specific deliverables,
- Clinical education and training requirements should be included in planning capital infrastructure,
- Gap funding for clinical academic appointments is needed.

7. Roles and responsibilities:

- Clarification of roles and responsibilities of universities and Queensland Health at all levels of the organisation is required,
- Queensland Health should include clinical education and training and research within its accountabilities.

8. Support for clinicians as teachers is needed including:

- Training for clinicians to be effective teachers,
- Support for administration and coordination,
- Availability of teaching tools and resources,
- Improved support from universities–including teaching skills and management of students who are underperforming.

11.5 Related Initiatives and Issues

Student Deed of Agreement

Deeds of Agreement between Queensland Health and universities, covering student placements for all disciplines, have been implemented and used since 2005. A comprehensive consultation and negotiation process occurred with representative Queensland universities and Queensland Health staff including district level and corporate units (e.g. Legal and Administrative Law Unit and Health Advisory Units) to develop the Deed which all stakeholders consequently endorsed. Queensland is the first Australian state to achieve generic agreement to formally manage tertiary level placements.

The Deed replaces the significant number of individual agreements that were formerly in place. It specifies the legal position on matters such as indemnity, intellectual property, privacy and consent with respect to student placements. Thirty universities, including all Queensland universities as well as inter-state and international universities, have signed a Deed.

While the main part of the Deed is signed by the Queensland Health Director-General and the university's registrar or similar and remains valid for five years, the Schedules to the Deed are completed and signed by the relevant university school and the District Health Service. Each student placement should be supported by a relevant Schedule (a Schedule may cover a number of placements for a number of students).

Issues with the application of Schedules have been identified as including:

- University staff responsible for initiating placement arrangements may not always be aware of appropriate processes, and do not always make arrangements through relevant channels. As a result, some placements may occur without a Deed Schedule in place. Designated points of contact and liaison within District Health Services would assist in addressing this issue, but in many instances District Health Services do not have resources available for this purpose.
- District Managers are at liberty to delegate authority for signing Schedules. However, it is not clear whether all District Health Services have implemented such delegation arrangements. As a result, placement supervisors may not be submitting Schedule documentation to the appropriate delegated authority. Compliance with the Deed framework is compromised when delegation authority is unclear at the District level.
- District Health Services are responsible for the storage of schedule documents and for the method and location of storage. Currently, there is no consistent approach to this process. Should a legal matter arise, there is a risk that relevant documentary evidence may not be retrieved in a timely manner.

The Workforce Planning and Coordination Branch and the Area Health Service Workforce Units of Queensland Health will continue to work collaboratively to support the Districts in this area.

Clinical Academics

It has been internationally recognised that over the last 10 years, academic medicine has entered a period of decline–as evidenced by a fall in recruitment to clinical academic posts. This is an issue affecting all clinical disciplines.

Factors contributing to this decline have been identified as poor public perception of scientific research; tension between balancing clinical teaching and research with demands for clinical services within limited budgets; increasing emphasis on non-clinical research; and limitations in funding models.

The expansion of health student numbers (medical, nursing and midwifery, allied health and oral health) and the establishment of new medical school places has increased demand for clinical training places in hospitals, senior clinicians to teach and supervise, and sufficient supervised experience with patients.

This creates an imperative to not only enhance capacity to recruit and retain clinical academics, but also review the current models clinical teaching. Clinical academic appointments are seen as a vehicle for education and health providers to work collaboratively to meet shared objectives.

A recent article in The Lancet[43] suggests strategies to reverse this decline, including:

- Attracting young clinicians to clinical academic careers through adequate funding and clear career paths,
- Recognising and supporting the three key elements of clinical academic positions–teaching, research and clinical practice–with teaching and research identified as critical outcomes within the clinical service context,
- Focus research on areas which will impact patients' lives, and base priorities on health needs.

A campaign to revitalise academic medicine has been implemented in Europe. Australia needs to also consider opportunities to build competitive teaching/research/clinical expertise and create an attractive market for clinical academics in this country.

In July 2006, AHMAC Chief Executive Officers agreed that Queensland would lead an across jurisdictional working group to clarify issues of concern in relation to clinical academic appointments and the associated administrative and management issues. A preliminary report was presented to the Health Workforce Principal Committee in February 2007, and it was agreed that the issues would be further progressed through the National Clinical Training Project.

As a result of consultation with all States/Territories to date, key common issues have been identified in relation to clinical academic appointments in Australia.

It has been identified that:

- Significant differences exist between pay levels of clinical and academic positions across jurisdictions which compromises recruitment and retention. Several states noted that key clinical academic positions have been vacated by staff seeking to fill more lucrative clinical posts,
- Management of this discrepancy varies from state to state, with several jurisdictions subsidising teaching positions through State or District arrangements to attract and retain quality staff,

- Regional and rural areas report significant strain on the small pool of staff currently teaching across private and public health sectors to support clinical placements in nonmetropolitan areas. Some jurisdictions do not currently make supplementary funding available to smaller health districts to assist in subsidising clinical academic positions. The result is a poor uptake of clinical academic appointments in regional health services.
- Structural arrangements between universities and health departments are ad hoc. There is a lack of consistent approach to:
    1. Reporting lines for positions.
    2. Performance management.
    3. Intellectual property.
    4. Percentage of clinical and teaching time.

Queensland Health has been involved in discussions with Queensland universities in relation to joint clinical academic appointments since 2004. Of the range of identified issues, salaries and employment conditions, indemnity and insurance arrangements were identified as the most contentious. Other issues for resolution included ownership of intellectual property, management of research activity involving university employees and management of information, (particularly with regards to privacy and confidentiality).

Both sectors have endeavoured to establish common principles of collaboration to underpin the establishment of clinical academic positions.

It is intended that Queensland Health's approach to clinical academic positions encompasses all disciplines and is not limited to the consideration of medical appointments only.

The lack of reliable data quantifying the number, role and cost of these positions poses significant barriers to assessing the current situation and to estimating future workforce need. Difficulty in recruiting and retaining staff in clinical academic positions and the anticipated increase in future student numbers highlights the need to progress work in this area as a priority for Queensland Health.

12. The Vision for the Future

What does Queensland need to achieve in relation to clinical education and training? What should be the vision for five-ten years time?

These were key questions considered by Taskforce members in their deliberations. A defined and shared vision was considered fundamental to the identification of possible strategies for change.

Early in the consultation phase, the following vision for Queensland was proposed:

1. A health workforce is well prepared and competent to flexibly meet the changing health needs of the Queensland population.
2. Health services recognise teaching, training and research as adding value to clinical service delivery–enabling staff to provide safe, quality service.
3. Clinical education, training and workforce development are core functions of Health Services/Queensland Health (explicitly resourced, planned, managed and evaluated at all levels of the organisation).
4. Clinical training is coordinated and managed within a statewide framework that ensures efficiency, effectiveness and reliability.
5. Successful partnerships across academic and clinical environments, across disciplines and across organisations, support sustainable clinical education and training.
6. Roles, responsibilities and accountabilities for clinical education and training in Queensland are agreed and clearly articulated.
7. Clinical education and training (including the allocation of student places) is linked to current and future workforce needs.
8. Dedicated, clearly identifiable and appropriate resourcing is provided and reflects the real costs of clinical training.

Following consideration of the findings of each of the subcommittees as detailed in their reports to the Steering Committee, this vision was further refined and is now reflected in a set of seven common outcome area statements with related recommendations as outlined in section 14 of this report.

13. Underpinning Principles

Underpinning principles have been established to guide the direction and intent of recommendations for appropriate action to achieve the desired clinical education and training outcomes. These principles provide both a benchmark against which strategies may be evaluated and a foundation for the development of future initiatives.

It is intended that all clinical education and training strategies will:

- Respect the values and contributions of individual professions and disciplines,
- Aim to develop life-long learners and teachers,
- Encourage and facilitate innovation,
- Facilitate open and transparent communication between stakeholders,
- Respect the views/interests of all stakeholders,
- Regularly review clinical education and training paradigms to ensure they are the most efficient and effective approach,
- Be culturally respectful,
- Be cognisant of the diverse health service needs of the Queensland population,
- Ensure clinical education and training reflects emerging service models,
- Reflect future health workforce requirements,
- Be supported by an organisational culture that values, respects and is committed to clinical education and training,
- Use current and future resources as efficiently as possible.

14. Common Key Outcome Areas and Recommendations

A number of principles and outcome statements were developed to guide the formation of recommended strategies. These reflect the critical common issues to be addressed and are identified under the following broad headings:

1. Commitment to clinical education and training.
2. Quality of and capacity for clinical education and training.
3. Coordination and integration of clinical education and training.
4. Funding.
5. Data systems supporting clinical education and training.
6. Collaboration and Communication.
7. Workforce Planning.

For each Common Outcome Area, an overarching outcome statement and related elements have been articulated.

It is recognised that a number of the required outcomes outlined are aspirational in nature, and that significant work and investment by various stakeholders is required to achieve the necessary changes. In developing its recommended strategies, the Steering Committee was cognisant of the need to prioritise and limit recommendations to ensure that the focus is on those key areas requiring action. This is to ensure that action is taken in those areas that will have the greatest impact on achieving key outcomes.

Common Outcome Area 1.

Commitment to Clinical Education and Training

Clinical education and training are core functions of Queensland Health–explicitly resourced, planned, managed and evaluated at all levels of the organisation.

1.1 Clinical education and training is more than core business, it is a foundation of a quality health system and clinical professional culture.

1.2 A clinical education, training and research culture directly contributes to a health system focussed on quality teaching, improved patient safety and health outcomes.

1.3 Students and new graduates are seen as an asset rather than as a liability in the workplace.

1.4 Clinical education and training is a central responsibility of all health clinicians.

1.5 Staff providing clinical education and training are supported, recognised, evaluated and developed as teachers.

1.6 Responsibility for coordinating and managing clinical education and training is recognised as additional to the responsibility to teach and train, and is separately resourced.

1.7 Rostering and workload management practices take into consideration required clinical teaching, education and training commitments.

1.8 Clinical education and training is included in all service, workforce and infrastructure planning across Queensland.

1.9 Queensland Health and key clinical education and training stakeholders actively participate in processes to plan the allocation of funding and student places to meet future Queensland health workforce needs.

Recommendation 1:

Queensland Health should commit to providing a number (to be determined for each discipline group) of quality assured supervised clinical placements for Commonwealth government supported places in the first instance, and an agreed number of full-fee paying professional pre-entry students, in Queensland Higher Education Institutions across the calendar year on a three year cycle. The number of clinical placements for any disciplinary group would reflect the number of educationally appropriate private, public and non-government experiences.

Recommendation 2:

A requirement to participate in clinical education and training activities should be incorporated into the job descriptions and performance appraisal and development (PADs) plans of all clinicians working in Queensland Health settings where clinical teaching is undertaken.

Recommendation 3:

The elements of clinical education and training activity should be defined and formally reported upon. Requirements for reporting on clinical education and training activity and outcomes should also be defined and embedded in reporting mechanisms. Such reporting should be, as a minimum, included in the Annual Report and existing reporting to government on the achievement of specified health service outcomes.

Recommendation 4:

Queensland Health should ensure that all new graduates employed in Queensland Health receive an organisationally consistent paid orientation to the workplace appropriate to their discipline, with a focus on patient safety and what is required to prepare them for the workplace.

Recommendation 5:

Queensland Health should ensure that staff commencing in new roles or unfamiliar settings will receive orientation to the workplace appropriate to their discipline with a focus on patient safety and what is required to prepare them for the workplace.

Recommendation 6:

Rostering practices for Post Graduate Year (PGY) 1 and 2, as additional medical graduates enter the workforce, should ensure that:

i. Prevocational learning objectives and capabilities are achieved regardless of the pattern of rostered work,

ii. The hours of the working day i.e. day, afternoon and evening shifts are reasonably distributed across PGY1 and 2 doctors.

Recommendation 7:

Clinical education and training expertise is recognised in career paths for allied health and oral health staff.

Common Outcome Area 2.

Quality of and Capacity for Clinical Education and Training.

Clinical education and training capacity is maximised in an environment that quality assures clinical education and training outcomes.

1.1 The quality of clinical education and training is able to be assessed objectively against robust standards and against commitments which have been agreed between relevant stakeholders.

1.2 Clinical placements are of a high quality and ensure contact with an appropriate range of patients/experiences and exposure to an appropriate range of health conditions and environments.

1.3 Education and training keeps pace with evolving changes in health care delivery and population morbidity and demographics.

1.4 Work readiness is clearly defined in partnership with stakeholders and used to inform the development of stakeholder training programs.

1.5 Organisational capacity to meet clinical placement requirements is clearly defined.

1.6 Criteria to determine the suitability of clinical placements for students/trainees are clearly defined, communicated and able to be understood and scrutinised by stakeholders.

1.7 Providers of clinical teaching are supported to develop high quality, situation appropriate, teaching techniques.

1.8 Clinical teachers, educators, students and trainees utilise learning tools, as appropriate, that increase the efficiency and effectiveness of clinical education and training.

1.9 Safe and affordable accommodation (onsite or nearby) is available for all disciplines so that:

i. Choice of clinical education and training learning experience in a chosen Health Service District is not limited, and

ii. Choice of a rural/remote location for career employment is not limited.

2.10 Appropriate clinical and ancillary space is available for clinical education and training in all health service districts across the state.

Allied Health and Oral Health Outcome Area

2.11 Innovative models of allied health and/or oral health staffing, such as outreach models, encourage access to high quality clinical education and training in rural and remote locations.

Medical Outcome Area

2.12 An efficient and effective prevocational medical education and training function within Queensland is:

i. Led by one or more people with a high level of formally recognised expertise in medical education,
ii. Focused on educating and training doctors to meet the health needs of the Queensland population,
iii. Resourced to a level that enables the achievement of required quality education and training outcomes,
iv. Tasked with overseeing education and training in a manner that is effectively coordinated and of a consistent quality,
v. Undertaken in accordance with an accepted educational framework,
vi. Able to be evaluated to determine its effectiveness,
vii. Able to meet the needs of all prevocational doctors rather than just PGY1,
viii. Able to meet the needs of both Australian and International Medical Graduates,
ix. Flexible in its mode/s of delivery and not limited to individual hospitals e.g. networking of facilities/services across sectors,
x. Coordinated across health sectors and not limited to the public sector,
xi. Held accountable and have clear lines for reporting,
xii. Responsible for minimising duplication in prevocational medical education and training.

Recommendation 8:

Queensland Health should ensure that clinical service delivery staff receive educational preparation to enable them to effectively teach and assess within clinical environments.

Recommendation 9:

Students should be provided with an early opportunity to reflect upon and understand their future role as clinical teachers.

Recommendation 10:

Queensland Health should implement consistent and equitable strategies to overcome disincentives to working as a clinical academic within and/or between disciplines across Queensland.

Recommendation 11:

A framework of support (e.g. accommodation, travel etc) for students undertaking outer and non-metropolitan clinical placements should be developed and consistently applied across universities and types of placements to maximise the number of placements able to be utilised. A review of currently available accommodation should be undertaken.

Recommendation 12:

Capacity Management Tool/s to assess organisational capacity for student placements should be developed and implemented to allow health sector sites to identify available clinical placement opportunities.

Recommendation 13:

Scholarships or other incentives should be used to improve the access of targeted groups and locations to clinical education and training.

Recommendation 14:

Clinical Training Networks should utilise where appropriate inter-professional learning to maximise the achievement of efficiencies in clinical outcomes that have been evidenced from this model.

Recommendation 15:

Principles should be established to guide the implementation of future public/private health sector partnerships to educate and train the clinical health workforce. These principles may vary between disciplines and professional groups.

Recommendation 16:

Electronic professional/learning portfolios should be identified and implemented as an aid to facilitate the efficient and effective delivery of clinical education and training.

Recommendation 17:

There should be clear articulation of the role and future of skills development centres within Queensland. This should recognise the role of centres and affiliate centres across sectors.

Recommendation 18:

Core training courses for Queensland Health clinicians should be developed and rolled out.

Priority areas for action in 2007 should include: preparation of doctors undertaking country relieving; advanced life support skills for Interns; emergency crisis resource management for doctors and nurses; maternity crisis resource management for midwives and registrars; and intensive care for physiotherapists.

Recommendation 19:

The Skills Development Centre should work with District Health Services and other skills development centres to ensure these programs are systematically and consistently delivered to achieve maximum effectiveness.

Recommendation 20:

A consistent approach to the accreditation of PGY2 terms should be developed. This approach should be mindful of the requirements of the National Curriculum Framework, the appropriateness of current PGY2 Accreditation Standards within Queensland, and the capacity of all relevant facilities to meet a consistent standard within a reasonable time frame.

Recommendation 21:

Positions dedicated to delivering and/or coordinating allied health and oral health clinical education and training should be established at Area and District Health Service level within Queensland Health.

Recommendation 22:

Supervision Training Packages that are to be developed and implemented for allied and oral health should be managed as a strategy within the overall clinical education and training framework.

Recommendation 23:

Specialist education for clinically based nursing and midwifery postgraduate and ongoing education activities is developed within local or regional centres, where appropriate, in response to identified clinical needs and contemporary nursing and midwifery practice.

iii. A secretariat to support discipline specific and across-disciplinary clinical education and training initiatives.

The responsibilities of the above discipline/profession specific Clinical Education and Training Coordination Units will include coordinating clinical education and training at a statewide level in conjunction with the respective disciplines and professional groups and:

i. Addressing the full spectrum of clinical education and training across from professional pre-entry to post-graduate specialist training and re-entry training,

ii. Addressing the needs of new graduates, preparation of clinicians commencing in unfamiliar clinical practice environments, and clinicians re-entering clinical practice,

iii. Facilitating clinical training networks across the public, private and non-government sectors where appropriate,

iv. Identifying and maximising opportunities for multi-disciplinary cooperation.

For the medical profession–the Medical Clinical Education and Training Coordination Unit should incorporate the existing national function and pre-vocational accreditation standards setting responsibilities of the Post Graduate Medical Education Council of Queensland (PMCQ). Further consideration needs to be given to the most effective and efficient means of undertaking accreditation of pre-vocational training terms.

For nursing and midwifery–the Nursing and Midwifery Clinical Education and Training Coordination Unit should incorporate the existing role of the Nursing Education Standing Committee.

For allied health and oral health–the Allied Health and Oral Health Clinical Education and Training Coordination Unit should incorporate the role of the Allied Health Standing Education Committee.

Recommendation 25:

The Steering Committee recognised the need for a mechanism for the overall coordination of clinical education and training across disciplines at a statewide level but differed in opinion as to the best mechanism and authority to achieve this.

As a basic function the committee recommends a multi-disciplinary advisory council on clinical education and training reporting to the Minister. Membership should include the chairs of the advisory panels for the three Clinical Education and Training Coordination Units across medicine, nursing and midwifery, and allied health and oral health. .

Recommendation 26:

The coordination structures (refer Recommendation 24 and 25) should be positioned externally to Queensland Health–to facilitate a level of independence–with a reporting line to the Minister for Health.

Recommendation 27:

Clinical Training Networks across the public, private and non-government sectors should be established where appropriate. Networks should be established as collaborations between employers hosting clinical education and training and higher education institutions or speciality training bodies/colleges depending upon the nature of the individual networks.

Clinical Training Networks may incorporate Clinical Placement Advisory Committees at a statewide level.

Clinical placement co-ordinators should be a feature of networks within Queensland Health. These positions should be funded and established at the service delivery level to support the implementation of strategies oversighted by discipline/profession specific Clinical Education and Training Coordination Units.

Recommendation 28:

Universities are to clearly identify their individual clinical placement requirements in terms of both hours of supervised placement and the clinical education and training outcomes to be achieved during each placement to the training facility.

Recommendation 29:

A corporate framework should be established that informs the negotiation of local Student Deed of Agreement schedules.

Recommendation 30:

Queensland Health should support clinicians to develop advanced skills and competencies in clinical education and training. Career pathways should recognise and reward clinicians who develop higher levels of expertise in and commitment to clinical education and training.

Recommendation 31:

The prevocational medical education function in Queensland should be led by appropriately qualified medical education academic/s.

Recommendation 32:

The priority areas for the establishment of medical clinical training networks should be:

i. General medicine,

ii. Surgery (taking into consideration the implications arising from a transition from basic surgical training (BST) to pre-surgical education and training (Pre-SET)),

iii. Radiology.

Common Outcome Area 4.

Funding

Funding is sufficient to achieve quality clinical education and training outcomes.

4.1 Funding and resourcing of clinical education and training are sufficient, equitably distributed, efficiently utilised, indexed in line with costs, and reviewed regularly to ensure adequacy.

4.2 Funding contributions from different sources are negotiated and clearly documented.

4.3 Funding for clinical training placements/posts is tracked to ensure that it is utilised for clinical education and training purposes.

4.4 Jurisdictional stakeholders actively support efforts to ensure the higher education sector is appropriately funded for clinical education and training.

4.5 Specific funding is made available to provide the capital, human and financial resources necessary to improve clinical education and training capacity in regional, rural and outer-metropolitan areas.

Recommendation 33:

The methodology described in the New Funding Model Policy Papers for identifying clinical education and training effort in the New Funding Model is recognised as a starting point but should be subject to continued review.

Recommendation 34:

Future funding models should be able to respond to the diversity in current education and training models/approaches across disciplines and should also be sufficiently flexible to adapt to new models.

Recommendation 35:

The elements of clinical education and training funding and expenditure to be reported against should be defined.

Recommendation 36:

An audit of education infrastructure and resources should be undertaken and a mechanism for ensuring adequate resourcing of the clinical education and training function across networks of facilities providing clinical education and training should be developed.

Recommendation 37:

Appropriate and adequate infrastructure resources are made available to support clinical education and training. Allocation of resources should be transparent and directly linked to the specific training and education support needs of individual disciplines and training providers. Support should include but not be limited to: clinical and non-clinical space, information technology, and support staff.

Recommendation 38:

The schedule of fees relating to university contributions to Queensland Health for clinical placements should be reviewed and be consistent across both District Health Services and universities and equitable across disciplines across the State.

Recommendation 39:

Provision of recurrent funding should be provided for Nurse Educator positions to co-ordinate, market, and ensure clinical relevance for the six most accessed Transition to Practice Nurse Education Programs (TPNEP). These positions would also have responsibility for a cluster of additional TPNEP.

Recommendation 40:

The model of support and funding for refresher, re-entry and overseas trained health practitioner programs including nurses, midwives and allied health staff should be reviewed.

Common Outcome Area 5.

Data Systems supporting Clinical Education and Training

All aspects of clinical education and training are underpinned by reliable, comprehensive and valid data.

5.1 There is a standard mechanism for collecting, storing, retrieving, reporting and interpreting data on need, availability and utilisation of clinical education and training placements/posts so as to monitor demand and supply.

5.2 The mechanism:

i. Functions across health and other relevant sectors,
ii. Captures, reports and validates clinical education and training activity at a local and statewide level,
iii. Informs and provides relevant information to stakeholders,
iv. Records linkages/dependencies between different types of clinical training places,
v. Provides early indication of when intervention is needed to meet required clinical education and training quality and quantity,
vi. Supports relationships between education institutions and health facilities,
vii. Identifies a minimum data set,
viii. Describes clinical education and training activity using standard definitions and data sets for relevant disciplines,
ix. Provides a mechanism for decision making and reporting to achieve an equitable distribution of funding.

5.3 Data collection, analysis and reporting inform clinical education and training governance.

5.4 Information gathered and analysed is shared between relevant stakeholders and reported in a transparent manner.

5.5 Information gathered should be the minimum data required for decision-making.

Recommendation 41:

A Queensland Health Minimum Data Set/s for clinical education and training should be defined and adopted through a consultative process with clinical education and training stakeholders and parties with data expertise. This consultative process should formalise the methods and sources for obtaining this data.

Recommendation 42:

A Clinical Education and Training Information System and Database should be implemented that informs clinical education and training governance and equitable distribution of funding. The role of this information system in the governance of clinical education and training should be explicitly stated and supported.

Recommendation 43:

The development and implementation of a suitable information system should be adequately resourced with development, implementation, and recurrent costs fully realised.

Common Outcome Area 7.

Workforce Planning

Workforce planning guides the development of a broad range of strategies that enhance clinical education and training capabilities.

7.1 Responsibility for determining future workforce needs is aligned with the areas accountable for health service planning and provision, on the basis of the intrinsic link between the two functions.

7.2 The creation of new training placements and positions will be based on valid projected population service needs and the availability of clinical experiences that meet relevant accreditation requirements.

7.3 New clinical training positions are created where there is an identified need, to increase capacity to accommodate additional Queensland clinical graduates while ensuring quality of training is maintained.

7.4 Recruitment and selection activities recognise the need to recruit a clinical workforce able to teach and supervise across the continuum of clinical education and training.

7.5 Appropriate clinical education and training mechanisms are able to support the body of knowledge required for new and extended service provision.

Medical Outcome Area

7.6 "Service only" Senior and Principal House Officer positions–especially in rural, regional and outer-metropolitan areas–are accredited as training posts as soon as suitable trainees and skilled supervisors become available, with appropriate infrastructure support to meet accreditation standards of the relevant professional bodies, in particular the Specialist Colleges.

Recommendation 49:

Accountability and responsibility for health workforce planning in Queensland should be retained by Queensland Health and undertaken consistent with the above common outcome areas.

Recommendation 50:

Clinical education and training tasks should be allocated to appropriately skilled staff in a manner that maximises efficiency and effectiveness.

Recommendation 51:

Queensland Health should promote equitable, flexible and more accessible discipline specific pathways into the workforce for re-entry and overseas trained health professionals while ensuring professional standards are maintained and regulatory requirements are met.

15. Conclusion

Queensland is currently in a position to make significant advances in the way in which clinical education and training is planned and managed in order to support and strengthen the health workforce.

The Ministerial Taskforce on Clinical Education and Training has brought together major stakeholders within Queensland Health, higher education, professional education associations and colleges, regulatory bodies, and targeted private and non-government organisations to commence a dialogue. This has centred on the most effective methods of providing clinical education and training to the numbers of students and trainees seen as essential to meet predicted health service delivery needs.

The dialogue between individuals, professional groups, Taskforce subcommittees and the Steering Committee has been frank and robust. It has confirmed the respect within current inter-relationships between health disciplines, and resulted in many instances in the support of multi-disciplinary approaches to clinical education and training in Queensland.

There is general agreement across stakeholders that Queensland will be able to create capacity for adequate, quality assured clinical education and training into the future. Nevertheless, for this to be achieved, additional resources and a sustained long-term vision will be required in order to support the necessary change process.

The vision is for planned and coordinated clinical education and training processes that will be sustained by tangible resource allocation and by open collaboration across sectors. To achieve the objective of clinical education and training as core business, Queensland Health will need to ensure the implementation of real strategies with measurable outcomes.

The Ministerial Taskforce on Clinical Education and Training has proposed recommended strategies for the way forward in this report. The following 5 years will prove to be the next real challenge.

health • care • people

Queensland Government
Queensland Health