

Clinical Training Profile: *Optometry*

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For external consultation

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Contents

Optometry Context.....	2
Accreditation.....	3
Optometry Education Pathway in Australia	4
Clinical Training	5
Optometry Programs.....	5
Clinical Training Hours.....	6
Courses	7
Characteristics of Clinical Training	8
Clinical Training Supervision.....	9
Simulated Learning Environments (SLE)	9
Appendix A – Definition of 2012 clinical placement settings.....	11

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Optometry Context

Optometry is a registered health profession with the Australian Health Practitioner Regulation Agency (AHPRA) through the National Registration and Accreditation scheme (NRAS). It is a requirement by National Law that all practicing optometrists must be registered with the Optometry Board of Australia (OBA). In 2012, there were a total of 4,564 registered optometrists in Australia, with 96.5 per cent in the optometry workforce actively working or looking for work.¹

Optometrists are primary health care providers trained to perform eye examinations to determine defects in vision, signs of injury, ocular diseases and systemic diseases with ocular manifestations. Optometrists make diagnosis, prescribe, fit and supply optical aids and therapy to correct and manage vision problems and eye diseases.²

Optometrists practicing therapeutically must be registered and have scheduled medicine endorsement recognised by the OBA. Optometrists with accredited qualifications in ocular therapeutics are trained to prescribe or administer OBA approved schedule 2, 3 and 4 medicines for the treatment of a number of eye conditions.³ From 1 December 2014, those applying for general registration as an optometrist are required to hold a qualification in ocular therapeutics. Accredited and provisionally accredited optometry programs have been updated to include topics in ocular therapeutics, so that new recent graduates do not require any additional qualifications to practise therapeutically.⁴

A large number of optometrists in Australia are self employed or work in private practice which includes independent practice or working for large optical companies. Optometrists also work in public clinics, hospitals, community health centres, specialist clinics or with ophthalmologists.

At 30 June 2012, there were a total of 524 students enrolled in an OBA approved program that leads to registration as an optometrist⁵. In recent year female students have accounted for approximately two thirds of graduating optometry students.⁶ Optometry is a practical discipline requiring significant levels of clinical training prior to registration. Clinical training in health care settings assists students to acclimatise to the culture and roles required in optometry practice and equip them with the skills and knowledge necessary for professional competence. Clinical placements involve optometry students working under supervision in a specific health setting, with the aim of providing the link between theoretical knowledge and practical application.

¹National Health Workforce Dataset (NHWDS): Allied Health Practitioners, 2012.

² Department of Immigration and Border Protection, Australian skills Recognition Information, Optometry-251411. Sourced: <http://www.immi.gov.au/asri/occupationso/optometrist.htm>

³ Australian College of Optometry. Australian College of Optometry Certificate in Ocular Therapeutics Course Information, p. 4

⁴ Optometry Board of Australia, Optometry registration standard for general registration for initial applications,

⁵ Australian Health Practitioner Regulation Agency Annual Report 2011/12.

⁶ Department of Education, Higher Education Statistics Collection, 2012.

Accreditation

The OBA is supported by the Australian Health Practitioner Regulation Agency (AHPRA), and is responsible for overseeing the regulation of the optometry profession within Australia. Specific responsibilities of the OBA include registering optometrists and students; developing standards, codes and guidelines for the optometry profession; handling notifications, complaints, investigations and disciplinary hearings; assessing overseas-trained practitioners who wish to practise in Australia; and approving accreditation standards and accredited courses of study.⁷

The Optometry Council of Australia and New Zealand (OCANZ) is the accreditation authority responsible for accrediting education providers and programs of study for the optometry profession. OCANZ assesses undergraduate and post-graduate optometry courses that can lead to registration as an optometrist and postgraduate courses in ocular therapeutics in Australia and New Zealand for accreditation purposes. Additionally, OCANZ assesses overseas optometry qualifications and conducts a competency-based examination for suitably qualified international optometrists. An assessment process of overseas-trained optometrists for therapeutic prescribing is also available.⁸

OCANZ does not specify the curriculum for optometry programs, but has established a set of 10 program Standards for the development of optometry programs. The Standards include optometry school governance/funding, educational goals, program management and curriculum, teaching methods and staff, clinical training, assessment, student selection and physical resources. For accreditation purposes, it is a requirement that optometry schools provide evidence to OCANZ that their programs of study meet these standards and that they are able to produce graduates competent in therapeutic practice.⁹

⁷ Optometry Board of Australia and New Zealand, About Optometry Board
<http://www.optometryboard.gov.au/About.aspx>, accessed 25 November 2012

⁸ *ibid*, programs of study <http://www.optometryboard.gov.au/Accreditation.aspx>, accessed 25 November 2012

⁹ Optometry Council of Australia and New Zealand, 2012, Accreditation Manual for Optometry Courses in Australia and New Zealand Part 1, p. 7

Optometry Education Pathway in Australia

Figure 1 shows the education pathway for optometry students leading to general registration as an Optometrist in Australia.

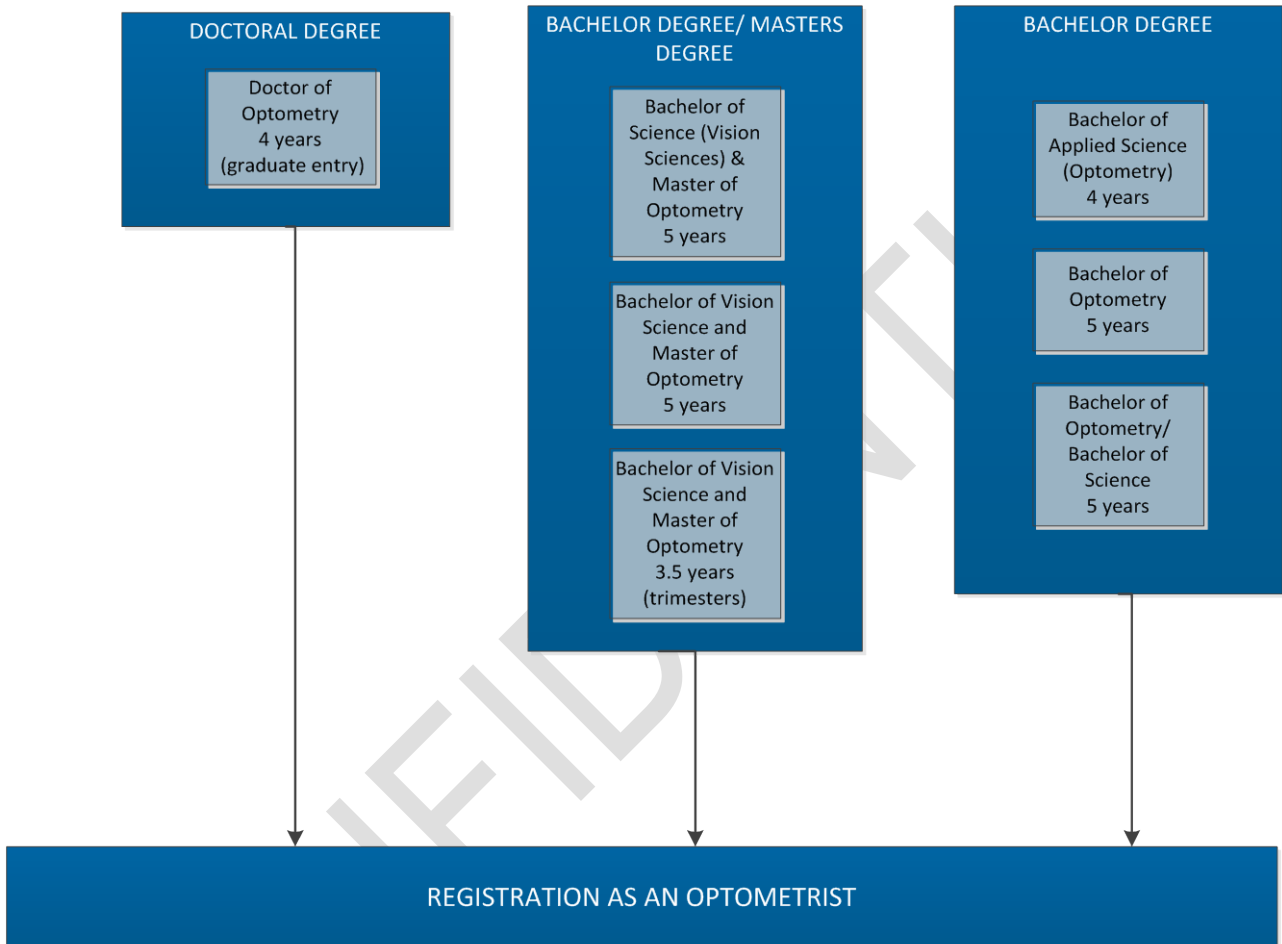


Figure 1: Education Pathway for Optometry 2012

Source: Optometry Board of Australia, Approved Programs of Study 2012

The education pathway includes accredited or provisionally accredited optometry programs approved by the OBA in 2012. However, subsequent figures included in the profile only include data provided by higher education facilities with approved and conditionally approved optometry programs that participated in the Health Workforce Clinical Training Placements Survey 2012. One Bachelor/ Masters degree represented in the pathway diagram was not included in the subsequent analysis as this was a new course, from which no data was available at the time of publication.

Clinical Training

According to OCANZ Standards, higher education providers must provide students with extensive and varied clinical experience. The clinical training and settings standard recognises that core training is often delivered within a university optometry clinic. However, there is also a need for higher education providers to provide students with experience across a range of settings to ensure that students have direct contact with patients of varying ages and social backgrounds, and to increase exposure to a range of ocular diseases and dysfunctions.¹⁰

The clinical training component of optometry education is competency based, with no specified minimum number of clinical training hours a course must provide for student registration to practice as an optometrist.

Clinical training offered within programs aims to equip students with the clinical assessment and treatment skills necessary to practice optometry competently and safely upon graduation. Optometry programs are not followed by an internship year or period of supervised practice. The clinical skills taught in university courses are therefore vital for competent and effective practice upon graduation.

Variances in curricula exist among optometry programs, with higher education providers offering clinical training and work placements at varying times within the course and at varying lengths. Nevertheless, it is common for the core clinical training components of the course to begin midway through the course and then increase in intensity during final years.¹¹

Optometry Programs

In 2012, there were six entry-level accredited or provisionally accredited optometry programs, in Australia from which data was available for this report:

- a four year Bachelor of Applied Science (Optometry)
- a five year Bachelor of Optometry
- a five year Bachelor of Optometry/ Bachelor of Science
- a five year Bachelor of Medical Science (Vision Science)/ Master of Optometry
- a five year Bachelor of Vision Science/ Master of Optometry
- a four year Doctor of Optometry.

¹⁰ Optometry Council of Australia and New Zealand, 2012, Accreditation Manual for Optometry Courses in Australia and New Zealand Part 2, p. 16-17.

¹¹ Health Workforce Australia, Survey of 2012 clinical training placements.

Clinical Training Hours

Figure 2 depicts the range of clinical training hours required for accredited and provisionally accredited Australian optometry courses in 2012, as reported by higher education providers. The clinical training requirements for optometry courses range from 400 hours to 816 hours of clinical training. The average of clinical training hours reported for optometry courses in 2012 was 613 hours.¹²



Figure 2: Range of clinical training hours across optometry programs, 2012

Source: Survey of 2012 clinical training placements. Health Workforce Australia.

Note: Due to the small number of accredited and provisionally accredited optometry courses, courses are not identified by type in the graph.

¹² The overall average in this clinical training profile is the simple average of clinical training hours of all optometry courses that were taken into account for the analysis. The overall average of clinical training hours for optometry courses that were taken into account for the analysis is 613.

Courses

The number of students per course varies as reflected in the equivalent full time student load (EFTSL) for the courses, ranging from 3 students to 285 students.¹³ The low EFTSL recorded in this case reflects a course that is no longer accepting new enrolments.

Figure 3 compares the variation in clinical training hours (either above or below the average), with the equivalent fulltime student load (EFTSL). Three programs required clinical training hours above the average, and three programs required clinical training hours below the average. There were a total of 626 EFTSL, with the majority of students (69 per cent) enrolled in programs requiring clinical training hours above the average. A smaller proportion (31 per cent) of students were studying in programs with clinical training hour requirements below the average.

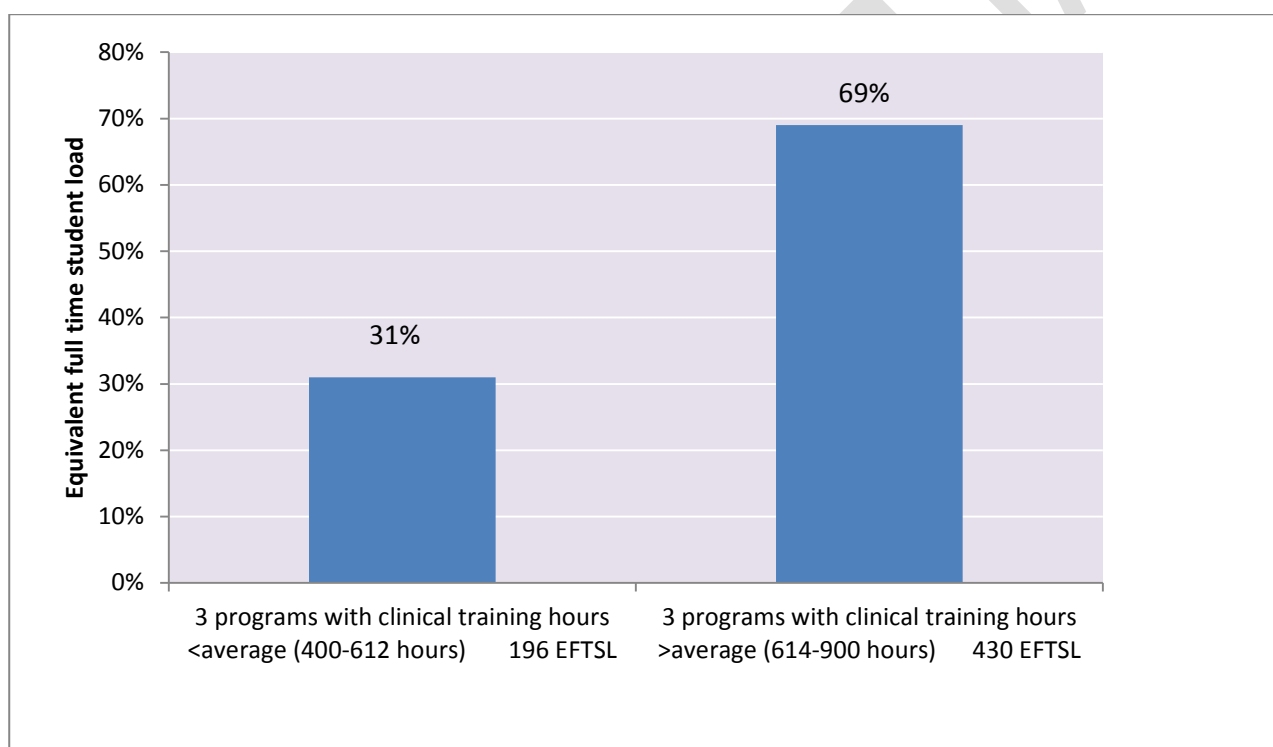


Figure 3: Proportion of student load in optometry programs, 2012

Note: The Optometry training profile includes only accredited and provisionally accredited undergraduate or graduate entry programs that on completion, lead to registration to practice in the profession at time of publication.

¹³ Health Workforce Australia, Survey of 2012 clinical training placements.

Characteristics of Clinical Training

It is each university's responsibility to ensure that adequate clinical placement experience is available for every optometry student to develop competence in the key areas of optometry, and that clinical placement exposes students to working with people from varying backgrounds and ages across a range of settings.¹⁴

Figure 4 reflects the proportions of clinical training hours by setting. The majority of optometry clinical hours (65 per cent) are carried out within educational institutions. The remainder of optometry clinical training hours are spent in human service (16 per cent), private/professional practice (11 per cent), primary care and community health (3 per cent), ambulatory/outpatients (2 per cent), diagnostic services (2 per cent) and aged care settings (0.3 per cent). In comparison to other health professions, optometry students spend a considerable amount of clinical training time in educational institutions and have limited exposure to acute care settings.

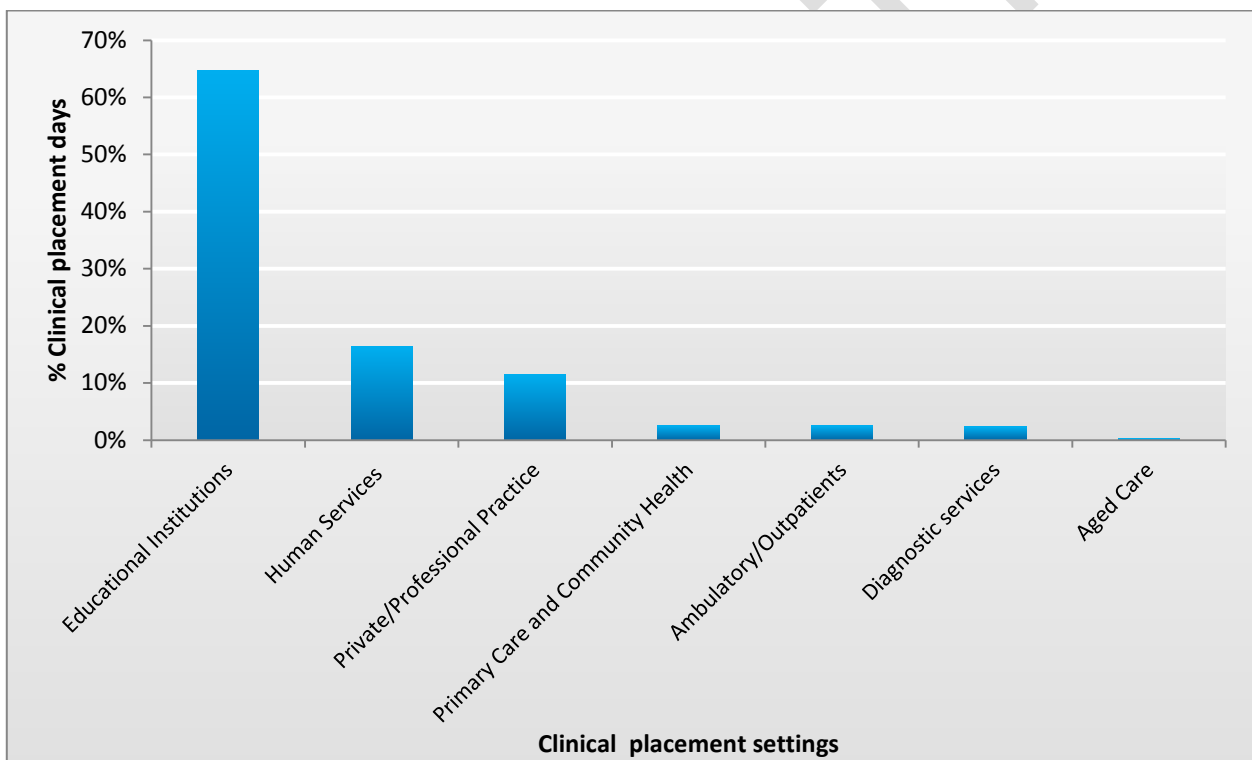


Figure 4: Clinical placement settings by area of optometry, 2012

Source: Survey of 2012 clinical training placements. Health Workforce Australia.

¹⁴ Optometry Council of Australia and New Zealand, 2012, Accreditation Manual op. cit, Part 2, p. 16-17

Clinical Training Supervision

Clinical education includes all experiences that contribute to a student's clinical learning. OCANZ's *Accreditation Manual for Optometry Courses in Australia and New Zealand* recognises the importance of clinical training, stating that clinical examinations, on either real or simulated patients should form a significant proportion of the overall assessment of the clinical disciplines.

Optometry programs must establish a plan to ensure that there are a sufficient number of clinical educators who are, or who will be, appropriately trained and supported in their clinical education role. The manual states that it is a requirement for courses to provide an adequate number of full-time staff to deliver clinical training on the following topics:

- functional disorder of vision,
- diseases of the eye,
- paediatric optometry and binocular vision,
- contact lens practice,
- geriatric optometry and rehabilitation of the partially sighted.

While it is a requirement for higher education providers to provide evidence of the ratio of clinical supervisors to students for each optometry program, the recommended supervisor to student ratio is not stated¹⁵. Higher education providers seek to provide educational resources for clinical supervisors to continue to develop their knowledge and skills relevant to their clinical education roles.

Simulated Learning Environments (SLE)

Simulation is identified in the *OCANZ Accreditation Manual for Optometry Courses in Australia and New Zealand*, Standard for clinical assessments and examinations for students. The standard specifies that a number of strategies can be implemented to assess student's clinical competencies, including the use of simulated patients. Furthermore, the accreditation manual outlines requirements for optometry schools when clinical exposure is limited, recognising that clinical experience for students can be supplemented by a range of activities including simulation based learning activities such as computer aided case exercises¹⁶.

The *Use of Simulated Learning Environments (SLE) in Undergraduate Optometry Training* report funded by Health Workforce Australia in 2011 highlights that simulation is being used as an educational technique in optometry courses in Australia for subjects relating to clinical skills development. According to the report, case based learning and peer practice were readily used in a variety of subjects, along with the use of digital image for the teaching of ocular pathology. Web based learning and computer programs were also identified, however these differed

¹⁵ John Ramsay & Associates, Health Workforce Australia, Clinical Supervision Support Program, Environmental scan and research.

¹⁶ op.cit. Optometry Council of Australia and New Zealand Part 2 p. 21

between the optometry programs¹⁷. Interestingly, the report found that optometry education providers viewed simulation as an adjunct to clinical placement and a mechanism to improve the quality of graduate optometrists through increasing the number of patients they needed to manage in clinical placement. Similarly, OCANZ indicated that they would support a proposal for increased use of simulation based training in undergraduate training, provided that this was intended as an adjunct to, rather than as a complete replacement for clinical experience with real patients.

The HWA funded report outlines that while there is use of simulation based education in optometry courses, relatively low technology has been employed when compared to other disciplines, as clinical methods in optometry are generally non-invasive and therefore are often taught using volunteers/ peers or patients from an early stage. The report identifies that there is a need for further development of simulation based training due to the limited availability of patients, and also to ensure that students are exposed to a variety of ocular conditions throughout training.

Disclaimer: Please note that the survey of clinical placements is a young collection and as such has data constraints which limit interpretation of the results. With time and investment, this type of data will be progressively standardised and analysis of the collection should become more accurate. The data has been reported by the participant HEPs. Training providers were not required to validate the data in 2012.

For the data analysis, 'course' has been defined as training delivered in Australia that on completion leads to graduation, and registration to practice the profession.

Data was not of sufficient quality to analyse the distribution of placements by remoteness category and therefore was not included in this profile.

¹⁷ The Use of Simulated Learning Environments in Undergraduate Optometry Training 2011.

Appendix A – Definition of 2012 clinical placement settings

Setting name	Definition	Examples
Acute (Medical/Surgical/Maternity/Emergency)	Includes all hospital placements in wards, theatres and other specialty programs excluding sub-acute, mental health and ambulatory/outpatients	Emergency, ICU, HDU, peri-operative, maternity, paediatric, hospital pharmacy, day surgery, etc. – not psychiatric wards
Sub-Acute	Includes placements in Rehabilitation, Palliative care, Geriatric Evaluation & Management units	Subacute care includes rehabilitation centres, palliative care, extended care in both hospitals and the community
Ambulatory/Outpatients	Includes all hospital placements involving outpatient and non-admitted patient care and home delivered services provided by hospital staff	Specialist clinics, outpatient clinics, Hospital in the Home, antenatal clinics
Aged Care	Placements in Residential and Community Aged Care facilities and day programs	Low and high care facilities, Independent Living Units, respite programs
Primary Care and Community Health (excluding GP)	Placements in Diagnostic laboratories and Medical Imaging Organisations	Pathology laboratories, medical imaging, sonography
General Practice	Includes General Practice whether in a private clinic, Community Health Centre, Super Clinic or other setting	
Private/Professional Practice (excluding GP & Diagnostic)	Placements in non-hospital based professional practices including Specialist Medical Clinics and excluding GP and Community Health Centres	Audiology, allied health, retail pharmacy, paramedics
Mental Health/Alcohol & Other Drugs	Includes all placements in Mental Health programs. This also includes Alcohol and other Drugs services.	Psychiatric/Mental Health wards, day programs, community mental health services & programs
Dental and Oral Health	Includes placements in School Dental Clinics, private or public clinics or laboratories.	
Educational Institutions	Includes all University administered clinics and other secondary and tertiary education provider clinics.	University clinics, primary and secondary schools, specialist schools
Human Services	Includes placements with organisations that are involved in human service related industries.	Child Protection, Public Health, Disability Support, Correctional Facilities, Relevant State, Federal and Local Government Departments, special interest organisations e.g. Red Cross, Heart Foundation etc. – unless covered by another setting
Other	Used only if placement did not correspond to any of the listed settings	