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HEALTH

NSW Ministry of Health

Psychology – Horizons Scanning and Scenario Generation

July 2015

(Including addendum with validation of findings completed July 2017)

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1 Executive Summary

> *THE PURPOSE OF THIS DOCUMENT IS TO OUTLINE THE METHODOLOGY, APPROACH AND THEMES RAISED BY THE LITERATURE AND PSYCHOLOGY STAKEHOLDERS TO INFORM THE WORKFORCE MODELLING PHASE (STAGE C IN FIGURE 1 BELOW) OF THE NSW MINISTRY OF HEALTH'S WORKFORCE PLANNING METHODOLOGY. IT SHOULD BE NOTED THAT THE VIEWS EXPRESSED IN THE REPORT ARE NOT NECESSARILY THOSE OF THE NSW MINISTRY OF HEALTH.*

1.1 Project background

The Selected Allied Health Professions – Horizon Scan 2015 project is driven by the Health Professionals Workforce Plan 2012-22, which sets out the framework for addressing the workforce implications of increasing demand for health services in NSW. Given this increasing demand for health services, the Plan establishes that simply increasing staffing without considering changing workforce practices and introducing more efficient and effective models of care is unsustainable. As part of the Plan the Workforce Planning and Development Branch (WPD) is responsible for developing and modelling projections for the Allied Health workforce.

1.2 About this project

The Horizon Scanning project represents an opportunity for stakeholders within the psychology profession across NSW to participate in the development of a short, medium and long-term vision for their field. In developing this vision, a number of system-wide drivers require consideration, including:

- The need to shift the provision of service from an institutional focus, towards a patient-centric model

- An increasing focus on Activity-Based Funding, encouraging services to consider more efficient models of care, often delivered in the home or in community based settings

- An increasing use of eHealth, which also demands changes in work practice as a result of increased access to electronic records, use of technology, mobile devices and electronic decision support

- An emphasis on collaborative, multidisciplinary teams across care settings and balancing health profession specialisation with generalisation to address the increased demand for care, particularly amongst patients with chronic and complex conditions

- A need to consider the geographic distribution of the workforce to align with changing population demographics and health needs.

The results of this research form part of the Horizon Scanning phase for the NSW Ministry of Health to support strategic workforce planning for the psychology workforce. The scope of this paper aligns with the Information Gathering and Issues and Drivers Analysis stages as set out in the Ministry of Health workforce planning methodology.

1.3 Scope of practice

Psychologists study human behaviour, learning and thinking, and apply evidence-based testing and interventions to improve mental health and overcome personal issues (Health Workforce Australia, 2014). The majority of psychologists report the bulk of their time is spent providing counselling and mental health interventions to adults on a one-to-one basis

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(Mathews et al., 2010). Other tasks performed by psychologists include behavioural assessment, teaching, cognitive assessment, personal coaching, addictions services, research and health promotion including mental and general health (Mathews et al., 2010). Following a master's or doctorate degree, additional supervised practice and development activities may lead to endorsement in a specialist area of psychology practice (Australian Psychological Society, 2015c).

1.4   Workforce characteristics

There are 29,387 registered psychologists employed in Australia, of which 13% are provisionally registered (Psychology Board of Australia). The workforce is roughly equally distributed across the public (52%) and private (48%) sectors. The gender profile of the workforce is predominantly female (77%) and data on new graduates suggests that this profile will continue for years to come (Health Workforce Australia, 2014).

In NSW, there are 89.9 FTE registered psychologists per 100,000 population, consistent with the Australian average of 84.6 (although there is some variability across states) (Australian Psychological Society, 2015a).

There is a shortage of psychologists in regional and remote areas, with the majority (94.3%) of psychologists working in major cities or inner regional areas.

1.5   Pathways to access psychology services

Common referring entities include General Practitioners, community health services, family and friends, educational organisations and through hospitals as an inpatient or at triage. Additionally, the use of the internet to search for information on mental health issues, interventions and services is increasing (Miller, 2012).

1.6   Drivers

There are a number of drivers impacting demand for psychology services, including population growth and demographics, service perceptions, service awareness and accessibility, government policy and funding, and the scope of practice of roles in the mental health sector. Key factors impacting supply include the capacity of the sector to offer supervision and training to provisional psychologists, professional structures and Award, and opportunities relating to telehealth.

1.7   Challenges and opportunities

Fragmentation of the mental health sector remains a key challenge for providers of mental health services and there are opportunities to better leverage integrated care models. Services for individuals with complex or chronic conditions remains a core focus, as does service access for those from culturally and linguistically diverse backgrounds. Future opportunities include further leveraging technology and telehealth, as well as better understanding the graduate supply, unlocking increased supervision capacity, innovative teaching approaches, supervision and staffing models.

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2 Introduction

The Selected Allied Health Professions – Horizon Scan 2015 project is driven by the Health Professionals Workforce Plan 2012-22 which sets out the framework for addressing the workforce implications of increasing demand for health services in NSW. Given this increasing demand for health services, the Plan establishes that simply increasing staffing without considering changing workforce practices and introducing more efficient and effective models of care is financially unsustainable. As part of the Plan the Workforce Planning and Development Branch (WPD) is responsible for developing and modelling projections for the Allied Health workforce.

The Horizons Scanning project represents an opportunity for stakeholders within the psychology profession across NSW to participate in the development of a short, medium and long-term vision for their field. In developing this vision, a number of system-wide drivers require consideration, including:

- The need to shift the provision of service from an institutional focus, towards a patient-centric model

- An increasing focus on Activity-Based Funding, encouraging services to consider more efficient models of care, often delivered in the home or in community based settings

- An increasing use of eHealth, which also demands changes in work practice as a result of increased access to electronic records, use of technology, mobile devices and electronic decision support

- An emphasis on collaborative, multidisciplinary teams across care settings and balancing health profession specialisation with generalisation to address the increased demand for care, particularly amongst patients with chronic and complex conditions

- A need to consider the geographic distribution of the workforce to align with changing population demographics and health needs.

This report synthesises the available data and literature regarding the psychology workforce in NSW, Australia and globally, including the outcomes of stakeholder consultation in order to:

- Articulate the full scope of the Psychology role (across both public and private sector practice)

- Identify key challenges, trends and drivers and opportunities which may impact the psychology workforce now or in the future

- Identify examples of how other jurisdictions have considered or addressed these factors in their own health workforce planning initiatives and offer insight to the potential implications for NSW Health organisations

- Where possible, identify potential metrics or benchmarking that might be applied to measure the impact of drivers such as technology, science, policy and costs on the workforce

- Shortlist key priorities for each workforce to address in the short, medium and longer term (to 2030).

The results of this research phase forms part of the Horizons Scanning phase for the NSW Ministry of Health to support strategic workforce planning for the psychology workforce.

Figure 1: Ministry of Health Workforce planning methodology
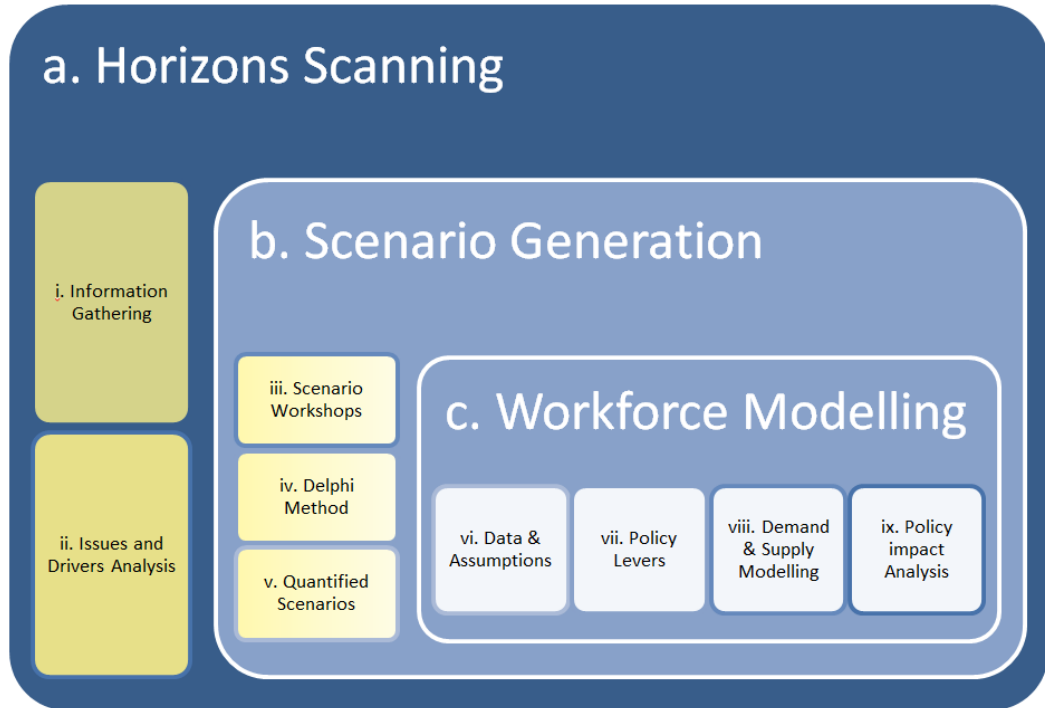
2.1 Methodology

The methodology applied throughout the Horizons' Scanning process is outlined below.

2.1.1 Roles in scope

The focus of this horizon scan is the psychology workforce in clinical and healthcare settings. Therefore, it should be noted that for the purposes of this review the psychology profession refers to the following approved areas of practice:

- Clinical psychology
- Counselling psychology
- Forensic psychology
- Clinical neuropsychology
- Sport and exercise psychology
- Educational and developmental psychology
- Health psychology
- Community psychology

An overview and definition of each of these roles is provided in Section 4.1 below.

Although organisational psychology is included in the list of practice endorsements, organisational psychology is excluded from the scope of this review on the basis that this speciality is generally not directly involved in the delivery of healthcare (Australian

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Psychological Society, 2015a). All other areas of practice endorsement have been included on the basis that practitioners with these endorsements may be directly involved in the healthcare environment.

2.1.2 Literature review

An initial literature search was conducted by the NSW Ministry of Health library, which was used as a foundation for this report. To augment the findings of the initial review a comprehensive search of peer-reviewed, organisational and grey literature was undertaken. Key words relevant to psychology services were identified and utilised. Details of the key words are included at Appendix A.

Major databases including CINAHL and OVID were accessed. Recent publications were prioritised and available published data was considered in the review.

2.1.3 Stakeholder consultation

A workshop with senior psychologists from a range of LHDs and disciplines was conducted on 27 May 2015. One to one consultation with two psychologists was also conducted to explore specific trends in greater detail. The purpose of the consultations and workshop were to further explore and prioritise key demand and supply drivers for the psychology workforce in NSW, and to explore factors impacting future delivery of psychology services.

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3 Summary of key demand and supply factors

An overview of the drivers impacting the supply and demand of the psychology workforce identified in the literature review and stakeholder consultation process are summarised in Figure 2 below, and defined in the subsequent tables:

Figure 2: Summary of key demand and supply factors

Demand drivers

Population demographics
Incidence of mental illness based on population behaviour and demographic characteristics

Government funding and policy
Focus of government funding and policies on scope and access to services

Service awareness
Visibility of mental health services impacts awareness and demand for services

Service Pathways
Referral pathways to mental health services

Scope of practice
Scope of role performed by psychologists and other professionals in the mental health sector

Person-centred models of care
Focus on integrated, person-centred service models

Supply drivers

Attraction → **Training** → **Professional Representations**

Competitiveness of entry to profession and places available
Demand for masters programs exceeds places available.

Registration
Not all students who undertake psychology study ultimately pursue registration.

System capacity to support supervision and training
Shortage of supervisors. Current system capacity is a bottleneck in the overall workforce supply.

Visibility and professional representation
Opportunities to improve the coordination of psychology as a profession, to enhance visibility and build capacity.

Technology
Telehealth as a system enabler

Table 1: Psychology demand drivers

Driver	Description
Population demographics	Incidence of mental illness based on population growth, demographic characteristics and access to services.
Service awareness	Awareness of mental health services based on referral pathways, community knowledge and perceptions, and visibility of key programs.
Government funding and policy	Scope, focus and access to services as determined by government funding and expenditure on mental health services.
Service pathways	Referral and treatment pathways and accessibility
Scope of practice	Scope of roles performed by psychologists and other mental health professionals
Person-centred models of care	Influence of person-centred approaches on staffing and service models

Table 2: Psychology supply drivers

Driver	Description
New graduates	Attraction to the profession and capacity of the education system
Supervision requirements	Capacity of the system to support supervision and training of provisionally registered psychologists
Professional representation, career pathways and Award	Professional structures within the profession, including organisational structures, professional bodies and the Award
Technology	Service provision enabled through technology

4 Overview of the profession

The following section provides an overview of the general characteristics of the current Australian psychology workforce, including scope of practice, entry pathways, key roles, work settings and professional bodies.
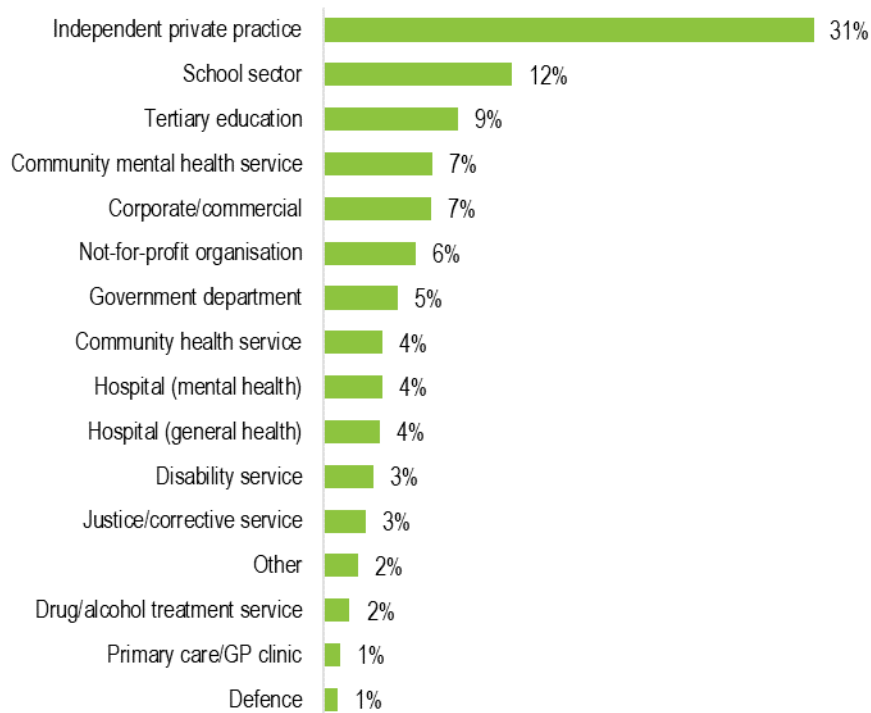
4.1 Scope of practice

Psychologists study human behaviour, learning and thinking, and apply evidence-based testing and interventions to improve mental health and overcome personal issues (Health Workforce Australia, 2014).

Psychologists may also practice in public and private schools under a variety of titles such as psychologist, educational psychologist, school psychologist (official in Western Australia only), guidance officer and counsellor (Australian Psychological Society, 2007). School psychologists account for approximately 12% of the psychology workforce (Mathews et al., 2010). The majority of psychologists report the bulk of their time is spent providing counselling and mental health interventions to adults on a one-to-one basis (Mathews et al., 2010). Other tasks performed by psychologists include behavioural assessment, teaching, cognitive assessment, personal coaching, addictions services, research and health promotion including mental and general health (Mathews et al., 2010).

Many students complete qualifications in psychology but do not go on to become registered. Those with psychology qualifications may work in a diverse range of settings, including hospitals, universities, prisons, defence forces, market research and private practice. The distribution of psychologists across the range of work settings defined in the National Psychology Workforce Survey is summarised in Figure 3 below.

Figure 3: Psychologist Work Settings

Work setting	Percentage
Independent private practice	31%
School sector	12%
Tertiary education	9%
Community mental health service	7%
Corporate/commercial	7%
Not-for-profit organisation	6%
Government department	5%
Community health service	4%
Hospital (mental health)	4%
Hospital (general health)	4%
Disability service	3%
Justice/corrective service	3%
Other	2%
Drug/alcohol treatment service	2%
Primary care/GP clinic	1%
Defence	1%

Source (*National Psychology Workforce Survey.* 2008)

The Australian Psychological Society also recognises 40 interest groups, some of which include: Gay and Lesbian Issues and Psychology, Psychology from an Islamic Perspective, Psychologists in Oncology, and Coaching Psychology.

Registered psychologists who practise in certain areas of psychology may be eligible for endorsement in an approved area of practice. The approved areas of practice for endorsement of registration are:

- Clinical psychology

- Counselling psychology

- Forensic psychology

- Clinical neuropsychology

- Sport and exercise psychology

- Educational and developmental psychology

- Health psychology

- Community psychology

- Organisational psychology (out of scope for this review).

Table 3 below defines each of the areas of practice in scope for this review. Appendix provides further information in relation to each of the above roles.

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Table 3: Psychology areas of practice

Area of Practice	Scope
Clinical psychology	Diagnosis, formulation, treatment and prevention of psychological problems and mental illness. Research and development of scientifically-based approaches to improving mental health and well-being.
Counselling psychology	Application of psychology and therapy to help individuals and groups to develop positive strengths and well-being and assist the resolution of problems and disorders.
Forensic psychology	Application of psychology and knowledge of the law to understand legal and justice issues and to generate legally relevant and useful psychological data in legal settings.
Clinical neuropsychology	Diagnosis and assessment of brain dysfunction. Design of clinical interventions to assist individuals with neuropsychological disability and impairment.
Sport and exercise psychology	Working with teams and individuals to enhance personal development, performance and well-being from participation in sport and exercise
Educational and developmental psychology	Working with children, young persons, adults and older adults to assist in learning, academic performance, behavioural, social and emotional development.
Health psychology	Application of psychology and health knowledge, to foster health promotion, public health, and clinical assessment and interventions relevant to health and illness.
Community psychology	Providing services to the community during times of challenge, to restore individual and collective well-being.

Source: (Psychology Board of Australia, n.d.)

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Under the Medicare Benefits Scheme, psychologists are able to access rebates for the following Medicare items:

- Better Access to Mental Health Care initiative
- Helping Children with Autism initiative
- Better Start for Children with Disability initiative
- Chronic Disease Management initiative
- Pregnancy Support Counselling
- Follow-up allied health services for people of Aboriginal or Torres Strait Islander descent.

Although psychologists do not currently have medication prescription privileges, the possibility of expanding their scope of practice has been a topic of recent debate and ongoing research (Australian Psychological Society, 2015d, 2012b).

4.2 Entry to the profession

The standards and processes for the training and credentialing of psychologists have been the subject of significant change and ongoing review (Cranney et al., 2008). The implementation of an exam as a component of registration requirements is underway, with some applicants already being required to sit the examination and the final time-related application exemptions concluding on 1 July 2016 (Psychology Board of Australia, 2015a). Provisional registration is required for interns undertaking supervised practice (Health Workforce Australia, 2014). A number of pathways into the profession are available including:

- A four-year accredited study program plus the equivalent of two years of full-time supervised practise (Australian Psychological Society, 2015b) approved by the Psychology Board of Australia
- A four-year accredited study program plus a fifth year of coursework plus the equivalent of one year of full-time supervised practise approved by the Psychology Board of Australia
- A four-year accredited study program plus an accredited 2-year minimum Master's degree or Doctorate
- A qualification approved by the Psychology Board of Australia as being equivalent to the other pathways, including those awarded overseas
- The possible requirement to complete an exam, currently depending on application date.

Following a master's or doctorate degree, additional supervised practice and development activities may lead to endorsement in a specialist area of psychology practice (Australian Psychological Society, 2015c). A list of available endorsements and the number of psychologists holding each endorsement is attached in Appendix C.

Figure 4 below illustrates the different pathways into the profession as described above.

Figure 4: Pathways to registration as a psychologist
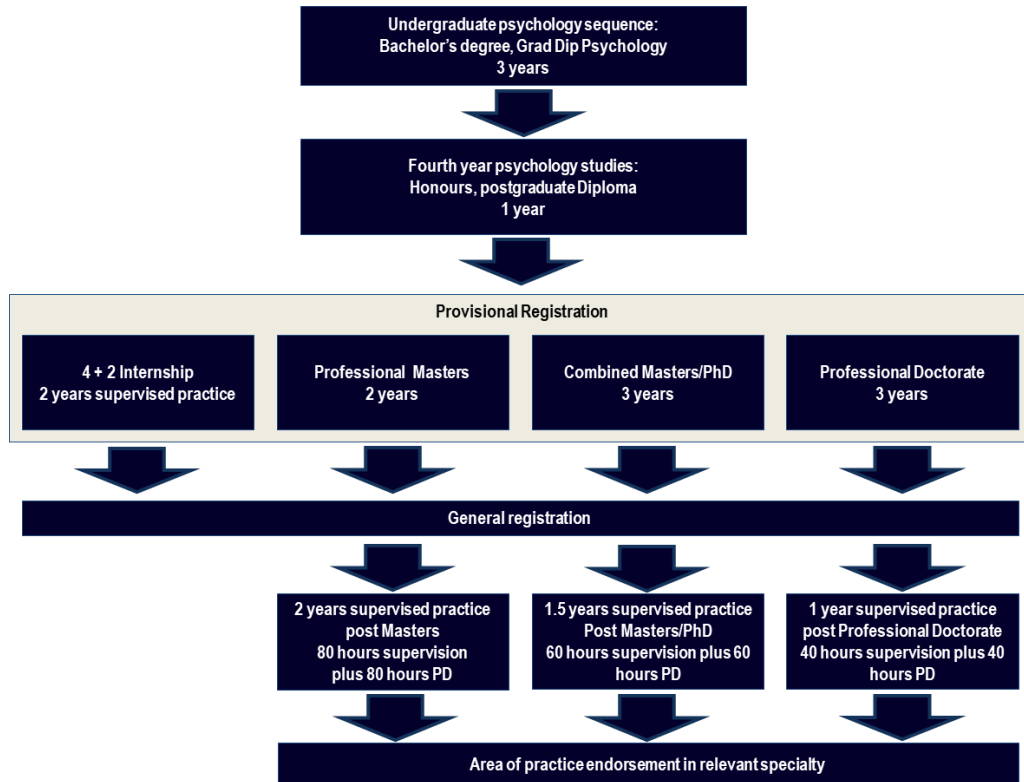
Source: (Australian Psychological Society, 2015c)

Approximately two thirds of university places in psychology are allocated to clinical psychology, and approximately half of all registered psychologists complete the training pathway through an internship program (Grenyer et al., 2010). Shortages in the availability of supervisors for internships have led to extensive delays in student program completion and reductions in the number of student places in university programs of study, which holds implications for the supply of psychologists entering the workforce (Nedeljkovic et al., 2014). Only approximately 3,000 practice supervisors are presently available in New South Wales, amounting to 34% of registered psychologists (Psychology Board of Australia, 2015b). Supervision pathways and professional entry requirements for the profession are a key focus within the profession. Where some stakeholders argue that professional training requirements for psychologists (particularly through the 4+2 and 5+1 pathways) are inadequate compared to other comparable countries (Australian Clinical Psychology Association, 2015), it has equally been recognised that the current supervision approach is both time consuming, expensive, and a bottleneck in the overall workforce supply (Australian Psychological Society, 2012; Health Workforce Australia, 2014).

4.3 Professional bodies and associations

4.3.1 Professional bodies and boards

Table 4 below provides an overview of the various professional psychology bodies and boards across Australia, their role and the stakeholders they represent.

4.3.2 Australian Psychology Accreditation Council

The Australian Psychology Accreditation Council (APAC) develops standards and surveys accreditation for psychology programs of study (Australian Psychology Accreditation Council, 2012a). APAC also provides assessor training and quality improvement information. A major review of course accreditation standards is currently being undertaken by APAC (Australian Psychology Accreditation Council, 2012b).

4.3.3 Psychology Board of Australia

The Psychology Board of Australia is the regulatory body for the profession (Psychology Board of Australia, 2014). The board also monitors internships and develops professional standards in partnership with key professional bodies (Psychology Board of Australia, 2013).

4.3.4 Australian Psychological Society

The Australian Psychological Society provides membership services to Australian Psychologists with benefits including professional representation and ongoing educational opportunities (Australian Psychological Society, 2015a). The Australian Psychological Society actively participates in consultation with other key professional bodies in the interest of furthering the profession and its standing (Australian Psychological Society, 2012a).

4.3.5 Australian Clinical Psychology Association

The Australian Clinical Psychology Association represents and promotes psychologists with endorsements as clinical psychologists by providing membership, training and representation services along with supporting and implementing best practice initiatives (Australian Clinical Psychology Association, 2012).

Table 4: Summary of professional bodies and boards

| Organisation	Role	Representation
Australian Psychology Accreditation Council	Accreditation of psychology study programs	Independent - manages assessment of education standards
Psychology Board of Australia	Registration, professional standards, complaints	Federal Government
Australian Psychological Society	Membership services	Representation of psychologists to government, industry bodies and the public
Australian Clinical Psychology Association	Advocacy, training, promotion of the clinical speciality	Endorsed clinical psychologists

4.4 Workforce characteristics

4.4.1 Number of psychologists employed in Australia

In 2012, there were 29,387 registered psychologists employed in Australia, of which 80% were in the psychology labour force, 13% were provisionally registered, and 7% were not in the psychology workforce (e.g., retired or employed in another sector) (Health Workforce Australia, 2014). New South Wales has the highest number of registered psychologists of any state or territory (Psychology Board of Australia).

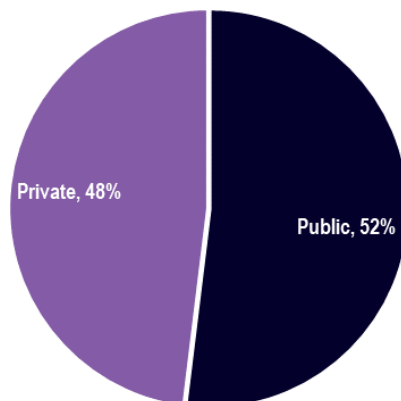**Figure 5: Psychologists employed in Australia (2012)**
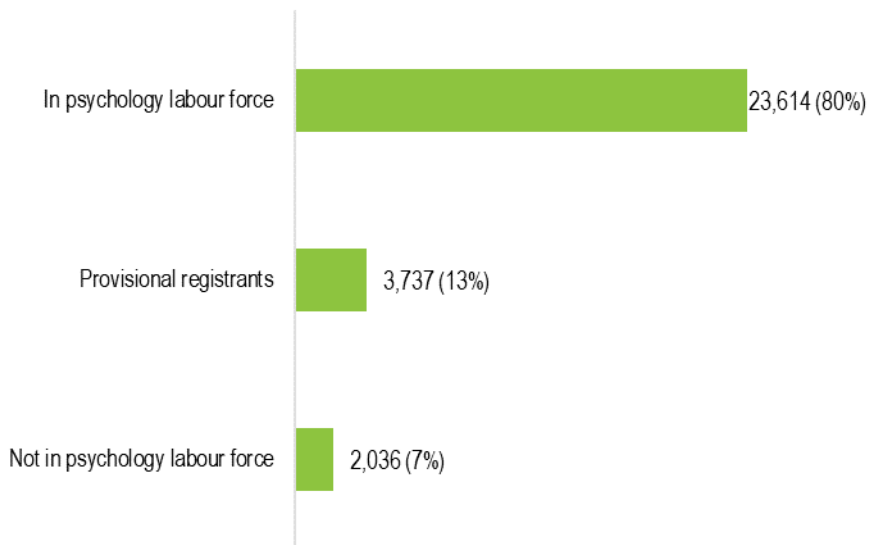
Source: (Health Workforce Australia, 2014)

4.4.2 Registered psychologists by sector

There is a roughly equal distribution of psychologists employed across the public and private sectors (Health Workforce Australia, 2014).

Figure 6 Registered psychologists by sector

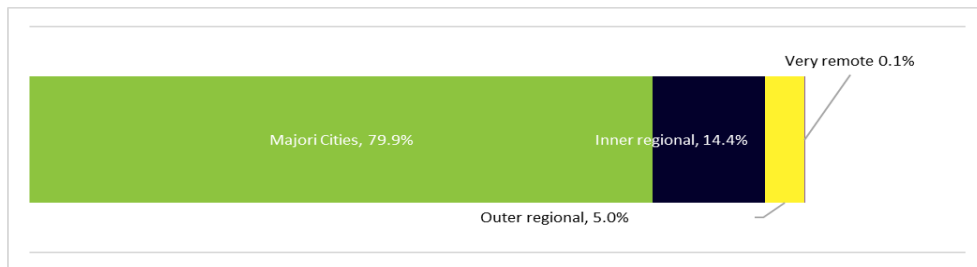*Source: (Health Workforce Australia, 2014)*

4.4.3 Registered psychologists by location

There is a greater representation of psychologists in metropolitan areas, and the shortage of psychologists in rural and remote areas has been recognised (Health Workforce Australia, 2014). 94.3% of registered psychologists work in major cities or inner regional areas, with less than 6% in outer regional, remote or very remote areas.

Figure 7: Psychologists by region

Source: (Health Workforce Australia, 2014)

4.4.4 Gender and age

77% of the Australian psychology workforce is female. The average age of female psychologists is 44.4 years, while the profile of the male psychologist workforce is slightly higher with an average age of 49.6 years. Over 40% of the female psychology workforce is between 20-44 years of age, which are the peak child bearing years. Growth in the psychology workforce has been predominantly been driven by females, and new psychology graduates are predominantly female (84%) suggesting that females will continue to account for the majority of the workforce in future years (Health Workforce Australia, 2014).

Figure 8: Psychologists by age group and gender
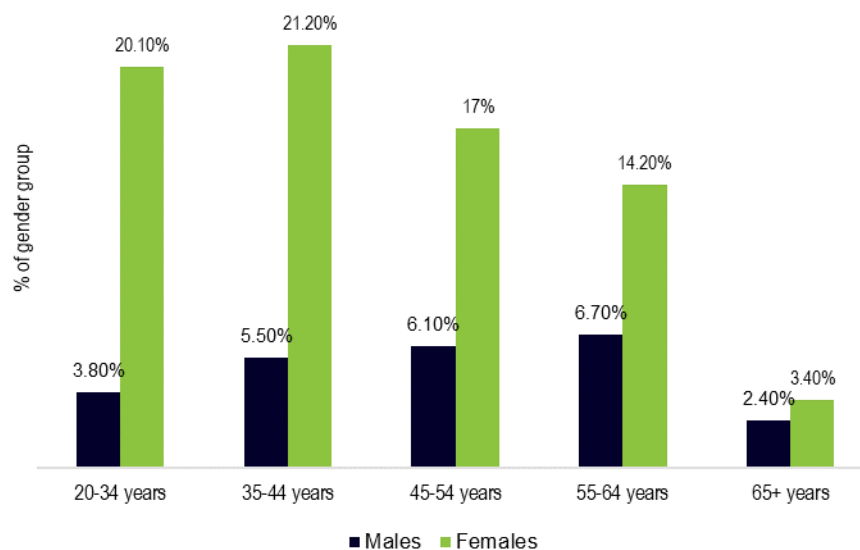
Source: (Health Workforce Australia, 2014)

4.4.5 Area of specialisation

Approximately one-third of registered psychologists hold at least one practice area endorsement with Clinical Psychology accounting for two-thirds of those endorsements (Psychology Board of Australia, 2014).

Analysis of clinical psychologist headcounts across New South Wales Local Health Districts from 2012 to 2014 did not indicate any rapid change in the number of clinical psychologists employed. There may be benefit in undertaking analysis of headcount and full time equivalent psychologists employed by LHD per 100,000 population.

Figure 9: Practice area endorsements
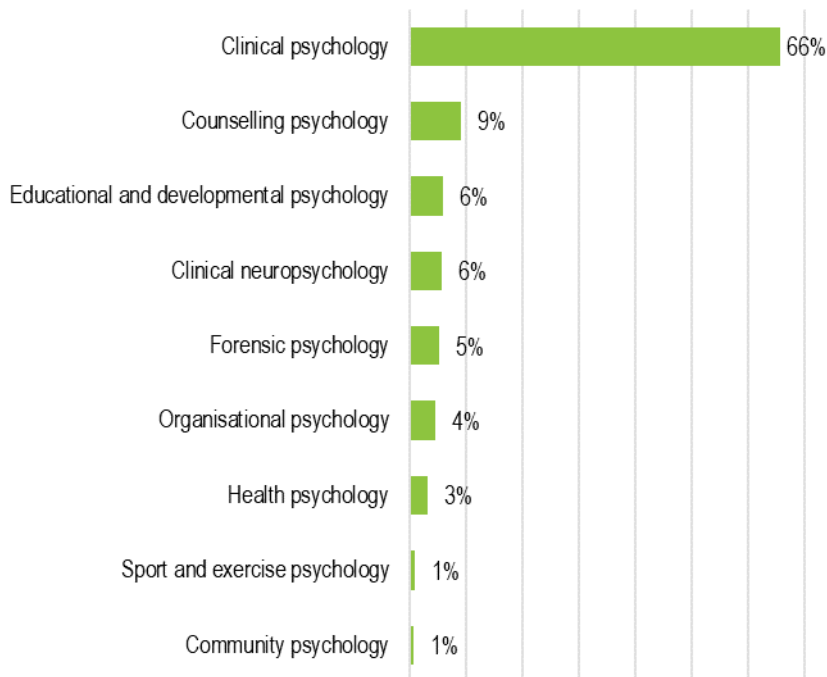
*Source: (Psychology Board of Australia, 2015b) *

4.4.6 FTE psychologists per 100,000 of population

In 2012, there were 89.9 FTE psychologists per 100,000 of population in NSW, compared to the national average of 84.6 FTE.

Table 5. 2012 FTE psychologists per 100,000 of population by State/Territory

State	NSW	VIC	QLD	WA	SA	TAS	ACT	NT	AUS
FTE registered psychologists per 100,000 population	89.9	88.7	77.9	85.3	59.3	68.3	138.4	79	**84.6**

Source: (Australian Institute of Health and Welfare, 2015

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4.5 Pathways to access psychology services

As General Practitioners are frequently the first point of healthcare contact for people requiring psychology services their potential to act as a referrer to psychology services is significant, however not all cases may be identified for appropriate referral. (Rickwood et al., 2007). Children attending schools which provide psychology services may access services through those schools, although not all schools provide these services (Australian Psychological Society, 2007). The use of information and communications technology, especially the internet, is increasingly becoming a primary means of seeking information on mental health issues, interventions and services (Miller, 2012). Common referral pathways may include:

- General Practitioner

- Community health service

- Family and friends

- Internet

- Educational organisation

- Inpatient or triage referral

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5 Key drivers of demand for psychology services

There are a complex range of factors, identified through the literature and consultation with stakeholders, that impact demand for psychology services and the capacity of psychologists to meet that demand. These drivers include broader population, service awareness, service accessibility, government policy and health sector funding initiatives. Training pathway characteristics and workforce distribution may also act as service drivers.

5.1 Population demographics

Approximately one in five Australians have a diagnosable mental illness (Wynaden, 2010). It has been suggested that over half of individuals with mental health issues are unaware of their need for care (Paige and Mansell, 2013). Furthermore, factors impacting mental health may vary between metropolitan and rural areas (Kelly et al., 2010). An increasing trend has been identified in the diagnosis rates of common mental health issues such as anxiety, depression, attention deficit hyperactivity disorder and autism (Matson and Kozlowski, 2011).

A number of demographic factors have been associated with decreased service access. Females and adults are more likely to access services than males and younger persons (Mackenzie et al., 2006). Older Australians are less likely to access services, with psychologists reporting a total of just 5% of total practice hours are delivered to adults aged 65 or older (Mathews et al., 2010a). It has been suggested that the specialisation of services provided by any particular service may have a negative impact on service accessibility for residents of the area with service needs outside of the speciality provided (Wilson et al., 2013). Knowledge of mental health issues and services, feeling capable of self-expression and possession of established relationships with healthcare providers are all factors which have been demonstrated to increase the likelihood of young people to engage with psychology services (Rickwood et al., 2007). The homeless and recipients of housing assistance have been identified as underserved and difficult to engage (Wilson et al., 2013). There are also specific risk factors related to migrant mental health, such as issues around language and cultural differences, and rates of mental disorders have been linked to migration pathways (experiences before, during and after settlement) (Kirmayer et al., 2011).

Population changes are also driving the increased incidence and demand for mental health services. In addition to total population growth (which increases demand even if the overall incidence of mental health as a proportion of the population remains static), changes to the demographic profile of the population are also impacting demand for services. For example, the ageing population is placing increased and changing demands on the psychology sector. The elderly have been identified as being at increased risk of developing mental health issues due to increased difficulty with attaining personal goals (Corrigan et al., 2014), life events, and age-related cognitive changes. In Australia, the proportion of Australians accessing subsidised mental health related prescription medicines tends to increase with age (although note that this trend does not apply to access to general mental health services, which are more frequently accessed by people under 64 years) (National Mental Health Commission, 2014). The ageing population is also likely to create a greater demand for psychological services in aged care settings.

Rural psychologists have reported that differences between rural and metropolitan practice include increased scope of practice, increased spectrum of case types, increased

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autonomy, increased responsibility and fewer service access options (Perkins et al., 2007). Perceptions of high workload and dissatisfaction with opportunities for continuing professional development and education have been identified as concerns of rural allied health professionals (Keane et al., 2011). Increased scope of practice, reduced service options, reduced support and increased demand are common issues in rural allied health practice (Struber, 2004).

5.2 Service awareness

Service awareness has been demonstrated to be a factor in both young people, who may not have an understanding of services and benefits, and the aged, who may tend to seek General Practitioner advice rather than seek services from a psychologist (Rickwood et al., 2007; Grenyer et al., 2010). The tendency of the aged to seek general practitioner consultations rather that psychology services may be attributed to increased perceptions of stigma around mental health issues and care (Grenyer et al., 2010). The advent of the internet and its frequent use to search for information regarding mental health issues, interventions and services has significantly increased service awareness (Miller, 2012). Coordination and organisation of services at a national level has been flagged as a contributor to the public perception of clinical psychology services in the UK, with evidence suggesting a well-coordinated and numerically large workforce may facilitate service awareness development (Burton et al., 2007).

Service awareness is also influenced by government policy, initiatives and funding (see below).

5.3 Government policy and funding

Government policy and funding initiatives have a significant impact on service awareness and accessibility. Data from 2011-12 indicates that the Federal government spent over $9b on mental health programs, attributable mostly to the Disability Support Pension, National Healthcare Agreements, Carer Payment and Allowance, Medicare Benefits Schedule and the Pharmaceutical Benefits Scheme. At the state and territory level, the largest proportion of funding for specialised mental health services is spent on inpatient care ($1.9 billion) and community mental health care ($1.8 billion). Federal funding of mental health services has increased over the last few years, attributable largely to increased uptake of brief psychological interventions through the Better Access program, however it has been noted that that expenditure is not always well directed, with recommendations that there should be less expenditure on the medical and hospital system and greater focus on prevention, community based programs and integrated system-wide interventions (National Mental Health Commission, 2014).

Psychology workshop participants identified funding to be the most critical driver of demand for services as it increases scope, awareness and access to services. 94% of psychologists report delivering services funded by Medicare's Better Access to Mental Health scheme, which provides subsidised funding for evidence-based treatment to clients with diagnosed mental health disorders (Department of Health, 2012a; Stokes et al., 2010b).

The introduction of the Medicare Rebate Scheme for psychological services has positively impacted the accessibility of psychological services for many patients, however the number of sessions is capped (Stokes et al., 2010b) and is considered inadequate for severe or chronic mental illnesses. This and other changes in mental health funding models are

driving a shift towards shorter treatment cycles which may be appropriate for some generalist interventions, but less so for more complex cases. For example, patients who present with chronic or comorbid health conditions may not always be effectively treated through short term interventions. Indeed, the Federal Government's response to the recommendations from the Inquiry into Commonwealth Funding and Administration of Mental Health Services report notes that initiatives such as Better Access were not designed to address the needs of patients with more complex and ongoing needs (Department of Health, 2012b). The National Mental Health Commission has recommended a shift away from such funding models in favour of a focus on integrated care pathways and prevention – particularly those at risk (National Mental Health Commission, 2014).

The governance of mental health initiatives in Australia also influences service access, with a disconnect between state and federal mental health systems, and fragmentation across health and social services (such as employment and housing). This creates a challenge for patients with mental illness as they often have touch-points across a range of government services which are not well coordinated (Medibank Private Limited and Nous Group, 2013).

5.4   Service pathways

While screening for common mental health issues may be relatively simple, the benefits of screening alone may be limited without appropriate referral and follow-up (Carlson, 2013). Appropriate training and adherence to evidence-based assessment guidelines have been identified as essential factors in accurate screening, which in turn enables appropriate referral and treatment pathways (Carlson, 2013). A European trial involving a free-to-access psychologist at local pharmacies resulted in increased service access and streamlined specialist referrals, with proximity and cost being identified as access drivers (Molinari et al., 2012). Common barriers to service access include stigma regarding mental health issues and service use, waiting times and preference to seek support from trusted individuals or publically-available information (Mullin et al., 2015). In order to offset this barrier, the internet is increasingly being used as a platform to promote engagement with psychology services by increasing the availability of service and intervention information (Rickwood et al., 2007). Cost, perceptions of limited service effectiveness, fear of further distress related to divulging concerns and distance from service providers are also identified as potential barriers to service utilisation (Paige and Mansell, 2013). Increasing acceptance of mental health issues and an associated reduction in the stigma attached to mental health issues have resulted in improved attitudes towards psychology services (Corrigan et al., 2014).

5.5   Scope of practice and generalisation of roles in the mental health sector

Mental health roles are performed by a range of health professionals, and not necessarily psychologists. A review of the characteristics of those who accessed services indicated that a greater number of people access Medicare subsidised mental health services through their GP, than a psychologist (Australian Bureau of Statistics, 2011). Psychologists are increasingly working in multi-disciplinary teams and changes to mental health models have seen an increasing emphasis on community-based interventions and opportunities for allied health professionals to work together to improve patient outcomes. These models offer the potential to support more patient-centric models of care, but role boundaries and scope are also key areas for review and consideration. Interviewees and workshop attendees reported that the boundaries between mental health roles are

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sometimes increasingly blurred, with other professions adopting some aspects of the psychologist's role (for example using techniques and therapeutic interventions such as Cognitive Behaviour Therapy). It was also noted that within the public sector, there is an increasing generalisation of mental health roles, with roles and position descriptions often being scoped so that they may be filled by a range of professions such as mental health nurses, social workers or occupational therapists. This more generic approach to service provision can result in roles which underutilise the full scope of psychologists' practice, with these positions often focused increasingly on case management and administration rather than evidence-based psychological interventions (Australian Psychological Society, 2014b). There is an opportunity for further research into this issue, with limited literature on scope of practice boundaries between disciplines in mental health in Australia.

5.6 Person centred models of care

There is a continued emphasis on the provision of person-centred models of care within mental health and other healthcare services. Person-centred approaches structure care around the acuity and needs of the individual, meaning that people remain connected to a core team that expands or contracts as requirements change, rather than having the individual transferred across different teams as their needs change. Relatedly, is the shift towards more community-based models of care. Person centred, whole-of-life models require psychologists to work closely with other allied health and service providers. In support of this shift in emphasis the National Mental Health Commission has recommended clear roles and accountabilities for government and service providers for the delivery of person-centred approaches (National Mental Health Commission, 2014). The Auditor General's review into the mental health workforce indicated that in NSW resources are primarily directed into acute rather than community care and that growth in community based services in NSW is lagging behind the other states (Achterstraat, 2010).

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6 Key drivers of supply of psychology services

This section outlines four driving factors, identified through the literature and stakeholder consultation process which influence the supply of the Psychology workforce as follows.

6.1 Graduates

While it appears that psychology remains a popular field of study, system constraints elsewhere in the supply chain are impacting actual supply. The Australian Psychological Society notes that demand for Masters' program places significantly exceeds places available (Health Workforce Australia, 2014). In 2010, there were 1,782 applications for clinical masters programs and only 546 admissions (Voudouris and Mrowinski, 2010). This demand also exceeds the capacity of the current system to provide supervision placements (see below), and publicly funded positions.

6.2 Supervision requirements and system capacity

The supervision of psychologists in training has been the subject of multiple concerns. Currently there are no accreditation processes for supervisors, which may pose a risk to the standardisation of supervision and appropriate supervisor background, although all internship programs must be approved by the Psychology Board of Australia (Australian Psychological Society, 2014a; Psychology Board of Australia, 2012). Evidence suggests that competency-based assessment may be more effective than supervision, with competency-based assessment frameworks recently emerging in Canada and the United States (Hunsley and K Barker, 2011). Further concerns have been raised with regard to the conducting of psychological testing by unqualified individuals (Psychology Board of Australia, 2010).

There are varying perspectives regarding the requirements of the current supervision structure. There are some views that the pathway to registration is excessively onerous due to time taken, difficulties in securing internship and length of unpaid supervised practice periods (Australian Psychological Society, 2012). The cost of supervising a psychology intern over a two-year period has been estimated as $17,000 (Australian Psychological Society, 2012). Recommendations aimed at reducing the impact of supervision requirements include increasing the scope of acceptable practices, reducing direct contact time requirements, increasing supervision flexibility and reducing documentation co-signing requirements (Australian Psychological Society, 2012). The onerous and lengthy pathway of entry into the profession has been identified as having the potential to impact upon workforce supply (Health Workforce Australia, 2014).

In contrast, some stakeholders have noted that the supervision requirements for psychologists in Australia are significantly lower than those for other English speaking countries. The Australian Clinical Psychology Association argues that professional training for psychologists through the 4+2 and 5+1 pathways pose a risk that graduates are not adequately prepared for professional practice, as the supervision components of those programs are unaccredited (Hyde, 2014).

Views regarding their appropriateness notwithstanding, the current supervision requirements create a significant bottleneck in the training and accreditation of new psychologists. While the demand for graduate programs is high and universities are offering new programs, the system's capacity to supervise students has not increased at corresponding levels. Only one-third of the registered psychology workforce has been

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approved as supervisors, which constricts the capacity of the system to support supervision of the new graduates. In addition, anecdotal reports suggest that the number of those supervisors actively supervising is even lower. A range of factors impact the availability of supervisors, including time and resource constraints (see also, Career pathways and Award, below).

6.3 Professional representation, career pathways and Award

Workshop participants in the public sector noted that a more coordinated professional representation of psychologists could be improved to drive change, visibility and capacity. It was also noted that in public hospitals, psychologists are embedded across a range of departments, creating challenges in administration, visibility and critical mass to effect change or operational improvements (for example, in the coordinated support and management of placement students). A review of psychology staff in Australian metropolitan public hospitals found that only 7% of psychologists worked in an independent psychology department, in line with international trends (Small et al., 2015). There is some concern that this may negatively impact professional unity, a finding which was endorsed by workshop participants.

The remuneration and incentive structure for psychologists in the public sector was noted by stakeholders as a key supply constraint and risk factor by workshop participants. No additional provision is made for training or educator roles within the award. The two most widely-reported factors in the retention of psychologists were increased job satisfaction and flexible working hours, with remuneration ranking next-highest (Stokes et al., 2010a). Opportunities for enhancing the sustainability of the psychology workforce may therefore be found in these areas, particularly amongst the two highest-ranking factors.

6.4 Technology

The role that telehealth services can play in service provision is increasingly being explored. Telehealth in the context of psychology refers to the provision of services via communications technology such as computers, telephones and the internet rather than traditional face-to-face delivery (Sampson and Makela, 2014). Telehealth in psychology has been described as rapidly expanding (Perle et al., 2011).

For example, the Government's eheadspace service provides telephone support, online counselling and web-enabled chat. The eMental Health Alliance notes that Australians are increasingly willing to engage with telehealth, and that both Australian and international data indicates that eMental health services are more cost-effective and cheaper to deliver, thereby increasing capacity to treat a greater number of patients. eMental Health services may also reduce demand on primary and secondary services (eMental Health Alliance, 2014). eHealth remains a controversial subject however, and it is recognised that there are still significant opportunities for advancement. Privacy, confidentiality and 'dehumanisation of the therapeutic bond' have all been cited as key factors to consider (Perle et al., 2011).

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7 Challenges and opportunities

This section outlines the challenges and opportunities for the Psychology workforce identified through the Horizons' Scan process from both the literature and stakeholder consultation.

7.1 Challenges

7.1.1 Evidence-based practice and service standardisation

Ongoing changes in the education of psychologists may impact levels of service standardisation.

Inter-university collaboration resulted in an agreed set of graduate attributes and evidence-based teaching guidelines for programs of psychology study which were adopted by APAC in 2008, however the accreditation standards for psychology study remain the subject of major review (Cranney et al., 2008; Hyde, 2014). It has been suggested that computer-modelled "virtual" patients may be able to enhance the degree of standardisation in teaching and assessing, however such models are in the early stages of development (Khosrow-Pour, 2015).

As generalist practitioners may practice in any of the endorsed specialties (but may not use a title relating to an endorsed strategy) the endorsement system in its current state may be a source of confusion for service users and may lead to generalists being engaged over specialists due to reduced cost (The Australian College of Specialist Psychologists, 2013). Concerns have been raised regarding variation in postgraduate studies geared towards generalist practice and practice within an Area of Practice Endorsement, along with the awarding of advanced standing, with suggestions made that these factors may result in insufficient preparation of new psychologists (Australian Psychological Society, 2014a). Even once qualified, ongoing maintenance of competence is recognised as a key factor in service quality, although the levels of recent practice and education required to achieve and maintain competence have not been definitively established and continue to be explored (Barnett et al., 2007).

Workshop participants considered the issue of service and practice standardisation and identified the following opportunities for increasing standardisation of practice and promoting continuous improvement:

- Maintaining stronger linkages with universities to encourage evidence-based practice
- Formalising career structures to provide greater opportunity and clarity around professional development and progression pathways
- Developing standardised performance indicators across the profession
- Reflecting the above requirements in the Award, where relevant.

7.1.2 Culturally appropriate psychology service access

Individuals who are members of ethnic minority groups may be less likely to seek and attend psychological services due to possibilities of being conditioned to value social independence along with potentially being less likely to divulge personal information (Paige and Mansell, 2013). Despite this potential predisposition to not access psychology services, survey findings indicated that approximately 55% of all psychology practice hours were delivered to clients of culturally and linguistically diverse (CALD) backgrounds

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(Mathews et al., 2010b). The same survey indicated that 16% of practice hours were delivered to people who are Aboriginal (Mathews et al., 2010b). Young Aboriginal men may be particularly unlikely to access mental health services, with cultural awareness training for practitioners being identified as a potential factor in promoting Aboriginal service access (Rickwood et al., 2007). There are further challenges as less than 1% of all employed psychologists in Australia are of Aboriginal or Torres Strait Islander descent (Health Workforce Australia, 2014).

It has been suggested that the recognition, assistance with clarifying and promotion of client care preferences are among the least-developed components of evidence-based practice in psychology (Spring, 2007). This may be of particular importance when considering strategies for hard-to-engage demographics with unmet service needs (Wilson et al., 2013).

7.1.3 Fragmentation of the mental health system

The mental health system and supporting infrastructure (for example, social services such as employment and housing) are recognised as fragmented and often poorly coordinated, even though individuals with mental illness often have multiple touch-points with such services (Medibank Private Limited and Nous Group, 2013). They may also access services from a range of healthcare professionals in different settings. The issue of fragmentation is exacerbated as mental illness is associated with a compounding cycle of disadvantage, with mental illness presenting disproportionately in demographics of social or economic disadvantage, which are in turn, less able to access services. This fragmentation is partly attributable to the fact that responsibility for mental health services is distributed across Federal and State governments, public and private hospitals, and not-for-profit entities (National Mental Health Commission, 2014). These challenges around governance and administration must be considered in the design and delivery of new initiatives as they may place further burdens on an already complex and fragmented system (Medibank Private Limited and Nous Group, 2013).

There may be opportunities to support greater collaboration across public and private sector psychologists to partially address or work around the issue of system fragmentation. Workshop participants identified the opportunity for an over-arching, integrated framework linking public and private services, as well as a clearly defined organisational structure for private psychologists in order to define integrated clinical pathways and drive person-centred practices.

7.1.4 Mental health services for chronic and complex cases

The government's response to recommendations from the Inquiry into Commonwealth Funding and Administration of Mental Health Services report recognises that initiatives such as the Medicare Benefits Scheme, which limit the number of rebate-able sessions, were not designed to provide ongoing services for individuals with more severe complex illness. The (National Mental Health Commission, 2014, p28) identifies around 3.1 percent of the population with severe mental illness, who can be subcategorised as follows:

- **Subgroup 1—Severe episodic**: individuals who have discrete episodes, interspersed with periods of remission (about two-thirds of the overall severe population).

- **Subgroup 2—Severe and persistent illness:** individuals with chronic mental illness that causes major limitations on functioning (i.e. very disabling) and is chronic without

remission over long periods. This group represents about one-third of the overall severe population.

- **Subgroup 3—Severe and persistent illness with complex multiagency needs:** this group represents those with the greatest disability among the severe population and who require significant clinical care (including hospitalisation) along with support to manage most of the day-to-day living roles (e.g. housing support, personal support worker domiciliary visits, day program attendance). This group is relatively small (approximately 0.4 per cent of the adult population or 65,000 people) and is likely to be the focus of NDIS Tier 3 individual support packages."

Addressing the mental health needs of those with severe mental illness remains a challenge and opportunity for the sector as the current fiscal environment will make it increasingly difficult to maintain the current growth in healthcare expenditure (National Mental Health Commission, 2014). Workshop participants were invited to consider the following question: "Thinking about patients with complex co-morbidities, how could their whole clinical experience be designed to maximise outcomes?" Participants identified challenges around the lack of governance structures integrating public, private and NGO services. They also identified the following opportunities:

- Dedicated case managers to identify and source the care and services required, and delivery of services in an integrated team, resulting in a more person-centred model

- Clear clinical practice guidelines encompassing processes such as assessment and discharge planning

- Better shared access to medical records (although challenges around confidentiality and privacy were also noted)

- Transitional care and stepped models of care to cater for needs across the spectrum of complexity, and for changing individual needs and circumstances.

7.2   Opportunities

7.2.1   Understanding the future workforce

An understanding of the graduate and student pool is currently limited, but presents an opportunity for increased understanding. For example, many students complete academic qualifications in psychology but do not ultimately pursue registration (Health Workforce Australia, 2014) – understanding aspirations and drivers of registration as a psychologist may assist in developing strategies to attract suitable and talented students to the profession, particularly those from diverse or indigenous backgrounds as they are currently under-represented in the workforce. A recent survey of clinical neuropsychology graduates in NSW identified that a large proportion (89%) of graduates perceived the limited number of available positions and competition for those positions as key barriers to entry to the workforce. 28% of those graduates who were employed in clinical neuropsychology were not working full time in the field and seeking more work. Further efforts are required to conduct broader national and state-wide reviews of the student and graduate experience in order to identify factors affecting the attraction and retention in the graduate workforce, as well as understanding opportunities for improving career pathways to both improve the patient experience, and the professional experience (Massey, J.S, Personal Communication, 5 June 2015).

7.2.2 National Disability Insurance Scheme (NDIS)

The introduction of the NDIS represents both changes and opportunities for the mental health sector. Under the scheme, psychologists can register to provide a range of supports through the NDIS, including assessment, early intervention, behaviour support and therapy. There remains some ambiguity regarding eligibility criteria for individuals to access the scheme and therefore the scope of supports provided (National Mental Health Commission, 2014). It is recommended that service managers (i.e. LHDs) and professional organisations work to develop a clear understanding of the potential implications (benefits and risks) of the NDIS for both the psychology workforce and for service delivery.

7.2.3 Telehealth

The National Mental Health Commission suggests that new technologies are explored to extend access to demographics which prefer to use technologies over face-to-face services, or are restricted by geography or socio-demographic constraints from accessing other mainstream services (National Mental Health Commission, 2014). Other considerations in the growth of telehealth in psychology include service acceptance by providers and clients, client service use capability, appropriate training for providers, infrastructure investment, ethics, confidentiality, security, practice guidelines and professional standards (Balamurugan et al., 2009; Corcoran et al., 2003; Perle et al., 2011). The ability to participate in telehealth is partly dependent upon access to appropriate communication capabilities, which may present issues for its use in remote areas and for individuals presently without access due to socio-economic factors (Sampson and Makela, 2014). Telehealth has the potential to overcome several barriers to care while concurrently enhancing the time-effectiveness of service delivery (Mullin et al., 2015). Given the increasingly ubiquitous and capable nature of smartphones, the potential for app development and smartphone utilisation in case management, data capture and research is extensive. Priority should be given to initiatives at all levels to exploit the potential of this technology to enhance care provision (Miller, 2012).

7.2.4 Training and credentialing

Considerable ongoing attention has been directed towards the training and credentialing of new psychologists. Opportunities to enhance the qualities and standards of the profession may exist within changes to training and credentialing. The recent inclusion of an exam as a component of registration may contribute to ensuring certain knowledge and competencies are embedded within practicing professionals (Psychology Board of Australia, 2015a). Benefits in modifying the supervision component of psychology training may increase the accuracy of competency assessment, reduce cost, reduce training time and reduce barriers related to internship sourcing (Australian Psychological Society, 2012).

7.2.5 Workforce distribution and scope of practice

The participation of psychologists in integrated care settings is widespread and has many known benefits. Given that the majority of services provided by psychologists are delivered to individual clients, the benefits of psychologist participation in integrated care settings which have the ability to promote messages to a wider client base include promotion of participation in holistic health promotion activities, promotion of regular screening and participation in healthcare registries (Nash et al., 2012).

It is recommended that LHDs explore and assess the potential to engage independent private psychologists (who comprise some 30% of the workforce) in government-funded initiatives, especially in rural and remote areas (Mathews et al., 2010b). Up to 25% of these private practitioners practice outside of metropolitan areas (Stokes et al., 2010b). Community-based psychologists have been identified as contributing to reducing hospital admissions, enabling hospital discharge, reducing hospital readmissions and ensuring continuity of care (Achterstraat, 2010). The Australian Psychological Society identified that there may also be opportunities for appropriately skilled psychologists to lead diagnosis and intervention strategies for a broader range of illnesses, increasing throughput in areas currently reliant on psychiatrists (Australian Psychological Society, 2014b).

7.2.6 Expansion of Allied Health Assistant involvement

A dedicated subset of Allied Health Assistants (AHA) exists within clinical Psychology. While these psychology assistants generally have clear job descriptions, evaluations of actual tasks performed indicate the roles vary depending on practice setting and manager/supervisor preferences (Lizarondo et al., 2010). It is recommended that the profession in collaboration with LHDs work together to develop role and accountability standards for AHAs (Munn et al., 2013).

7.2.7 Leveraging Integrated Care

7% of psychologists report working in a community mental health service while only 1% report working in a GP or primary health clinic (Mathews et al., 2010b). Similarly, approximately 7.5% of psychologists practice in hospital settings (Mathews et al., 2010b). Consideration may be required when considering the capacity of these workforces to participate in expanded integrated care initiatives.

The Grants Management Improvement Program operated by NSW Health facilitates the acquisition and/or contracting of community-based mental health services to allow the engagement of the community-based workforce in public strategic initiatives (Mental Health Commission of New South Wales, 2014). The HealthOne New South Wales program seeks to promote interdisciplinary team development, while the Western New South Wales, Western Sydney and Central Coast Local Health Districts are proposing to trial mental health integration with other health services under the New South Wales Ministry of Health's Integrated Care Strategy 2014-2017 (Mental Health Commission of New South Wales, 2014).

7.2.8 Care Pathways (Health Pathways and Map of Medicine)

Care pathways are electronic resources which support primary care clinicians to plan patient care through primary, community and secondary health care systems. These tools are designed to be used at the point of care, primarily for general practitioners but may also be utilised by specialists, nurses, allied health and other health professionals.

There is an opportunity for the psychology profession engage with those organisations which are seeking to develop care pathways for their services, making it easier for the wider health community to understand what services are available and how they may be referred into or accessed.

7.3 Gaps in the current body of literature

Gaps exist in current research regarding supervision of trainee psychologists, with suggestions being made that evidence for supervision effectiveness is lacking and that the supervision process may actually limit the accuracy of trainee competence assessment (O'Donovan et al., 2011). The processes by which psychologists develop the skills to become effective supervisors are also poorly understood (Hunsley and Barker, 2011). This may be a contributor to the state of flux seen in the internship training structures.

The care preferences of people who are Aboriginal and the methods by which they seek and access psychology services have been identified as areas where further research is required (Rickwood et al., 2007).

Research exploring factors impacting mental illness in rural and remote areas is not as comprehensive as those of metropolitan areas, with suggestions made that there may be significant differences between these factors with varying geography and remoteness (Kelly et al., 2010).

Despite widespread job advertisements indicating that a number of roles may be filled by psychiatrists, social workers or mental health nurses, literature investigating the impacts of psychologist role boundary blending was not evident. The scale of this issue may be further evaluated through a review of current job descriptions within the NSW healthcare system.

While it is widely held that a significant shortage of psychologists and available services exists, the extent of this shortage is not precisely known.

7.4 Considerations for future planning and scenario generation

A number of scenarios and opportunities to explore in the next phase of the workforce planning process have been identified, including:

7.4.1 Increasing system capacity for supervision and training

Whilst psychology remains a popular program of study, the current system does not have the capacity to meet demand. The current model is also seen to be costly and lengthy.

How can we unlock greater capacity for supervision of intern psychologists, for example through: innovative teaching and delivery models, structural changes to the supervision program and requirements and incentives and support for supervisors?

7.4.2 Increasing service access to rural communities and underserved demographics

If supervision and registration pathways can be unlocked to achieve greater capacity and throughput of interns, there may be opportunities to expand the psychology workforce in rural areas and to support service delivery to underserved demographics such as older people, people who are Aboriginal and those from culturally and linguistically diverse backgrounds.

What system-level and program level initiatives can be implemented to increase the representation of psychologists in underserved communities and demographics? What incentives and support elements can be provided to attract and retain psychologists in these areas?

7.4.3 Achieving greater whole-of-system integration

In order to provide more personalised and flexible modes of care, increase efficiencies and improve mental health outcomes, there must be greater standardisation and less fragmentation across the sector.

How can patient outcomes be enhanced – particularly for those with complex needs and comorbidities – through practice standardisation, collaboration and integration across the private, public and NGO sectors?

7.4.4 Defining key roles and boundaries in the mental health sector

There are a number of critical roles that need to exist to support a mental health sector which meets patient needs across the spectrum of mental health needs, however role boundaries and scope of practice are increasingly blurred.

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9   Appendix A: Stakeholders Consulted

The table below provides details of the stakeholders consulted

Name	Position	LHD/Organisation
Cidi Olujie	Senior Clinical Psychologist	CCLHD
Vida Bliokas	Psychology	ISLHD
Lee Francis	Clinical Psychologist	MLHD
Joann Bobrowski	Mental Health Nurse	NBMLHD
Vanessa Croker	Senior Clinical Psychologist	NBMLHD
Herman Neukirch	Psychology	NNSWLHD
Melissa Fick	Psychology Services and Research Centre, Macquarie Hospital	NSLHD
Anna Mandalis	Psychology	SCHN
Lil Vrklevski	Director of Psychology	SYDLHD
Tim Hewitt	Clinical Psychologist	WNSWLHD
Clodagh Ross-Hamid	Psychology	WSLHD
Gary Bruderlin	Workforce Recruitment and Redesign Manager	CCLHD
John Merrick	Director Allied Health	HETI
Andrew Kaw	Allied Health Forensic Hospital	JH&FMHD
Alison Grundy	Principal Psychologist	SESILHD
Wendy Conroy	Principal Psychologist	SESILHD
Judy Hyde	President, Australian Clinical Psychology Association	

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10 Appendix B: Literature review key word search

The key words used in the literature review search are listed below as follows:

- Service quality

- Community, integrated, de-institutionalisation

- Home, community, acute, rehabilitation

- Model of care, model of delivery

- ABF, casemix, activity based funding

- e-health, electronic health records, health information technology

- Geographic distribution, rural, remote

- Training, credentialing, registration

- Unmet needs, service gaps, opportunity(ies)

- Accessibility

- Workforce, recruitment, retention, incentive

- CDM, chronic disease management, Medicare

- Risk, benefit

- Indications

- Drivers

- Emerging issues

- Scope of practice, role design, service delivery

- Allied health assistants

- Mental illness, diagnosis, classification

- Social worker, Mental Health Nurse, role blending, job description, crossover, boundary

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11 Appendix C: Areas of endorsement

Table 6. Areas of endorsement

Area of endorsement	Number of psychologists
Clinical psychology	5,084
Counselling psychology	802
Forensic psychology	414
Clinical neuropsychology	446
Organisational psychology	339
Sport and exercise psychology	77
Educational and development psychology	450
Health psychology	225
Community psychology	44
Clinical psychology and forensic psychology	178
Clinical psychology and counselling psychology	152
Clinical psychology and clinical neuropsychology	103
Clinical psychology and health psychology	92
Clinical psychology and educational and developmental psychology	79

Source: (Health Workforce Australia, 2014)

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Table 7: Defined areas of psychology practice

Area of Practice	Definition
Clinical psychology	Most clinical psychologists develop expertise in specific areas, or practice in sub-specialisations of clinical psychology. They provide a wide range of psychological services to individuals across the lifespan and for mental health conditions that range from mild to severe and complex. In addition to professional practice, clinical psychologists may be involved in research, teaching and supervision, program development and evaluation, public policy and other activities that promote psychological health in individuals, families, groups, and organisations.
Counselling Psychology	Counselling psychologists specialise in the following areas: • Counselling and psychotherapy • Mental Health disorders • Program development and evaluation • Mediation • Assessment and reports.
Forensic Psychology	Forensic psychologists are scientist-practitioners. They apply psychological knowledge, theory and skills to the understanding and functioning of legal and criminal justice systems, and to conducting research in relevant areas. They often work in criminal, civil and family legal contexts and provide services for litigants, perpetrators, victims, and personnel of government and community organisations.
Clinical Neuropsychology	Clinical neuropsychologists provide assessments and treatment recommendations for people experiencing difficulties with memory, learning, attention, language, reading, problem-solving, decision-making or other aspects of behaviour and thinking abilities. Neuropsychologists also provide treatment that may employ cognitive, educational, behavioural or psychosocial methods.

Sport and Exercise Psychology	Sport and exercise psychologists specialise in the following areas:
	Performance enhancement and mental skill development
	Anxiety and stress management
	Concentration and mental preparation
	Overtraining and burnout
	Team building and leadership
	Communication skills and conflict resolution
	Health and wellness coaching
	Weight management
	Debriefing and program evaluation
	Recovery and restoration
	Injury rehabilitation
	Psychological assessment
	Video analysis of sporting emotions and performances
	Career transitions and coping with grief and loss (for example, de-selection and retirement)
	Balancing sport and study, employment and/or family life.
Educational and Developmental Psychology	Specific areas of practice include:
	Early childhood
	School years
	Adolescence
	Adulthood
	Later adulthood
Health Psychology	Specific areas of practice include:
	Health promotion
	Clinical health psychology

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Community Psychology	Community psychologists specialise in:
	Needs analysis for communities at risk, such as immigrant groups and rural and remote communities.
	Community asset mapping of social capital and related resources.
	Community generated problem solving based on collaboration and social justice.
	Community capacity building to manage change and address risks and threats.
	Evaluation of psychosocial environments with respect to sense of community, quality of life, social support networks, resilience, etc.
	Social impact assessment related to environmental issues such as drought and climate change.

Source: (Australian Psychological Society, 2015a)

NSW Ministry of Health
Workforce Planning & Development Branch

Addendum to the Selected Allied Health Professions Horizon Scan

Psychology Workforce

July 2017

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12   Addendum Introduction

The 2015 Selected Allied Health Professions Horizons Scan examined the workforce implications of the likely future developments in the health landscape for the allied health profession of psychology.

The Psychology workforce was considered through a desktop review of the international literature, a series of interviews with senior stakeholders, an online survey to identify key issues and a 'Scenario Development' workshop. The outputs of these activities are detailed within the Psychology Horizons Scanning report.

This addendum provides a validation review of the Psychology Horizons Scanning reports submitted to the Ministry of Health Workforce Planning and Development Branch in 2015. The intention of the addendum is to highlight any gaps/issues which may have emerged for the psychology workforce since the original review was undertaken in 2015.

12.1   Statistical data constraints

In 2015 the Australian Institute of Health and Welfare (AIHW) was the data custodian of the National Health Workforce Data Set (NHWDS). The AIHW's contract expired on the 30th June 2016 and the Department of Health assumed custodianship of the NHWDS on 1st July 2016. At the time of this validation, the statistical data for the period 2016-2017 was unavailable on the Department's website. The statistical data was primarily sourced from the Psychology Board of Australia. Statistical comparison will only be conducted on available matching datasets.

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13   2017 Validation review of the psychology workforce

A refreshed literature review was undertaken in order to identify any new literature pertaining to the Psychology workforce. Where new or updated literature was identified a summary has been included below.

13.1   Workforce characteristics

Data provided by the Psychology Board of Australia in December 2016 (Psychology Board of Australia, 2016) confirms that:

- There were 34,167 registered psychologists in Australia.

- The psychology workforce was approximately 79.4% female and 20.6% male.

- 12.8%% of the psychology workforce was aged under 30 years and 25.4% was aged 55 years or older.

The number of registered psychologists has increased by 4,780 (up from 29,387) compared to the data contained in the 2015 report, however the other observable characteristics and distributions were similar.

As per the Public Service Commission (PSC) Workforce Profile data, in the year 2016, the number of Aboriginal psychologists in NSW Allied Health was five (5) as compared to approximately 556 non-Aboriginal psychologists (NSW Public Service Commission, 2016).

13.2   Professional bodies and associations

A review of the psychology professional bodies and associations identified in the 2015 Horizons Scanning Report was conducted and no changes to the membership list was observed.

13.3   Additional key drivers for demand for psychology services

The original findings of the 2015 report remain valid. Additional literature that identifies additional or new demand drivers for the psychology workforce could not be sourced.

13.4   Additional key drivers of supply of psychology services

As noted previously by the 2015 report, supervision requirements and system capacity was highlighted as a barrier to supply. This was further found in a study where system issues such as standards and regulations within professional and accrediting bodies, the nature of workplaces and industrial awards posed greater barrier to potential placement supervisors than individual internal factors such as motivation (Shires, Vrklevski, Hyde, Bliokas, & Simmons, 2017). The shortage of time and inability to access approved supervisor training were also noted as barriers to the provision of external student placement.

13.5   Challenges and opportunities for the psychology workforce

Within rural and remote regions, accessibility to continuing professional development was report as being difficult (Gallego, et al., 2016). Technology such as webinars could be an option to extend training and professional development to remote environments. In addition, it was noted that the growth of individual funding models in the National Disability Insurance Scheme (NDIS) could present an opportunity for the rural private therapy sector.

A study was conducted to investigate the advantages of psychological service delivery through Fly-In, Fly-Out and Drive-In, Drive-Out (FIFO/DIDO) models to rural and remote

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locations (Sutherland, Chur-Hansen, & Winefield, 2016). Whilst there were some advantages to the model, there were still significant challenges encountered. A major finding was that the FIFO/DIDO service may be less appropriate for Indigenous communities due to the importance of developing long-term relationships with communities that often experience inconsistent services.

It was noted in a study that a combination of specific and generalist skills, collaboration and cross-disciplinary communication skills were required when supporting people with intellectual disabilities and complex support needs (Dowse, Wiese, & Smith, Workforce issues in the Australian National Disability Insurance Scheme: Complex support needs ready?, 2016). The study also highlighted that workers in the disability sector need better access to supervision and mentoring. Currently the NDIS funding framework includes only the costs of delivering individualised support and does not cost supervision and mentoring (Dowse, Wiese, & Smith, Workforce issues in the Australian National Disability Insurance Scheme: Complex support needs ready?, 2016). The absence of organisational funding for supervision and mentoring will impact on ability to provide support in the longer term.

An Australian study suggests that for sustainable provision of high-quality mental healthcare in Australia, training costs and pathways should be the key focal point (Crome, Shaw, & Baillie, 2016). It noted that Australian policy makers should take a stronger role in managing and supporting the training of the mental health workforce.

13.6   Additional areas of interest

In addition to the demand and supply drivers identified and explored, a number of key emerging areas of interest for the allied health professions were considered through the validation review process which may impact the psychology workforce.

13.6.1 Impacts of ICT including eHealth and NSW ICT strategies

eHealth NSW initiatives for 2016-2026 (NSW Health, 2016) identify that there are five key drivers for change in patient interaction with technology as follows:

- Technology is strengthening patient knowledge, allowing them to be increasingly empowered, health literate and engaged as partners in their healthcare and wellness

- There is an increasing demand for healthcare workers and pressure to address shortages of skilled health workers, predominantly in regional and rural communities

- The emergence of integrated care models means there is a need to provide seamless, effective and efficient partnering with the patient, their carers and family. Technology must be more successfully harnessed to do this.

- Rapid development and adoption of technology innovations has created opportunities within the home, hospital and community care settings.

- There is a move toward open information and transparency across government agencies contributing to an improvement in data quality and analytics which assist in delivering greater care across communities and industries (NSW Health, 2016).

Technological developments within integrated care include HealtheNet, a central clinical repository providing a state-wide view of clinical history and seamless information-sharing between hospitals, community health, GPs, patients and private clinicians. This provides a framework to promote transparency and sharing of individual patient data between providers across the state. Additional eHealth Integrated Care solutions include a secure

messaging and eReferral management system as well as shared care planning tools. These technological solutions have the potential to support patient-centred models of care and promote psychology involvement in delivering care that spans across the longitudinal view of the patient's journey.

The Community Health and Outpatient Care (CHOC) electronic medical records program was a 7-year state-wide Integrated Clinical System program that has been implemented across eight services (including Aboriginal Health, Aged and Chronic Care and Mental Health) in NSW community health. Leveraging both Cerner's ability to provide information integration across a wide range of care settings and the CHIME solution, a platform that was specifically designed for community health to various Patient Administration Systems and aims to create a 'single patient view', the CHOC program aims to provide clinicians across multiple sites with timely access to clinical information.

The eMR Connect Program aims to deliver a state-wide, comprehensive electronic medical record (eMR) and is an integral component of eHealth NSW's Strategy for NSW Health:2016-2026's integrated care solutions. The Integration of clinical systems within the various Local Health Districts and community health systems including CHOC is essential to the vision of the eHealth NSW Integrated Care Solutions Strategy.

From a workforce planning and management perspective, solutions such as the Integrated Human Capital Management Suite could potentially support the recruitment and retention process of the workforce via standardisation of processes across the state. In addition, this could provide data to enrich predictive workforce models that in turn will assist in future workforce planning.

13.6.2 Rostering best practice

Workforce rostering is a factor that influences the broader health workforce. Health services that operate seven days per week are under pressure to show the increased cost of providing weekend services can be measured in improved patient outcomes. A qualitative study was undertaken whereby managers perceived that a seven-day operational week improved patient flow and quality of care and reduced adverse incidents, such as falls and intensive care admissions (Mitchell, O'Brien, Bardoel, & Haines, 2017). It was noted that there are challenges associated with planning, staffing and management of seven day services, mainly due to change resistance from a workforce that has traditionally operated during traditional working hours. Strategic human resource planning could be considered to ensure the psychology workforce can provide adequate levels of patient care within a seven-day operational week.

13.6.3 Addressing the health needs of the broader Aboriginal and Torres Strait Islander Communities

Psychology and the broader allied health profession should examine its ability to address the health needs and deliver appropriate levels of care to Aboriginal and Torres Strait Islander communities.

Peer mentoring was identified as a "powerful tool for two-way learning to promote practice improvement". When an organisation was found to have put in place sufficient levels of management support and training for non-Aboriginal and Torres Strait Islander staff and where they partnered closely with Aboriginal Health Workers (AHWs), there was evidence of an increased readiness to learn and adjust practice to deliver services in a more

culturally appropriate manner. This increase in cultural awareness may in turn have a positive impact on the health outcomes of Aboriginal and Torres Strait Islander people.

The Aboriginal and Torres Strait Islander view of health is not just about the physical wellbeing of the individual. It is the social, emotional and cultural wellbeing of the entire community, a concept that is usually ignored by mainstream health services. It is therefore unsurprising that mainstream health services face additional challenges in trying to gain the trust of Aboriginal and Torres Strait Islander people.

Recognition of spirituality as a critical factor in Indigenous well-being can contribute to the development and implementation of health promotion and preventative projects. The psychology profession should therefore adopt and embrace culturally responsive practices and trauma informed services.

Stakeholder engagement undertaken with Indigenous Allied Health Australia in 2017 identified that the geographical distribution of the psychology workforce is just as important as the size of the workforce. Supporting the concept of a holistic model of care, design around implementing 'central hubs' within the communities is of key importance. As Aboriginal and Torres Strait Islander communities possess unique cultural characteristics, specialised models must be designed and developed around the community values themselves.

There is a view that specialised models should be developed by Aboriginal and Torres Strait Islander people and that evidence based models should form the foundation for designing these specialised models of care. Through a combination of leadership, development, mentoring and inclusion the health needs of the Aboriginal and Torres Strait Islander people can be addressed. Stakeholders acknowledged that there should be a process of respectful consultation with the Aboriginal and Torres Strait Islander community on how services should be delivered. The concept of a cultural navigator was identified as one role that could significantly enhance the current psychology service offering to Aboriginal and Torres Strait Islander communities.

The encouragement and support of Aboriginal people to patriate in the profession of psychology is key aspect to promoting improved health needs of broader Aboriginal and Torres Strait Islander communities. Through stakeholder consultation, it was noted that Aboriginal students and graduates were strongly driven to contribute back into their communities. The provisioning of appropriate support and availability of placements for these students is vital.

Aboriginal graduates should be supported with future employment in areas that have cultural connections and supports. Career progression from the role of allied health assistants to allied health professionals was a 'natural' transition. It was identified that adequate support for participation of Aboriginal people within the workforce was a key driver.

13.6.4 Emerging models of care

New and emerging models of care have the potential to impact across the whole range of Allied Health Professions including the psychology workforce. Examples of emerging models and initiatives include Leading Better Value Care, the Whole of Health Program and the Ministry of Health's Integrated Care Strategy.

An example of an emerging patient centred model of care in NSW is the Leading Better Value Care Program. Commencing in 2017/18 the NSW Health system will refocus - away from the traditional approach of measuring value in terms of volume/output in relation to costs, to measuring value in terms of the Institute for Healthcare Improvement Triple Aim of health outcomes, experience of care and efficient and effective care (in relation to costs). In this context, health outcomes are defined as the outcomes that matter to patients (NSW Health, 2017).

NSW Health's Integrated Care Strategy also aims to provide a patient-centred model of care through seamless, effective and efficient care that reflects the whole of a person's health needs; from prevention through to end of life, across both physical and mental health, and in partnership with the individual, their carers and family (NSW Health, 2017).

The NSW Health 'Whole of Health Program' (WOHP) is a centrally facilitated but locally led program which aims to improve access to care for patients across NSW. It began as the Whole of Hospital Program in February 2013 to drive the local change needed to improve patient delays, with NSW having fallen short of the 4-hour Emergency Department (ED) target (previously National Emergency Access Target or NEAT) in 2011 and 2012 (NSW Health, 2016). Through improvements in patient accessibility, this could increase the demand for services.

There is a potential opportunity for the psychology profession to participate in multidisciplinary and interdisciplinary team based care through the emergence of new models of care including integrated patient centric models of care.

13.6.5 Impacts of the NDIS

The rollout of the NDIS will have a significant impact upon the psychology profession and the services it provides. It is anticipated there will be an increasing number of service providers working in remote Indigenous communities over the next few years, with progressive rollout of the NDIS. To provide culturally appropriate, evidence based services, it is essential for individuals and organisations to understand the meaning, barriers and enablers of participation for children and families in remote areas (O'Kearney, Johnston, Greenstein, Pilikington, & Pidgeon, 2015).

The intensity and range of supports required by many people with intellectual disabilities and complex support needs translates into the need for commensurate support services. This raises several workforce issues relevant to both the profile of worker skills and the mechanisms through which these skills might be developed and maintained. Workforce planners face the challenge of ensuring both specific (depth) skills in specialist support areas such as behaviour support, as well as generalist (breadth) skills in areas such as service coordination and cross-disciplinary or cross-sector communication, or both (Dowse, Wiese, & Smith, Workforce issues in the Australian National Disability Insurance Scheme: Complex support needs ready?, 2016).

Given that healthcare systems and associated services are becoming increasingly consumer driven there may be a requirement for psychologists to become more responsive to specific consumer need and emerging policy directions that seek to meet consumer need and expectation. The psychology workforce may need to provide support to navigate these new working environments and ways of working.

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13.7 Conclusion

This validation review concludes that the findings of the 2015 Psychology Horizons Scanning Project remain valid and fit for purpose. The literature published since 2015 supports the original findings, while a smaller subset of research further expands on / enhances the themes identified in the 2015 work. Only a small number of new publications were identified, and these additional findings are complementary to the earlier work as no new, distinct workforce drivers have emerged as a result.

These areas include NSW ICT Strategies including eHealth NSW initiatives, patient-centric integrated models of care, FIFO/DIDO workforce models and further opportunities to address the broader health needs of Aboriginal and Torres Strait Islander communities.

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14   Addendum References

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