

DISCUSSION PAPER

TOWARDS A MORE EFFICIENT & EFFECTIVE MENTAL HEALTH SERVICE IN NSW HEALTH: THE DEVELOPMENT OF AN EFFECTIVE CLINICAL PSYCHOLOGY WORKFORCE

A document prepared by Dr. Phil Renner & Professor Alex Blaszczynski in collaboration with NSW Health Department Senior Psychologists, The Centre for Mental Health (Professor Beverley Raphael and Dr Sally Wooding) and the Australian Psychological Society (Dr. Louise Roufeil)

Under the auspices of the Director of NSW Mental Health, Professor Beverley Raphael, and the Australian Psychological Society, senior clinical psychologists working within NSW Health met in July 2004 to discuss the current status and future directions of clinical psychology services. This document is a summary of the key outcomes of this meeting,

September 2004

EXECUTIVE SUMMARY

Background: the problem in NSW

The NSW Government Response to the Select Committee Inquiry into Mental Health Services in NSW (2003) recognized the need to improve the efficiency and effectiveness of mental health services in order to meet both the current level of demand and the projected epidemic of mental health disorders. The aim of this document is to outline the under utilization of one of the specialist mental health service providers, that is, clinical psychologists, within NSW Health, and to suggest ways in which developing the clinical psychology workforce could allow NSW Health to better manage the existing and rapidly increasing burden of mental health disease in the community.

The value of a clinical psychology workforce

Clinical Psychology represents a significant but grossly underused workforce group offering core mental health and specialist interventions across the full range of disorders and conditions. In this context clinical psychologists provide direct services in addition to applying specialist skills within multidisciplinary settings. They have substantial expertise in developing and implementing evidence based psychological interventions for a range of low and high prevalence mental health disorders. Clinical psychology contributes unique specialist knowledge and skills that complement mental health service development and delivery through:

- ⇒ Expert skill in clinical assessment
- ⇒ Proven significant contribution to discipline-specific in addition to interdisciplinary research and training
- ⇒ Life span development approach consistent with the National Mental Health Plan
- ⇒ Clinical application from primary care through to inpatient units
- ⇒ Expert skills in the management of comorbid and complex disorders
- ⇒ Expertise in prevention, early intervention and treatment with early signs of disorders
- ⇒ Expertise in working with children, adolescents, adults, couples, families and groups
- ⇒ Expertise in guiding, evaluating, implementing and delivering interventions in transcultural settings
- ⇒ Expertise in the psychology of aging and dementia

The value of clinical psychology is demonstrated through high demand for clinical services, cost effectiveness, consumer acceptability, reported effectiveness of evidence-based

treatments for severe health disorders, and the increasing extension of such psychological skills to all fields of healthcare (Jorm, 1994; McDonald, 1998; NHS, Scotland, 2003; Haby et al 2004). Psychological therapies are effective not only in terms of patient health outcomes but also in the comparative return between expenditure and measured health benefits (Milgrom, Walter & Green, 1994; Schwartz, 1995), especially in the augmentation of medical interventions and the shortening of time to wellness and recovery (Anthony, 2000). This has been recently emphasized in two important Australian studies that found that cognitive behavioural therapy (provided by a public psychologist; Heuzenroeder et al 2004) was the most effective for the patient and the most cost-effective in comparison to pharmacological interventions (Haby et al 2004; Heuzenroeder et al 2004).

The current mental health workforce in NSW

Other specialist mental health professions, for instance psychiatrists and mental health nurses, are currently experiencing workforce shortages. However, there is a good supply of psychologists graduating from universities and a highly developed system for professional registration (NSW Psychologists Registration Board) and for assessing competency standards through the standard supervisory requirements and the various Colleges of the Australian Psychological Society (APS) with current mandatory ongoing accreditation requirements ensuring competency of service delivery in the scientist-practitioner model.

It is difficult to estimate the size of the psychology workforce in NSW due to inadequate data collection strategies. However, there is estimated to be about 696 psychologists working in NSW Health (not all of these are clinical psychologists) (NSW Health workforce profile, 2004). These approximate figures indicate that NSW Health falls substantially short of international minimal benchmark figures for an effective clinical psychology workforce (for example, 1:5,000 per population as in the Scottish NHS).

Some of the major barriers to the optimal functioning of the clinical psychology workforce within NSW Health, in addition to their low workforce numbers, are:

- ⇒ The management of psychological services by non-psychologists
- ⇒ Limited opportunities for clinical psychologists to develop and implement psychological interventions and the 'misuse' of complex psychological interventions
- ⇒ The lack of recognition of the specialized skills of clinical psychologists compared to the psychological skills possessed by other health professions

Workforce management to date, with clinical psychology expert resources submerged in other structures and programs, has impeded the efficiency, effectiveness and cost-benefit provision of mental health services delivered by clinical psychologists. The opportunity now exists for considered planning to reform the infrastructure supporting the delivery of a range of mental health services. In accordance with the overall aims of the National Mental Health Plan 2003-2008 (Australian Health Ministers, 2003) and the objectives of population health models (Raphael, 2000), there is an imperative to maximize the contribution of clinical psychology by clarifying its professional role and functional relationship with other relevant mental health professionals. In this way, discipline-based specialist as well as generic skills can be applied within multidisciplinary settings to achieve best-practice evidence-based interventions maximizing the health benefits of those in the population requiring mental health services.

Conclusions

It is recognized that workforce development is crucial in the delivery of effective health treatments and that clinical psychology is a major contributor to health in NSW. Restructuring of psychology and clinical psychology services in NSW could result in:

- ⇒ Increased utilization of cost effective treatments in both mental health and general health programs
- ⇒ Better utilization of already present and expert resources currently being submerged in other structures and frameworks
- ⇒ Substantial expansions of already stretched specialist psychiatrist and specialist medical resources
- ⇒ Thereby meeting much of the current unmet community demand, particularly in mental health, without extra training or overseas recruitment.

Recommendations

To achieve an effective and efficient public mental health service in NSW based on a consumer centered rehabilitation and recovery model it is recommended that:

- ⇒ An organizational structure (a NSW Directorate of Psychology) with appropriate funding and governance be established within NSW Health to specifically develop the clinical psychology workforce to become a core component of the mental health workforce along with psychiatrists and nurses, and in keeping with international best practice health systems

- ⇒ That the Directorate of Psychology work in close collaboration with other health professionals to address the workforce challenges identified by leaders of mental health professions
- ⇒ That current systems of mental health professional care are restructured to enhance consumer access and flow through effective psychological treatment options to both complement and augment medical and nursing best practice and enhance outcomes in recovery and rehabilitation as envisaged by the National Mental Health initiatives
- ⇒ That the current distribution of psychologists and clinical psychologists is clearly mapped to allow benchmarks standards to be met and to drive the goals and expectations of the National Mental Health Plan (2003-2008)
- ⇒ That career structures are developed to retain experienced clinical psychologists in full time employment in the public health system to ensure the future delivery of fully integrated multidisciplinary team approaches to health care and prevention

-----ooOoo-----

1 Objectives

The aim of this document is to outline the current demand on the public health system in NSW to better manage the existing and rapidly increasing burden of mental health disease in the community. Results of the Australian Mental Health Survey indicate that too many people with current comorbid and disabling disorders are going without specialist treatment (Andrews, Henderson, Hall, 2001). It is argued that a significant improvement in the mental health system in NSW could be brought about by better mobilization and utilization of the specialist mental health skills of clinical psychologists. Specifically, the document points out the:

- Added value of clinical psychology to public health services and outcomes in terms of the delivery of time limited evidence-based interventions to the community
- Current inefficiencies in the use of clinical psychology resources
- Suggested strategies as to how clinical psychology can be managed to address crucial workforce challenges and to meet the objectives of the National Mental Health Plan 2003-2008.

2 The crisis in the mental health system in NSW

With the increasing burden of mental disorders, mental health needs to take its place at the forefront of health service development (NAPPEIMH, 2000). Mental and behavioural disturbances are common, affecting more than 25% of all people at some time in their lives. They are present at any point in time in about 10% of the adult population. Around 20% of all patients seen by primary health care professionals have one or more mental disorder. One in four families are likely to have at least one member with a behavioural or mental disorder. These families not only provide physical and emotional support, but also bear the negative impact of stigma and discrimination. Depressive disorders are already the fourth leading cause of the global disease burden. They are expected to rank second by 2020, behind ischaemic heart disease but ahead of all other diseases (World Health Report, 2001). There is growing evidence highlighting the reality that current services are struggling to meet both the expectations of people accessing services as well as practitioners (Inquiry into Mental Health Services in NSW, 2002).

The public mental health system in NSW currently emphasizes acute care (particularly for those with the less prevalent mental health disorders such as schizophrenia and bipolar disorder) and a case management model with service delivery relying heavily on generic

mental health workers. The latter appears to have developed, at least in part, as a response to the apparent workforce shortage of the two traditional specialist mental health professionals, psychiatrists and mental health nurses. Additionally, considerable efforts are understandably directed at early intervention with children, adolescents and families but public mental health services are particularly sparse in relation to both common and comorbid mental health disorders and to the care of the elderly, a rapidly increasing sector of the population. Currently, despite the emerging emphasis on rehabilitation and recovery, what is increasingly absent are vital aspects of treatment (other than medication), particularly for the high prevalence disorders of depression and anxiety; that is, there is increasing evidence to suggest that very few people with mental health concerns in NSW have access to the growing number of evidence-based interventions that are effective in ‘curing’ or assisting in the management of both the low and high prevalent mental health disorders and the actualization of the concepts of wellness, recovery and rehabilitation (Sugarman, 2001).

3 The current mental health workforce in NSW

There is considerable concern in NSW about the lack of sufficient numbers of health professionals to maintain existing services at adequate levels, let alone to deal with the expected ‘epidemic’ in mental health disorders. In most western countries (e.g. UK, USA, Canada), the specialist mental health workforce includes psychiatrists, nurses and clinical psychologists. However, within the NSW public sector mental health system, clinical psychology is a profession with historically under-recognized professional utility. The strong emphasis on nursing and medical staffing in the mental health system has resulted in poor understanding of the potential contribution of clinical psychologists to health service delivery. Additionally, the inclusion of psychologists/clinical psychologists within the classification of some 14 ‘non-medical’ health professionals such as podiatrists and dieticians as ‘Allied Health’ has obscured the availability of professions such as clinical psychology to meet the growing need for specialist mental health professionals. In terms of workforce supply and demand, the Government Department of Employment and Workplace Relations National Skill Shortage document lists 12 health professions, but does not include psychology. Additionally, there are currently approximately 630 students graduating annually with a psychology degree in NSW. Thus, there is potentially an ample supply of psychology graduates to meet workforce demand. In Australia, the current estimated psychology workforce is between 8,000 and 11,000 (although it is recognized that there are limitations with the existing data collection process and that the psychology workforce is likely to be significantly larger than this ABS data suggests) (HPCA, 2004). Details of available data on the NSW psychology workforce and the overseas workforce are presented in Appendix 1.

Summary: Clinical psychologists have high levels of practitioner skills in assessment, treatment, research and collaboration. Currently their specialist mental health competencies are obscured and diluted by their miscellaneous grouping in an allied health role. Possessed of specialist competencies, they have a unique role to play in transforming policy, training, population health and clinical practice, as well as facilitating workforce development and delivering effective consumer and community health gains.

3.1 The skill-base of clinical psychology

Like psychiatry, clinical psychology is a mental health profession whose complete post-graduate training is in the area of mental health. As scientist-practitioners, clinical psychologists are specifically trained to change human behavior and use techniques with proven scientific effectiveness through scientific research and statistical analysis. They have a thorough understanding of varied and complex psychological theories and the ability to formulate and respond to both complex disorder and to novel problems, generating interventions based on this solid knowledge base. Empirical training equips the clinical psychologist with the skills to understand and contribute to new research, evaluate interventions and apply these empirical skills to their own treatment of patients and that of the mental health services themselves. They are skilled in the use of psychological tests, behavioral observations and clinical and diagnostic interviewing. These skills are used to assess psychiatric disorders, specific aptitudes and cognitive deficits, personality, social functioning, adaptive behaviors and psychological issues pertaining to physical illnesses. They also act as consultants and so work with and through others to bring change in the individual group, family, hospital or agency setting.

Various reports indicate the prevalence of mental health disorders and the role played by clinical psychologists in dealing with them. The National Health Survey 1989-1991 demonstrated a high demand for clinical psychology services with 43,000 Australians consulting a psychologist over a 2 week period, requiring some 63, 000 consultations (Jorm, 1994). Inquiries such as the Human Rights and Equal Opportunity Commission (1993) in Australia and NHS reviews in Britain have found that mental health care systems need to make greater use of the distinctive skills and services of clinical psychology. In many areas across NSW, psychiatric registrar and consultant posts remain vacant, whereas in the same areas, there is the capacity for a full complement of clinical psychologists, and in the absence of other professionals in the community rehabilitation setting, provisionally registered psychologists are increasingly filling mental health provider roles.

3.1.1 The potential utilization of clinical psychology skills within the public mental health sector

Following is an outline of the specific skill-base of clinical psychology and how the public mental health sector might utilize such skills.

Expert skills to enhance the repertoire of general mental health assessment (MHOAT):

- Acknowledged expertise in personality assessment and in-depth clinical assessment of complex presentations
- Evidence based expertise in integrating complex relationships between biological, social, and psychological systems and transforming this analysis into effective treatments based on the understanding of how behavior changes.
- High-level skills in building relationships, managing aggression and self-harm, and enhancing compliance with medication and relapse prevention to sustain individuals outside of hospital settings in the long-term.

Scientific and research training:

- Training within the ‘scientist-practitioner’ framework supports the application of critical thinking to clinical services that leads to evidence-based and cost effective services
- Treatment planning based on models of targeted, stepped and time-limited care promoting greater access of consumers to mental health services, increased health gains and patient flow through the overloaded mental health system.
- Treatment of numerous medical conditions is enhanced by evidence-based interventions from clinical psychologists.

Life span knowledge:

- Clinical psychology views mental health disorders as disorders of development of the whole person and the profession is at the forefront of treatment innovation, provision and evaluation of treatment modalities across the full spectrum of health care interventions.
- All practitioners have a population health orientation and combine this with the expertise to provide mental health literacy; advise social policy; identify risk and protective factors; and play a key role in investigating causes, courses, outcomes and interventions for psychological aspects of disorders across the age and cultural spectrum.

3.1.2 The breadth of settings in which clinical psychologists can operate: Primary care to in-patient units

Following is a summary of the specific settings in which the skills of the clinical psychologist could be utilized. A more detailed outline of the expertise of clinical psychologists in developing and delivering evidence-based interventions for mental health problems is presented in Appendix 2.

Primary Mental Health Care:

- Providing brief psychological treatments and support for psychological symptoms of mental illnesses in the community
- Working with GPs to enhance prevention, identification and early treatment of patients with mental health disorders and psychological aspects of illness
- Developing specific intervention for addictions, bereavement and trauma, domestic violence and recovery from illness
- Relapse prevention to make health gains more sustainable and promote physical and emotional well-being
- Working with schools and educators on preventing or recognizing the effects of depression/anxiety/bullying
- Working with educators and carers to contain the behavioral aspects of developmental disorders and delays

Secondary (Specialist) Mental Health Care:

- Specialist expertise in assessment, formulation of care and enactment of treatment across levels of health need
- Consultation-liaison to other service providers for support & to enhance their mental health knowledge such as GP's and lay carers
- Specialist expertise for the treatment of specific disorders e.g. neurological behavior problems in dementia; personality disorders, psychosis and substance abuse and gambling
- Education and training for other practitioners for focused psychological work such as registrars and nurses
- Teaching and implementing rehabilitation and recovery models, as well as working with consumers and carers to enhance wellness, as well as establish clinical competencies in the community, identify entitlements and case manage users of service in the community

- Leaders in research programs in partnership with other group such as academic departments.

Specialist Mental Health Care for Infants, Children, Adolescents and Families:

- Lifespan psychology expertise resulting in the capacity to provide specialist interventions in perinatal mental health such as treatments in women's mental health with regard to identifying and treating anxiety in the prenatal period and depression in the postnatal period
- Expertise in assessing mental health disorders and in applying targeted interventions and relapse prevention both brief and longer term
- Expertise in assessing risk and protective influences and identifying and intervening with the wide spectrum of subsyndromal and syndromal disorders e.g. programs targeting children and adults for social competency, social withdrawal, eating disorder, chronic medical illness such as diabetes management, epilepsy, asthma and congenital or acquired disorders
- Contributions to specific areas of clinical work – obsessive-compulsive disorder, PTSD, Disruptive Behavior Disorder, and comorbid, pervasive, and severe disorders such as Autistic Spectrum Disorder, Borderline Personality Disorders and dual diagnosis disorders.
- Expertise in developing and delivering parenting programs to promote and support caregiver competency: for example, Triple P Parenting Programs for family harmony and conduct disorder, which have proven effectiveness.
- The provision of early intervention and prevention to youth mental health such as managing comorbid conditions i.e. substance misuse and mental health problems.
- Early intervention programs with borderline personality disorder, a condition that place costly demands on hospital and emergency services through repeated suicidal and self-harming behavior and other crises
- Identification and treatment of early psychosis resulting in arrested progression of disorders. Management includes support for the patient and their family
- Outcome and evaluation research from both a practice and academic base

Specialist Mental Health Care for Adults:

- Harm minimization and resilience programs such as stress management, relationship management and addiction management
- Treatments for complex mental health disorders such as affective and anxiety spectrum disorders, PTSD, substance misuse, aggression, psychotic spectrum with recurrence and relapse prevention

- Involvement in the treatment of psychotic symptoms
- Management of bipolar affective disorder
- The ability to make differential decisions about the treatment of complex and comorbid mental health problems
- Alternatives to treatments in large institutions for example working collaboratively with consumers and carers in the community
- Direct effective treatment of people with disabling personality disorders
- Mental health problems in older persons e.g. behavior problems associated with dementia
- Services for people with mental health problems who live in remote areas through the use of treatment protocols and supervision of local practitioners
- Clinically oriented research involving clients with comorbid and complex disorders
- Managing severe mental health problems associated with medical conditions e.g. pain management
- Management of drug-resistant psychosis, depression, anxiety, personality disorder, sexual deviance such as pedophilia, criminal and violent offenders, adolescents and teenagers who cannot be medicated effectively or safely, dementias

Transcultural Mental Health Settings

- With the uniquely diverse population demographics of NSW, clinical psychologists are expertly positioned to evaluate, implement, and deliver interventions in cross-cultural settings which are under serviced at this time
- Western assessment instruments are of little value in most transcultural settings, and require careful application even when users of care demonstrate fluency in English
- Education and socialization in non-western settings is a powerful factor in mental health presentations, and the impact of these environmental factors is best evaluated by psychologists

Rural & remote NSW

The collaborative model in which clinical psychologists work and their tradition of being in a consultant/educational/supervisory role has already borne fruit in rural NSW where clinical psychologists working in rural areas have pioneered collaborative models of health care with GP's and have demonstrated significant gains to patients' mental health (Vines, Richards, Thomson, Brechman-Toussaint, Kluin & Vesely, 2004). The extension of such models throughout rural NSW offers a cost efficient and effective way of bringing time limited, evidence based mental health interventions to people living in rural and remote NSW.

4 Barriers to the effective usage of clinical psychologists in NSW Health

There are a number of inter-related barriers that currently prevent clinical psychologists from maximizing their contribution to the public mental health system.

4.1 The management of psychological services by non-psychologists

As noted above, in NSW psychologists/clinical psychologists have generally not been classified as specialists in the field of mental health, but rather have been categorized as ‘allied health’ and thus been managed within the Allied Health framework where there may be very limited knowledge of the skill-base of clinical psychology. As an example of the poorly understood nature of clinical psychology, current efforts by the Allied Health sector to establish competency assessment frameworks are irrelevant to psychology, with competency and credentialing standards already set by the State Registration Board, supervision benchmarks and the Colleges of the Australian Psychological Society (College of Clinical Psychology, College of Health Psychology, College of Neuropsychology, College of Counseling Psychology, College of Developmental Psychology, College of Forensic Psychology). With minor variations, most clinical psychologists are line managed by an Allied Health Professional (e.g. a physiotherapist) or by a Mental Health Nurse and thereby afforded little, if any, control over budgets, equipment, positions or job descriptions. In some Area Health Services, *clinical* governance of psychological services is afforded to the Senior or Principal Psychologist, but without commensurate control over budgets, staffing or job descriptions, this position is essentially powerless to maximize the specialist skills of the profession that were outlined above. The fact that the profession of psychology is not managed by psychologists within the public mental health sector in NSW is an anomaly in the western world. This is even more surprising when one considers that the separate professional identity of psychology as acknowledged in the industrial structure of the profession, which has a psychologist award separate from the ‘allied health’ award and which has sustained the profession in numbers within the government services (Health & Community Employees Psychologist (State) Award, 2001).

4.2 Limited opportunities for clinical psychologists to develop and implement psychological interventions and the ‘misuse’ of complex psychological interventions

As noted above, there are currently limited opportunities for clinical psychologists within the public mental health sector to develop and deliver the psychological interventions for which they have been uniquely trained and for which there is an urgent public need. Despite their expertise, many clinical psychologists currently work within a case management (rather than a treatment or consultant) model. On the other hand, there is a disturbing trend of complex psychological interventions being delivered in less than optimal ways and by less skilled workers. It is important to point out that the successful implementation of evidence-based treatments such as CBT is not without unwanted side effects in that in manualised form and in the hands of less expertly trained therapists it may fail to deliver the expected treatment gains (Kavanagh, 1993, 1994, King 2002). Exciting as treatment development is, supposed capacity building through software or through providing other professionals with brief training in evidence based treatments may not result in the “downloading” of all that is needed for patients to improve. That is, there is concern that ‘protocol driven’ treatments alone, are unlikely to provide the most optimal method of approaching treatment (Otto, Pollack & Maki, 2000), *unless backed by the necessary clinical expertise*. Hence they are uneconomical, unlikely to achieve clinical pathway demands, and demoralizing to the consumer.

Clinical psychologists, as scientist-practitioners, rather than generic allied health workers have the competencies to deliver expanded ‘protocol driven’ treatments (e.g. for CBT) for clients to address more than the symptoms of the targeted disorder. Moreover, the reliance on less skilled workers to provide these complex interventions ignores the importance of the adequate matching of clients to treatment. Treatment failures frequently result when treatments are applied in ‘blanket fashion’ – a skilled initial client assessment is needed to decide which clients would be optimally treated by which intervention techniques (Silverman, 1996). The contribution of clinical psychologists in this regard is of relevance to service issues of access, recovery, patient flow and prevention of blockage in health service resources. It is also likely to address the common ‘revolving door syndrome’ in mental health services and consumer disillusionment with outcomes that result in poor psychosocial adaptation and great cost to the social welfare services.

Better initial assessment of patients by skilled clinicians can contribute to a much more sustainable Stepped Care model of treatment. Stepped care treatment models represent the

attempt to maximize the effectiveness and efficiency of decisions about allocation of resources in therapy and suggest the desirability of providing a range of interventions ranging from self-help to longer-term individual therapy. In an environment of limited resources it is practical to provide the time, expertise and individual attention a patient needs but not more (Haaga, 2000). Bickman et al's (2000) Fort Bragg Evaluation Project (FBEP) demonstrated that more (in terms of a continuum of care) is not necessarily better. However, the success of stepped care models is predicated on a skilled initial assessment of the patient. Additional information of the role that clinical psychologists can play in stepped care models of service delivery is included in Appendix 3.

4.3 The lack of recognition of the specialized skills of clinical psychologists compared to the psychological skills possessed by other health professions

The development of positions known as generic mental health positions and the misunderstanding of the makeup and purpose of multidisciplinary teams has contributed to poor understanding of the expertise of clinical psychologists and a general lack of understanding about exactly what level of psychological skills can be provided by health workers in NSW Health. Within multidisciplinary settings, there is confusion as to defined roles and contributions made by specific disciplines: specialist skills are not applied due to the misinterpretation of the concept of generic worker. Multidisciplinary management of community members with mental illness is based on the premise that staff will apply discipline-specific skills in the development of treatment plans. However, not all members of the team are multi-skilled and able to undertake the function of other disciplines. There is concern that generically organized services fail to deliver consumer health outcomes. Therefore, there is a need to implement a structure that takes into consideration specialist as well as generic skills to maximize public sector accountability and health gains. Appendix 4 offers two models for comparative purposes: a diffuse (generic) allied health model and more effective discipline (specialist)-focused organization.

In Australia psychological competencies and credentialing standards are maintained and updated by professional bodies such as the Colleges of the Australian Psychological Society and the State Registration Boards (Psychologists Registration Board). In Britain, the NHS over a number of years has performed extensive reviews of competency standards for clinical psychologists. Additionally, the NHS work has clarified the range of psychological skill possessed by a number of health disciplines. Psychological skills within the mental health sector are thus located within a skills framework comprising three levels (MAS, 1989):

Level 1: these are basic “psychology” skills such as establishing, maintaining and supporting relationships with patients and relatives, and using some simple, often intuitive techniques, such as counseling and stress management

Level 2: this level of skill includes undertaking circumscribed psychological activities, such as behavior modification. These activities may be described by protocol. At this level there should be awareness of the criteria for referral to a psychologist.

Level 3: at this level, a health professional has a thorough understanding of varied and complex psychological theories and their application.

Almost all healthcare workers use level 1 and 2 skills. In particular, medical, nursing, occupational therapy, speech therapy and social work staff use these skills. Some have well developed specialist training in level 2 activities. The issue of inter-professional dissemination of psychological skills and practice can be viewed through such levels of psychological knowledge. Clinical psychologists possess skills and knowledge at all three levels. Their particular contribution is their rounded knowledge of psychological theories, assessment and clinical treatments (MAS, 1989) at the third level of expertise, largely accessed by the most disabled, and hence costly of consumers who otherwise form the bottlenecks in the mental health system, such as those with Borderline Personality Disorder.

In addition to other health professionals gaining skills in the application of CBT protocols for general psychological problems, increasingly innovative developments are enhancing the capacity of self-serve psychological interventions such as CBT whether delivered through primary care level practitioners, bibliotherapy or computer based treatments. (Williams, 2001). Because of their specialist competencies and ongoing psychological knowledge development, clinical psychologists remain key professionals in the dissemination, evaluation and training of such innovative delivery of psychological techniques.

The NHS Scotland (2002) has identified three levels of psychological work in healthcare suggesting that:

- The provision of good psychological care is an issue for all healthcare professionals
- The qualified psychologist’s role is to work at the highest level, providing advice, supervision and training for others; to work directly with complex clinical cases; to carry out and support psychological research within the NHS

- There is an “intermediate” level where non-psychologists or psychology graduates work to protocol in circumscribed areas of psychological work.

Although recommending this “tiered” model of psychological services, the report points out a situation familiar to NSW Health:

“Too often the full potential of qualified psychologists is not adequately utilized in health service settings. In response to long waiting times, psychologists’ skills may be focused on direct patient care at the expense of other functions. This may keep waiting times in check but does not achieve the widest and most efficient benefits for patients and the health service as a whole” (Clinical Psychology Workforce Planning Report p.9; NHS Education for Scotland, 2002).

4.4 Insufficient number of clinical psychologists employed compared to overseas Benchmarks

This issue has been addressed in an earlier section of this document. Please also see Appendix 1.

5 Conclusions and recommendations

The value of clinical psychology services is evident from surveys that demonstrate the following:

- a high demand for clinical psychology services (Jorm, 1994);
- cost effectiveness and consumer acceptability of psychological treatments (Haby et al 2004; Heuzenroeder et al 2004);
- positive consumer and professional evaluations of clinical psychology services (McDonald, 1998);
- the reported effectiveness of evidence-supported psychological treatments for severe health disorders for children, adolescents and adults (Haby et al 2004; Heuzenroeder et al 2004);
- and the explicit acknowledgement in health service systems of the value of clinical psychology and the increasing extension of such skills to all fields of healthcare (NHS, Scotland, 2003).

Accountability, accessibility and cost effectiveness: The current economic, political and consumer climate demands increased accountability, accessibility and cost effectiveness from health services. Psychological therapies are effective not only in terms of patient health outcomes but also in the comparative return between expenditure and measured health benefits (Schwartz, 1995). Health service data shows that there are substantive cost reductions, decreased inpatient bed days, and reduced utilization of costly medical services associated with clinical psychology services (Milgrom, Walter & Green, 1994). A focus on using the specialist competencies of clinical psychologists in the development and delivery of evidence-based and cost effective psychological interventions is likely to result in enhanced outcome in health services delivery consistent with government objectives of a focus on user and carer need and the delivery of effective care, efficiency, and accountability outcomes.

It is recognized that workforce development is crucial in the delivery of effective health treatments and that clinical psychology is a major contributor to health in NSW. To achieve an effective and efficient public mental health service in NSW, it is recommended that:

- An organizational structure (a NSW Directorate of Psychology) with appropriate funding and governance be established within NSW Health to specifically develop the clinical psychology workforce to become a core component of the mental health workforce along with psychiatrists and nurses, and in keeping with international best practice health systems
- That the Directorate of Psychology work in close collaboration with other health professionals to address the workforce challenges identified by leaders of mental health professions
- That current systems of public mental health professional care are restructured to enhance consumer access and flow through effective psychological treatment options
- That the current distribution of psychologists and clinical psychologists is clearly mapped to allow benchmarks standards to be met.
- That career structures are developed to retain experienced clinical psychologists in full time employment in the public health system.

References

- American Psychological Association (APS online). Treatment for the 'untreatable'. www.apa.org/monitor/mar04/treatment.html
- ABS Australian Bureau of Statistics (2004). In Health Professionals Councils of Australia (HPCA) (2004). *Input to National Rural Health Alliance draft position paper on Allied Health Professionals in rural and remote Australia*. www.hpca.com.au
- Australian Health Ministers. National Mental Health Plan 2003-2008. Canberra: Australian Government, 2003
- Australian Psychological Society. www.psychsociety.com.au
- Ames, D. (1993). Depressive disorders among elderly people in long-term institutional care. *Australian and New Zealand Journal of Psychiatry*, 27, 379-391.
- Andrews, G., Henderson, S., & Hall, W. (2001). Prevalence, comorbidity, disability and service utilization: overview of the Australian National Mental Health Survey, *British Journal of Psychiatry*, 178: 145-153
- Anthony, W.A (2000), A Recovery oriented service system: setting some system level standards. *Psychiatric Rehabilitation Journal*, 24, 159-168.
- Australian Bureau of Statistics (1998). *1997 Mental Health and wellbeing: Profile of adults, Australia*. Australian Government Publishing Service, Canberra
- Australian Psychological Society (2004) *Personal communication D. Stokes*.
Dstokes@psychsociety.com.au
- Bickman, L.E.W., Lambert, A.R., Andrade, R. & Penaloza, R.V. (2000). The Fort Bragg Continuum of Care for Children and Adolescents: Mental Health Outcomes over 5 years. *Journal of Consulting and Clinical Psychology*, 68, 4, 710-716.
- Commonwealth Department of Health and Ageing (2002). *National Mental Health Report*. Canberra: Commonwealth of Australia.
- Cassano, G. B., Pini, S., Sacttoni, M., Rucci, P., & Dell'Osso, L. (1998). Occurrence and clinical correlates of psychiatric comorbidity in patients with psychotic disorders. *Journal of Clinical Psychology*, 59, 60-68.
- Gonder-Frederick, L.A., Cox, D.J., & Ritterband, L.M. (2002). Diabetes and Behavioral Medicine: the second decade. *Journal of Consulting and Clinical Psychology*, 70, 3, 611-625.
- Haaga, D.A. (2000). Introduction to the special section on stepped care models in psychotherapy. *Journal of Consulting and Clinical Psychology*, 68, 4, 547-548.
- Health & Community Employees Psychologist (State) Award (2001)
www.industrialrelations.nsw.gov.au/awards/pathways/results.jsp
- Hickie, I. (1999). Primary Care Psychiatry is not Specialist Psychiatry. *Australian Medical Journal*, 170, 171-173.
- Government Department of Employment & Workplace Relations (2004). In Health Professionals Councils of Australia (HPCA) (2004). *Input to National Rural Health Alliance draft position paper on Allied Health Professionals in rural and remote Australia*. www.hpca.com.au
- Haby, M.M., Tonge, B., Littlefield, L., Carter, R. & Vos, T. (2004). Cost effectiveness of cognitive behaviour therapy and selective serotonin reuptake inhibitors for major depression in children and adolescents. *Australian and New Zealand Journal of Psychiatry*, 38, 8, 579-591.
- Heuzenroeder, L., Donnelly, M., Haby, M.M., Mihalopoulos, C., Rossell, R., Carter, R., Andrews, G. & Vos, T. (2004). Cost-effectiveness for psychological and pharmacological interventions for generalized anxiety disorder and panic disorder. *Australian and New Zealand Journal of Psychiatry*, 38, 8, 602-612.
- Human Rights and Equal Opportunities Commission (1993). *Human rights and mental illness: Report of the inquiry into the human rights of people with mental illness*. Canberra: Australian Government Publishing Service.

- Inquiry into Mental Health Services in NSW/Legislative Council, *Select Committee on Mental Health*, Sydney, NSW (2002) ISBN 0734720297.
- Jorm, A.F. (1994). Characteristics of Australians who reported consulting a psychologist for health problems: An analysis of the data from the 1989-1990 National Health Survey. *Australian Psychologist*, 29, 212-216
- Kavanagh, D.J., Piatkowska, O., Clarke, D, O'Halloran, P Manicavasagar, V., & Rosen A. (1993). Application of cognitive-behavioral family interventions for schizophrenia in multidisciplinary teams: what can the matter be?
- Kavanagh, D.J (1994) Issues in multidisciplinary training of cognitive behavioral interventions. *Behaviour Change*, 11, 1, 38-44.
- Kendler, K.S., Gallagher, T.J., Abelson, J.M., et al. (1996). Lifetime prevalence, demographic risk factors, and diagnostic validity of nonaffective psychosis as assessed in a US community sample. *Archives of General Psychiatry*, 53, 1022-1031
- King, M., Sibbald, B., Ward, E., Bower, P., Lloyd, M., Gabbay, M., & Byford, S. (2002) Randomized controlled trial of non-directive counseling, cognitive-behavioral therapy and usual general practitioner care in the management of depression as well as mixed anxiety and depression in primary care. *Health Technol Assess* 2000; 4 (19). www.ncchta.org
- Kubzansky, L.D., Kawachi, I., Spiro, A, Weiss, S. T., Volonas, P.S., & Sparrow, D (1997) Is worrying bad for your heart? A prospective study of worry and coronary heart disease in the normative aging study. *Circulation*, 95, 818-824.
- Linehan, M.M. (2000) The empirical basis of dialectical behavior therapy: developments of new treatment versus evaluation of existing treatments. *Clinical Psychology: Science and Practice*, 1,113-119.
- MAS - Management Advisory Service (1989) *Review of Clinical Psychology Services; Activities and Possible Models* MAS, Cheltenham. www.derekmowbrayassociates.co.uk
- Marks, K. M. (2002). The maturing of therapy. *British Journal of Psychiatry*, 180, 2000-2004.
- McDonald (1998) in Hospital Salaried Officers Association – Western Australia (1998) *Increased Work Value: the case of Clinical Psychology Document: Application No P39 of 1997*. Perth. 93285155 pp.13.
- Milgrom, J., Walter, P. & Green, S. (1994). Cost saving following psychological intervention in a hospital setting. The need for Australian based research. *Australian Psychologist* 29, 194-201
- Murray, C.J.L, & Lopez, A.D. (Eds.). (1996) *The Global Burden of Disease: A Comprehensive Assessment of Mortality and Disability from Diseases, Injuries, and Risk factors in 1990 and Projected to 2020*. Published by the Harvard School of Public Health on behalf of the World Health Organization and the World Bank, Harvard University Press. www.who.int/msa/mnh/ems/dalys/intro.htm.
- NAPPEIMH: *National Action Plan for Promotion, Prevention and Early Intervention for Mental Health (2000)*. Commonwealth of Australia.
- NHS Education for Scotland (2002). *Clinical Psychology Workforce Planning Report*. www://nes.scot.nhs.uk/publications/clinicalpsychologywfp.pdf
- NHS Education for Scotland (2003). *Recent Psychological Research of significance to the delivery of Healthcare in Scotland*. CMO Psychology Advisory Committee Briefing Paper. www.nes.scot.nhs.uk/psychology
- NSW Department of Health (2004) *Workforce Profile Site*. www.health.nsw.gov.au/policy/ssdb/workforce/psych/2001psych.html.
- Otto, M.W., Pollack, M.H., & Maki, K.M. (2000). Empirically supported treatments for panic disorder: Costs, benefits and stepped care. *Journal of Consulting and Clinical Psychology*, 68,556-563.
- Psychologists Registration Board of NSW www.psychreg.health.nsw.gov.au
- Raphael, B. (2000). *A Population Health Model for the Provision of Mental Health Care*. Commonwealth of Australia.

- Rivers V, (2004). *Personal communication with GP Liaison Mental Health, CSAHS.*
- Rollnick, Mason & Butler (2004). *Health Behavior Change: A Guide for Practitioners.* Churchill, Livingstone. London.
- Roy-Byrne, P.P. (1996). Generalised anxiety and mixed anxiety-depression: Association with disability and health care utilization. *Journal of Clinical Psychology, 57* (Suppl. 7), 86-91.
- Roy-Byrne, P.P., & Katon, W. (1997). Generalised anxiety disorder in primary care: the precursor/modifier pathway to increased health care utilization. *Journal of Clinical Psychiatry, 58* (suppl. 3), 34-40.
- Saunders, P.A., Copland, J.R., Dewey, M.E., Gilmore, C., Larkin, B.A., Phaterpekar, H., & Scott, A. (1993). The prevalence of dementia, depression and neurosis in later life: The MRC-ALPHA study. *International Journal of Epidemiology, 22*, 838-847.
- Sawyer, M.G., Arey, F.M., Baghurst, P., Clarke, J., Graetz, B., Kosky, R., Nurcombe, B., Patton, G., Prior, M., Raphael, B., Rey, J., Whaites, L., & Zubrick, S. (2000). *The Mental Health of Young People in Australia. The Child and Adolescent Component of the National Survey of Mental Health and Well Being.* AGPS, Canberra.
- Schwartz, S. (1995). Should the government pay for psychotherapy? *Bulletin of the Australian Psychological Society, 17*, 5-8.
- Scott, J. (2001). Cognitive therapy for depression *British Medical Bulletin, 57*, 101-113.
- Shaw, B.A., L.M Chatters, C.M. Connell., & Ingersoll-Dayton, B. (2004). Emotional Support from Parents early in Life, Aging, and Health. *Psychology and Aging, 19*, 1
- Silverman W.H. (1996). Cookbooks, manuals, and paint-by-numbers: psychotherapy in the 90's. *Psychotherapy, 33*, 2, 207-215.
- Sugarman, R (2001). A Neurobehavioural-informed approach to the use of clinical competencies in supporting the community based care of individuals with multiaxial diagnoses. *Australian Health Review, 24* (4) 197-201.
- White, C.A (2001) *Cognitive behavior therapy for chronic medical problems: A guide to assessment and treatment in practice.* Wiley, Chichester.
- Williams, C. (2001). Use of written cognitive-behavior therapy self-help materials to treat depression. *Adv Psych. Treat. 7*, 233-240. www.calipso.co.uk
- World Health Report (2001). www.who.int/whr2001/2001/main/en/
- Vines, R., Richards, J.C., Thomson, D.M., Brechman-Toussaint, M., Kluin, M., & Vesely, L. (2004). Clinical psychology in general practice: A cohort study. *Medical Journal of Australia, 181*, 2.
- Zimmer, J.G., Watson, N., & Trent, A. (1989). Behavioral problems among patients in skilled nursing facilities. *American Journal of Public Health, 74*, 1118-1121.

APPENDIX 1

CLINICAL PSYCHOLOGY WORKFORCE DATA IN NSW HEALTH & OVERSEAS BENCHMARKS

Workforce planning benchmarks overseas and in NSW Health

In Britain, the National Health Service, through a series of service planning reviews, expanded its clinical psychology workforce from 780 in the 1980's to 4,896 FTE's, i.e., approximately 1 per 10,000 population. More recently in 2002, The Scottish NHS set a ratio of 1:5,000 population with clinical psychologists working as specialists complementing a range of services provided at the primary levels (NHS, Scotland, 2002).

In NSW, dedicated data on the clinical psychology workforce distribution is not available. The main sources of data derive from the NSW Psychologists Registration Board and the Australian Psychological Society. NSW Health bases its estimate of the psychology labor force by extrapolating data from the NSW Psychologists Registration Board (NSW Health work profile, 2004). It is important to note that this data does not identify the actual number of clinical psychologists given the registration data set is based on general psychologist classification with no separate breakdown for clinical psychologists.

The following distribution shows the psychology and public health labor force based on statistics obtained in 2001:

- Registered with NSW Psychologist Board, 5,590
- Department of Health estimate numbers employed in health: Mental Health: 183; Hospital: 275; Community Health: 238. *Total: 696* 'psychologists' employed in NSW Health across both fulltime and part time positions.

The National Mental Health Report (1999-2000) recorded the FTE employed in NSW specialist mental health services as 371 (Commonwealth Department of Health & Aging, 2002)

The Australian Psychological Society data for NSW (2003) shows:

- NSW membership: 4,427
- Clinical College: 454
- Clinical Neuropsychology: 85
- Total Clinical and Neuropsychologists: 539 (< 15% of total)

Estimates based on these above sources would suggest that approximately 696 'psychologists' are employed in NSW Health, with approximately half working in the community and in mental health services (i.e. around 370). Clinical psychologists represent a smaller percentage of this number.

These approximate figures indicate that NSW Health falls short of minimal benchmark figures for clinical psychology workforce participation such as those recommended overseas (for example, 1:5,000 per population as in the Scottish NHS). There is an urgent need to establish the nature of the distribution of the clinical psychology workforce in NSW and to set workforce psychology and clinical psychology benchmarks. For example, the South Western Sydney area, with over 750 000 people would need 150 psychologists, with currently less than 40 available in a sorely pressed service with few psychiatrists, nurses or registrars.

APPENDIX 2

DETAILED OVERVIEW OF THE ROLE OF CLINICAL PSYCHOLOGISTS IN DEVELOPING & IMPLEMENTING EVIDENCE-BASED INTERVENTIONS FOR MENTAL HEALTH PROBLEMS

(i) Complex and Comorbid Service Delivery

The National Survey of Mental Health and Wellbeing of Adults (1997), (Andrews, Henderson & Hall, 2001) indicated that nearly one in three of those who suffered from an anxiety disorder also experienced an affective disorder, while one in five also suffered from a substance abuse disorder. There is also significant comorbidity between many psychiatric disorders and personality disorder making clinical practice more difficult than the assumption that disorder is discrete would suggest. Health service usage also indicates high levels of comorbidity among people with psychotic disorders with an overall prevalence higher than 58% (Kendler, et al, 1996). Comorbidity is also high among other mental health disorders (Kubzansky et al, 1997; Roy-Byrne, 1998) and early adolescent consumption of alcohol and cannabis are contributory in the epidemiology of psychosis.

Clinical psychologists are well placed to help people with *complex and comorbid* disorders to develop cognitive, behavioral, social and emotional competencies that assist with the effective management of stressors and events. A focus on emotional management is a growing development in evidence based psychology, and balances/complements the cognitive focus in many traditional CBT therapies (Linehan, 2000). This focus on emotional regulation also has implications for complex trauma presentations, addictions, carer support and has major implication for the management of clients in inpatient facilities and in the community. It shows enormous promise for the management of comorbid conditions across all levels of severity and is predicted to be a major source of interventions for the growing burden of mental health disorders. With the stigma still attached to adjustment and developmental disorders and treatment by psychiatry, billions of dollars is wasted by consumers every year on 'pop psychology' and self help literature of dubious value: such funds are better directed to clinical therapies with defined outcomes.

With older populations the overall incidence of psychiatric disorder is 17% (Saunders et al, 1993). Twenty percent of older persons residing in the community experience significant depressive symptoms warranting intervention. Zimmer, Watson and Trent (1989) suggest that 62-83% of institutionalized older people demonstrate behavior problems sufficient to require constant or active consideration in their patient care plan. There is a 6-18% incidence of depression in nursing homes and 27-40% incidence of depression in hostels (Ames 1993).

For organic conditions such as Alzheimer's type dementia, there is a 5% prevalence rate at age 65 and 20% prevalence rate at 80 years. As Alzheimer's disease constitutes only 70% of all dementias, other forms include vascular dementia, lewy body type, frontal dementia and sub cortical dementia as seen in Parkinson's disease. These conditions are significantly linked to family and carer stress, grief reactions and behavior problems, which necessitate psychological interventions.

Clinical Psychologists are also trained in neuropsychology and can bring extensive knowledge of cognitive theory (and neuropathology) to bear on psychiatric problems. They are also trained in developmental theory and practice and lifespan stages, equipping them to assess, diagnose and treat mental health problems over the lifespan from the perspectives of prevention to treatment of conditions are varying as learning difficulties to dementia.

In relation to broad health issues there is a clear link between poor physical and mental health. Being diagnosed with a serious or life threatening illness, or having a chronic illness increases the risk of mental health problems. It is generally accepted that around 20-25% of patients with chronic medical problems experience clinically significant psychological problems (White, 2001). Clinical psychologists can play a number of roles in managing mental health during illness. They can act as consultants to general medical staff, advising them on, for example, the patient's ability to cope with particular procedures, or the best psychological management for the patient. They can also play a role in training staff, for example in recognizing and managing distress, in communication skills, or in psychologically focused methods of setting goals with patients to achieve optimal outcomes. (Gonder, Cox & Ritterband, 2002; Rollnick et al, 2004). They also provide direct patient care to patients with more complex problems. Available empirical research has demonstrated that the services provided by clinical psychologists employed in inpatient settings result in significant economic savings to the community owing to their ability to reduce patient anxiety and depression, as well as enhance the immune response, motivation, concentration and memory. This results in fewer post-surgical complications, reduced post-surgical bed stay, less reliance on analgesic medication and fewer return visits to the hospital. Another area of intervention is in prevention of mental health problems, particularly with children with chronic illnesses.

With the psychology of developmental resilience and its promotion and their ability to work with families as well as individuals, clinical psychology has a unique contribution to prevention priorities. For example, at the level of perinatal mental health they intervene with parents as research has demonstrated the importance of appropriate parental support in

reducing risk to the children of both adult depression and chronic health problems (Shaw et al, 2004).

For all of the mental health disorders described in this section, Clinical Psychologists have been involved in internationally recognized research about the mechanisms underpinning psychiatric disorder, and the practice of evidence-supported effective treatments.

(ii) Disability and Comorbidity at the Primary Level

In terms of mental health general need, 19% to 40% of patients presenting in the primary setting to G.P's, have mental disorders. Estimates are higher if comorbidities with physiological conditions are taken into account. Approximately 30-50% of these patients manifest sufficient distress to warrant further assessment and treatment (Hickie et al, 1999). However, referral onto specialist is low with a 6.2% referral rate for psychologists and an 8.4% referral rate to Psychiatrists (Sawyer et al, 2000). The remainder of sufferers are managed in the primary care sector often not receiving 'best practice' treatments. The cost burden of untreated psychological disorders is compounded by the inappropriate use of the health system by those for whom psychological disorders remain unresolved. Andrews et al (2001) also point to a serious mental health service delivery problem in that only 65% of people with multiple comorbidity with at least one current disorder had consulted a health professional for a mental problem during the year, 19% had consulted only a G.P., 28% had consulted a mental health specialist with or without concurrent G.P. support, and 18% of this comorbid group had consulted only a health professional without any specific mental health training. Such prevalence, disability and service use data indicate that groups of people with the greatest need for treatment are not receiving services.

Our current public health service structures do not facilitate patient access to relevant psychological treatment and do not enhance patient flow for those who have accessed our health services with mental health disorders.

One of the values of clinical psychologists is their ability to provide treatments such as CBT at an expert level. Given that the evidence base for psychological treatments for mental health disorders such as depression and anxiety are equivalent to drug treatments (Haby et al., 2004; Heuzenroeder et al., 2004; Scott, 2001) and enhance the effectiveness of medication, it is crucial for health services to provide standard and more complex psychological interventions as a routine services. Recent Commonwealth initiatives such as the *Better Outcomes in Mental Health Care* have indicated that up to 85% of allied health treatments were provided

by psychologists with evidence of significant outcomes (Rivers, 2004). There appears to be much merit in clinical psychologists working collaboratively across both the public and private sector to enhance consumer access to front line and effective clinical psychology treatments.

APPENDIX 3

THE ROLE OF CLINICAL PSYCHOLOGISTS IN STEPPED CARE MODELS OF SERVICE DELIVERY

Stepped care treatment models represent the attempt to maximize the effectiveness and efficiency of decisions about allocation of resources in therapy and suggest the desirability of providing a range of interventions ranging from self-help to longer-term individual therapy. The success of such models is predicated on a competent and in-depth initial assessment in order to both minimize consumer exposure to inappropriate or harmful treatments and to maximize cost effective health gain. The well developed assessments linked with treatment skills of clinical psychologists are well suited to this role.

Stepped Care: Expert clinical judgment

Given that evidence based decision rules are lacking for making assessment-treatment judgments (Haaga, 2000), clinical judgment is used to assign an initial level of intervention. Concern that failure to respond to a treatment could discourage clients from seeking subsequent treatment or undermine their response to such treatment in addition to the possibility of clients getting worse from ineffective treatments makes competency at expert assessment of crucial importance. This is a complex area where clinical psychologists' skill at assessment and outcome measures assist in matching patient profiles to treatments for better health outcomes.

Stepped Care: briefer and less expensive treatments for more people

Stepped care models have the potential to deliver effective and cost efficient treatments (in terms of both money and human resources) to large numbers of people. For example, instead of delivering standard protocol driven CBT to all patients, Williams (2001) recommends that CBT treatments should be delivered across three levels:

- *Level 1:* Treatments should be routinely initiated by the provision of brief therapies such as self-help, delivered, for example, as structured written self-help or computer-based materials. These treatments could be widely offered in primary care alongside the wide range of self-help provided by voluntary sector groups and organizations
- *Level 2:* Where the person has more severe or complex problems, or is at risk, more intensive therapist guided packages of care should be provided

- *Level 3:* For more complex or treatment resistant cases, full specialist CBT could be offered by experts.

Appendix 4

COMPARISON OF A DIFFUSE (GENERIC) ALLIED HEALTH MODEL OF SERVICE DELIVERY AND A DISCIPLINE-SPECIFIC (SPECIALIST) MODEL OF SERVICE DELIVERY

Structures: Work designs and health outcomes

A theoretical example mapping productivity is used to compare a typical Area Health Service psychology work design (Model X) with that of an outcomes focused work design (Model Y). This will illustrate opportunities for shifting health cultures to focus on health outcomes and to utilize clinical psychology more effectively in the public system.

Model X has approximately 40 clinical psychologists employed in various roles and functions. Everyone works generically in a case management and multidisciplinary team system. There are no productivity outcomes demonstrating psychology contributions relating to key performance in such areas as: health service planning, collaborative research, treatment programs, clinical outcomes, capacity building through training and consultation, publications or obtaining funding through grants.

Model Y has approximately 37 clinical psychologists employed in specific roles and functions within a psychology profession structure. In accordance with the National Mental Health Plan and service priorities, productivity is high with outcomes demonstrated relating to improving the access of the community to effective treatment programs, collaborative programs with the Divisions of General Practice, staff training, research productivity and collaboration, publications and the securing of additional service delivery funding through competitive grants. Linkages with University research programs and Divisions of General Practice have effectively established clinical research units within the AHS enhancing the range of available services on a cost-neutral basis. Most importantly, quality assurance programs designed to evaluate service outcomes are a standard feature of the role of clinical psychologists. Clinical psychologists represent a resource for training and education of other staff including mental health professionals, psychiatric registrars and postgraduate students. Collaborative links with university clinical psychology units foster postgraduate student research on key mental health issues and attract graduates of high caliber into the public health workforce.