

Review of Mental Health Care in the ADF and Transition through Discharge

Initiated by the Minister for Defence Science and Personnel,
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the Minister for Veterans' Affairs,
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Letter of submission of report to Ministers

To follow

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Glossary

2HSB	2 Health Support Battalion
ACPMH	The Australian Centre for Posttraumatic Mental Health
AD	Adjustment Disorder
ADAPCP	Abuse Prevention and Control Program
ADF	Australian Defence Force
ADFRP	ADF Rehabilitation Program
ADP	Alcohol and Drug Program
ADPAs	Alcohol and Drug Program Advisors
ADPC	Alcohol and Drug Program Coordinator
AGPT	Australian General Practice Training
ALTC	Army Logistic Training Course
AMHOO	Acute Mental Health on Operations
ANARE	Australian National Antarctic Research Expedition
AOD	Alcohol and Other Drug
APS	Australian Public Service
APS	Australian Psychological Society
AREP	Alcohol Rehabilitation and Education Program
ASIST	Applied Suicide Intervention and Skills Training Program
ASPEA	The Association for Supervised Pastoral Education in Australia
ATAPS	Access to Allied Psychological Services
ATODS	Alcohol, Tobacco and Other Drug Services
AUDIT	Alcohol Use Disorders Identification Test
BAI	Brief Alcohol Interventions
BATTLEMIND	Buddies (cohesion) vs. Withdrawal; Accountability vs. Controlling; Targeted Aggression vs. Inappropriate Aggression; Tactical Awareness vs. Hyper vigilance; Lethally Armed vs. “Locked and Loaded” at Home; Emotional Control vs. Anger/Detachment; Mission Operational Security (OPSEC) vs. Secretiveness; Individual Responsibility vs. Guilt; Non-Defensive (combat) Driving vs. Aggressive Driving; Discipline and Ordering vs. Conflict.
BOI	Boards of Inquiry
BRCS	Brief Resilient Coping Scale
CA	Chief Army
CAF	Chief of Air Force
CBT	Cognitive Behaviour Therapy
CCD	Chief of Capability Development
CDF	Chief Defence Force
CF	Canadian Forces
CFTS	Continual Full Time Service
CHP	Contract Health Practitioners
CIDI	Composite International Diagnostic Interview
CIO	Chief Information Officer

CISD	Critical Incident Stress Debriefing
CISM	Critical Incident Stress Management
CIMS	Critical Incident Mental Health Support
CMVH	The Centre for Military and Veterans' Health
CN	Chief Navy
CO	Commanding Officer
COSC	Chiefs of Staff Committee
CPE	Clinical Pastoral Education
CSSBs	Combat Service Support Battalions
CTAS	Career Transition Assistance Schemes
DCO	Defence Community Organisation
DEQ	Deployment Experience Questionnaire
DFA	Defence Families of Australia
DFPO	Defence Force Psychology Organisation
DFR	Australian Defence Force Recruiting
DFRDB	Defence Force Retirement and Death Benefits Scheme
DHSD	Defence Health Services Division
DHSP	Deployment Health Surveillance Program
DI	Defence Instruction
DI (G)	Defence Instruction (General)
DIS	Diagnostic Interview Schedule
DMH	Directorate of Mental Health
DMHP	Directorate of Mental Health and Psychology
DoD	Department of Defence
DPsych	Directorate of Psychology
DSG	Defence Support Group
DSM IV	Diagnostic and Statistical Manual of Mental Disorders
DSWs	Defence Social Workers
DVA	Department of Veterans' Affairs
EMDR	Eye Movement Desensitisation and Reprocessing
EPRIS	Electronic Psychology Records and Information System
ESO	Ex-service Organisations
FaCHSIA	Department of Families, Housing, Community Services and Indigenous Affairs
FLOs	Family Liaison Officers
FPS	Focussed Psychological Strategies
FRACGP	Fellow of the Royal Australian College of General Practitioners
GP	General Practitioner
GPS	Global Positioning System
HealthKEYS	Health Key Solutions
HSB	Health Service Battalions
IPSS	Integrated People Support Strategy
IWG	Interdepartmental Working Group
JHC	Joint Health Command
JHSA	Joint Health Support Agency

K10	Kessler Psychological Distress Scale (K10)
KYMS	Keep Your Mates Safe
LASER	Longitudinal ADF Study Evaluation Retention
MCLO	Military Compensation Liaison Office
MEC	Medical Employment Classification
MECRB	Medical Employment Classification Review Board
MH	Mental Health
MHPSG	Mental Health and Psychology Support Group
MHPSG	Mental Health and Psychology Support Group
MHPSS	Mental Health and Psychology Support Services
MHS	ADF Mental Health Strategy
MHS	Mental Health Strategy
MHU	Mental Health Unit
MIMI	Medical Information Management Index
MMLE	Maximum Marginal Likelihood Estimate
MO	Medical Officer
MOU	Memorandum of Understanding
MRCA	Military Rehabilitation and Compensation Act
MRCG	Military Rehabilitation and Compensation Group
MSI	Major Stressors Inventory
MSOs	Military Support Workers
MTRU	Military Training and Rehabilitation Unit
MWDU	Member with Dependents - Unaccompanied
NCO	Non Commissioned Officer
NSA	National Support Area
OATP	Outpatient Alcohol Treatment Program
OSI	Operational Stress Injury
OSISS	Operational Stress Injury Social Support
PCL	Posttraumatic Stress Disorder Checklist
PCL-C	Posttraumatic Stress Disorder Checklist - Civilian
PCM	Program Case Manager
PC-PTSD	Primary Care Posttraumatic Stress Disorder Screen
PD	Psychological Debriefing
PDHRA	Post-Deployment Health Reassessment
PMkeys	Personnel Management Key Solutions
POPS	Post-Operational Psychological Screen
PRTG	Psychology Research and Technical Group
PSG	Psychology Support Group
PSM	Program Case Manager
PSS	Psychology Support Sections
PsSTs	Psychology Support Team
PSYMAN	Psychology Manual
PTDS	Post Traumatic Stress Disorder
PTI	Physical Training Instructors

PTSR	Posttraumatic Stress Reaction
PTSR	Posttraumatic Stress Response
PULHEEMS	Physical Capacity, Upper Limbs, Locomotion, Hearing, Eyesight, Mental Capacity, and Stability
PULSE	Profile of Unit Leadership Satisfaction Effectiveness
RC	Rehabilitation Coordinator
RCT	Randomised Controlled Trial
REDLOs	Regional Education Liaison Officers
RESPECT-D	Re-Engineering Primary Care Treatment of Depression
RESPECT-Mil	Re-Engineering Primary Care Treatment - Military
RIDC	Recruit Instructor Development Course
RMC	Royal Military College
RMHTs	Regional Mental Health Teams
RMHUs	Regional Mental Health Units
ROAC	Regular Officer Advanced Course
ROBC	Regular Officer Basic Course
ROCL	Relief Out Of Country Leave
RSL	Returned Services League
RtAPS	Return to Australia Psychological Screen
RTW	Return To Work
SLA	Service Level Agreement
SMR	Standardised Mortality Rate
SOCOM	Special Operations Command
SOS	Signs of Suicide
SPP	Suicide Prevention Program
SPTSS	Screen for Posttraumatic Stress Symptoms
SRARP	Short Returning to Australia Reengagement Program
SSRI	Selective Serotonin Reuptake Inhibitors
SWAPP	Service Workforce Access Program for Partners
T4T	Train the Trainer
TCAs	Tri-cyclic Antidepressants
TFCBT	Trauma-focussed Cognitive Behavioural Therapy
TIP	Training Information Program
TMS	Transition Management Service
TODS	Tobacco and Other Drugs
TRES-R	Traumatic Stress Exposure Scale - Revised
TSS	Traumatic Stress Symptoms
VA	Veterans Administration
VA	Veterans Affairs
VCDF	Vice Chief Defence Force
VVCS	Veterans and Veterans Families Counselling Service
WHO	World Health Organisation

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Executive Summary and Recommendations

EXECUTIVE SUMMARY

The ADF's Mental Health Strategy

The establishment of the MHS by the ADF in 2002 was far-sighted. The Strategy compares favourably with mental health strategies in other Australian workplaces. It also compares well with what exists in military forces in other countries. Some of these military forces have mental health policies and programs in place, particularly in relation to PTSD. Others have individual mental health promotion programs in place however they do not have the suite of programs at a whole of forces level that exists in the ADF. The enthusiasm and commitment of ADF members in delivering these programs adds to the ongoing achievement of the MHS. This has meant that programs are well received by members.

Having made this fundamental point, it is necessary to consider the problems and barriers to the full success of the MHS and how these can be identified and overcome, leading to improvements of the MHS in the future. Throughout the review it was clear that Defence is committed to looking after the mental health of its members and further enhancing the effectiveness of the ADF Mental Health Strategy.

While the ADF's Mental Health Strategy compares favourably with mental health strategies in military forces in other countries and other Australian workplaces, its rollout has been patchy and has depended too much on the enthusiasm and commitment of ADF regional mental health providers. This situation has reflected the lack of proper funding for both the Directorate of Mental Health and the Regional Mental Health Teams.

The Mental Health Strategy also needs further development for it truly to be a Strategy, rather than a small number of specific programs as at present. New conceptualisation would allow the development of the next evolution of the strategy, and the inclusion of even more innovative programs like a continuum of resilience training and mental health literacy. This evolution of the strategy will need proper marketing if it is to have maximum impact on members, to be evidence-based in general and to be evaluated where appropriate.

The delivery of mental health services in the ADF

The ADF one of the largest mental health workforces in Australia and has a range of organisations and service providers committed to delivering a high standard of mental health care to ADF members. The model for the planning and delivery of mental health services in the ADF however would benefit from substantial modification and further development. In general, the model should move to the formation of multidisciplinary teams, particularly on bases, to involve psychologists and medical officers but also social workers and chaplains where relevant. These multidisciplinary teams should operate not only at primary-level on bases but also at secondary-level in the regions. The two levels of care need to work closely together if they are to be successful, such as through 'shared care' arrangements.

It is important that the overlap and duplication in national policy and planning in mental health, as is currently happening with the two Directorates of Mental Health and Psychology does not continue. Separation of practitioner roles in delivering mental health services should again come to an end - the policy and planning group should be multidisciplinary in nature. New institutional arrangements will be necessary to achieve this.

The ADF mental health workforce – staffing and training issues

There are enthusiastic commanders and health staff in the regions committed to caring for and improving the mental health of ADF members. Their ability to do so however, is impacted on by resource issues.

There are critical staffing issues in the Psychology Support Sections on bases and this is having major impacts on the delivery of mental health services in the ADF. It is also necessary to substantially increase the involvement of doctors in mental health care. Their variable participation in this form of care represents a major shortcoming in the provision of mental health care services in the ADF. This in part reflects difficulties in recruiting and retaining psychologists and other mental health professionals in the wider Australian community, particularly in provincial and remote areas. But these difficulties can be overcome.

These are also exacerbated by the current staff allocation caps within the ADF. Recruitment and retention strategies should be modified to target GPs with an interest in mental health care. New pay and conditions for Contract Health Practitioners (CHPs), new arrangements with third-party providers and new marketing strategies may be necessary. At the same time, psychologists are a scarce resource in the ADF and it is necessary to use these assets more efficiently.

Chaplains (padres) provide pastoral care that is valued by ADF members. Further training in clinical pastoral education associated with the Association for Supervised Pastoral Education in Australia would extend their competence and confidence in this work. Social workers and the Defence Community Organisation institutionally can make an important contribution to primary level mental health care where this a family dimension and could be further involved.

The level of education and learning for mental health practitioners needs to increase in both initial officer training courses and continuous professional development. This also applies to CHPs during their initial induction. The Australian Centre for Posttraumatic Mental Health (ACPMH) has produced an ADF Mental Health Training Framework which contains many valuable recommendations regarding mental health care on bases. These include: assessment, treatment planning and short-term treatment using an evidence-based framework such as Cognitive Behavioural Therapy; care coordination, and mood and adjustment disorders treatment.

Screening for mental health problems – RtAPS and POPS

All ADF members returning from deployed operation are involved in comprehensive support processes, which include psycho-education and an individual screen at time of

return to Australia (RtAPS) and three to six months post deployment (POPS). This process is one of the most comprehensive of any military in the world and was developed in collaboration with the ACPMH, Macquarie University and internationally recognized experts in military mental health.

While this opportunity for the post-deployment psychological screening and counseling, with referral if necessary is valuable, RtAPS and POPS need to be restructured to be more cost-effective. This should result in their more complete conduct, better diagnosis of DSM IV mental conditions and their assured referral and management. Currently staffing does not exist to diagnose and manage DSM IV mental illness following a RtAPS or POPS referral. Currently an expectation is raised that can not be met. It is also very difficult to sustain two post deployments screen unless the the critical issues in the PSSs are resolved by a significant increase in staffing levels.

A middle way in post-deployment screening and debriefing suggests itself and that is that only a properly resourced POPS continue in its full form. RtAPS would continue but only in the form of group briefs but without screen or individual debrief. Some 'diverted scarce psychological resources' could return to base to conduct POPS but also service any post-deployment mental health problems presenting by self-referral at this time.

It is important, given their particular circumstances that Reserves fully participate in these post-deployment screens.

Military culture and mental health

Resilience training aims to increase a member's ability to withstand the stresses that can be expected during their service life. These are not only combat-related but also include working and living on bases and on deployment, interacting with others including the chain of command. They also involve effects of military life on personal relationships and families. The ADF has been a pioneer in the area of Resilience training for recruits and currently is an international leader in the field. Resilience training would also be valuable on a number of occasions other during a member's lifecycle through the ADF.

The Defence Attitude and Opinion Survey has shown some increase in Mental Health Literacy and a willingness to see care within the system Defence since the introduction of the mental health strategy. That being said mental health remains stigmatised in the ADF, as it does in the community. Mental health presents obvious extra challenges for armed forces, the ethos of which necessarily values physical and mental toughness as well as teamwork. There are many barriers to seeking mental health care in the ADF and these need to be addressed.

Privacy, disclosure and sharing of mental health information

The common multidisciplinary mental health service proposed will very substantially promote the sharing of health information among mental health practitioners. A common clinical record shared by doctors, psychologists and others is a very important advantage of a common mental health service. Much improved sharing of

health information between doctors and psychologists and commanding officers where duty of care is paramount, was the most frequent recommendation of the recent Boards of Inquiries into the suicides of ADF members. It is subject to a revised Defence Instruction (General) and Health Directive and must be implemented.

The Medical Employment Classification (MEC) system and Mental Health

There are some problems with the operation of the MEC system or more particularly the policy that ADF members must be deployable to continue service in the ADF. This is a change from previous practice. Whatever else the merits of the current system, it encourages members to conceal their mental, and for that matter, physical health problems. These members run the risk of their health breaking down or necessary treatment not being able to be accessed while on deployment.

Guidelines to guide the application of the MEC system should be developed so as to better define what levels of present or possible future severity of common illnesses (particularly mental illnesses) are compatible with deployability as determined by the ability to tolerate withdrawal of medical or care support under operational conditions. This should clarify the issue around the use of anti-depressant medication by members on deployment.

The ADF Rehabilitation Program and Mental Health

There are some problems, alongside many successes with the new ADF Rehabilitation Program. This is to be expected in a program so recently introduced. These are first, the availability of alternative employment options for members with chronic mental illness and second, more effective rehabilitation programs. The establishment of the Regional Mental Health Units and national inpatient mental health facility (the latter, at a future time) should support rehabilitation programs for members with chronic mental health problems.

An occupational health model should operate further extending the clinical rehabilitation model which currently exists. This will involve the member and the care team, but also their commanding officer. Support for alternative employment in the member's unit, or elsewhere in their base depends on the mental health literacy of officers as well as other ranks.

Participation in on- or off-base rehabilitation programs aimed at returning the member to work is also important. These programs realistically may need to prepare the member for return to work outside the ADF. The principles of rehabilitation (a graduated return to military life which combines both treatment for mental illness and military training) at the former Military Training and Rehabilitation Unit (MTRU) in the UK is worthy of further study. On-base 'rehabilitation platoons' stigmatise their members and, do not constitute rehabilitation as normally understood.

Transition from the ADF

A seamless discharge is important for all ADF members, transitioning-out for medical reasons. A number of services whose responsibility is either with the ADF or DVA have now been established to support this. Services should start as soon as possible

after first notification of intention to discharge and should continue for a period well beyond discharge. Joint responsibility of these services by ADF and DVA is highly desirable. It is important that these services provide information to members on the full range of services and benefits available to them so they can pursue ones most relevant to them. Members transitioning-out of the ADF with chronic mental health conditions have special needs beyond comprehensive provision of information. The Townsville Lifecycle Transition Mental Health and Family initiative adds value here but an additional case management dimension may be necessary.

It is important that members of the ADF who transition out for reasons for mental illness believe that their contribution to the ADF is fully acknowledged. Joining the ADF requires the new member to undertake a necessary major, somewhat forcible psychic reorientation. Failure then to succeed in the ADF for whatever reason sets in train a sequence of possible negative reactions – anger and resentment against the ADF, failure to find new employment, illness and invalidism. This may occur for a variety of reasons - health, aptitude, unsuitability, guilt, shame, bullying, post-deployment reinterpretation of the ADF experience. This is most undesirable in both personal and economic terms for the individual, ADF and community.

Mental health and families in the ADF

Families of ADF members are important to the good functioning of the member. They also bear much of the brunt of members' difficulties if they occur. They are early communicators of members' difficulties to the relevant agencies. At a broad conceptual level, the ADF needs to welcome the member's family as well as the member into the broad 'Defence family'. Acknowledgement of this in itself is important but more concrete expressions of this acknowledgement are necessary. These could include participation by families in both post-deployment screening programs and pre-deployment briefings as well as transition activities (see Section 10). It could also include attention to family impact on postings and post-deployment exercises and training activities that require members to spend further long periods of time away from their families.

Mental Health research and surveillance in the ADF

The ADF has done well in supporting mental health research but less well in supporting ongoing recording of mental health clinical data (client characteristics, contact type, diagnosis, quality of life measure etc) which are routine in public community mental health services.

The conduct of a prevalence survey of mental health conditions in the ADF should be a high priority. The ADF's strong commitment to development and evaluation of innovative programs should continue. The decision by COSC to investigate commercial off-the-shelf e-health products to provide a fast-track interim solution to the lack of a comprehensive health information system can be strongly supported.

RECOMMENDATIONS

Section 2 The ADF's Mental Health Strategy

1. Recommendation 2.1: The Directorate of Mental Health needs to be fully staffed and core positions need to be established as triservice rather than on loan by single forces.
2. Recommendation 2.2: An oversight group to the Directorate of Mental Health should be established to consist of senior Defence health, single service health and Defence personnel staff as well as non-Defence clinical and academic experts. The purpose of such a group would be to sustain the strategic direction and delivery of the Mental Health Strategy.
3. Recommendation 2.3: The Mental Health Strategy needs further development for it truly to be a Strategy rather than a small number of specific programs as at present.
 - It should specifically include components in resilience training (including stress inoculation, mental health first aid as well as personal and relationship life skills), mental health literacy and bullying.
 - The Strategy should be evidence-based to the greatest extent possible and the innovative components should be rigorously evaluated.
 - Attention to presentation (marketing) of the revised Mental Health Strategy so as to have maximum impact on ADF members will also be important.

Section 3 The delivery of mental health services in the ADF

Primary care on bases

4. Recommendation 3.1: Psychology Support Sections on bases should combine to form teams with health professionals providing mental health care services in medical centres/hospitals and be renamed Mental Health and Psychology Support Services (MHPSS).
5. Recommendation 3.2: Social workers in DCO can have an important role in the delivery of primary care mental services where family issues are involved. They should form part of the proposed multidisciplinary mental health team on base. Their services should be available not only to families of members but members themselves where family issues are involved.
6. Recommendation 3.3: The role of chaplains in primary care mental health services is supported.

Secondary care in regions

7. Recommendation 3.4: The proposal to create triservice Regional Mental Health Units (RMHUs) can be supported

8. Recommendation 3.5: An important part of the roles of clinical specialists in RMHUs is to visit bases to support primary care mental health practitioners particularly through participation in 'shared care' arrangements and some direct provision of care.

Tertiary care nationally

9. Recommendation 3.6: The proposal to establish a tertiary-level, triservice inpatient mental health ward within a general hospital facility can in principle be supported but should have lower priority than the rapid and sustained development of high quality primary mental care facilities on bases.

National planning and operations for mental health services

10. Recommendation 3.7: The Directorates of Mental Health and Psychology should merge to become the Directorate (or Branch) of Mental Health and Psychology (DMHP) with a SES Band 1 level Director to lead this combined entity.
11. Recommendation 3.8: As previously proposed (Recommendation 2.2) an oversight group to the Directorate of Mental Health should be established to consist of senior Defence health, single service health and Defence personnel staff as well as non-Defence clinical and academic experts. The purpose of such a group would be to sustain the strategic direction and delivery of the Mental Health Strategy.
12. Recommendation 3.9: The Psychology Support Group should be renamed the Mental Health and Psychology Group (MHPSG) and should become multidisciplinary in nature.

Section 4 The ADF mental health workforce – staffing and training issues

13. Recommendation 4.1: Additional staff should be allocated in the mental health arena accompanied by an increase in APS positions in JHC. Any reallocation under existing staffing caps will see the imposition of deficits in other areas of health care delivery. An overall increase in the Mental Health budget is also necessary in order to deal with critical staffing issues.
14. Recommendation 4.2: Recruitment strategies for CHPs need to offer pay and conditions more attractive to CHPs. They should aim to recruit GPs with a demonstrated interest in mental health.
15. Recommendation 4.3: The use of third party providers (and specifically VVCS) should be considered as providers of mental health services both on and off base
16. Recommendation 4.4: Options such as telepsychiatry have obvious attractions for the provision of mental health care in remote settings and could operate out of the proposed tertiary level in-patient facility or a RMHU – see Section 3.5.
17. Recommendation 4.5: Psychology assets should be more efficiently deployed by greater use of non-psychologists where this is possible and redesign of post-

deployment psychological screening so as to increase the availability of psychologists on base for primary mental health care on base.

18. Recommendation 4.6: A position should be established within the DMH for a relatively junior medical officer to liaise with medical officers in the ADF and promote their involvement and training in primary mental health care.
19. Recommendation 4.7: Pastoral care training for chaplains should be increased.
20. Recommendation 4.8: Expanded initial induction and continuous professional development programs are necessary for medical officers, psychologists and other health personnel aimed at substantially increasing the proportion of mental health staff who are competent to deliver simple cognitive behavioural therapy, care coordination and the management of non-complex mood and adjustment disorders. Goals for the proportion of staff attending these courses should be set and progress towards these goals should be monitored annually. Appropriate release and travel arrangements will be necessary for this to occur.
21. Recommendation 4.9: AMHOO should be rolled-out - all health staff about to deploy should be required to attend.

Section 5 Screening for mental health problems – RtAPS and POPS

22. Recommendation 5.1: The POPS should retain its present form with additional resourcing so that follow-up and referral for members with possible problems can occur. This will require adequate and timely access to secondary care as well as primary care level mental health professionals.

Other desirable new features of the POPS would be an additional brief involving families and an appropriate record system to monitor that follow-up and referral is happening.

23. Recommendation 5.2: It is proposed that only the ‘briefs’ components of the RtAPS be retained. The psychological screen and one-on-one counseling components should be discontinued. The group brief should involve members’ families as well as members and take place on an occasion back in Australia which has both educational and social purposes (eg meeting/talks followed by a BBQ). A suitable name for it would be the Short Returning to Australia Reengagement Program (SRARP).

Resources on base should be increased so that members with early post-deployment problems should have adequate access in the first instance, to primary care level mental health staff.

It is possible to consider that a full second screen could return in the future. It would need to be demonstrated however that one screen has positive benefits for members, that mental health services on base are fully staffed and that there are additional staff to both conduct and properly followup two post-deployment screens.

Section 6 Military culture and mental health

24. Recommendation 6.1: Pre-deployment briefings and other annual briefings should include education and training in mental resilience. As these programs are innovative in nature, they need to be evaluated.
25. Recommendation 6.2: Recruit schools should include education and training in mental resilience. Resilience training should also be introduced in promotional and officer courses so that this can later be communicated to lower ranks. Again, as these programs are innovative in nature, they need to be evaluated.
26. Recommendation 6.3: All training, promotional and officer courses should include sessions on mental health literacy and bullying. The presentation of these topics is challenging and needs to move beyond front of classroom ‘briefs’ to be more scenario-based and involve role playing. It should not be so short and embedded among large numbers of briefs to make no impression on members.

Opportunities for even further strengthening Defence Policy in Discrimination and harassment through military discipline or other avenues should be explored.

27. Recommendation 6.4: Paramedics and medical clerks working in Defence medical services should be educated and counselled about the importance that members place on being able to consult doctors in confidence. If education and counselling is insufficient, they should not be able to continue working in Defence health centres, cautioned or disciplined.
28. Recommendation 6.5: For a variety of reasons, Reservists are more likely to experience higher rates of mental health problems post-deployment and experience more difficulties in their recognition and treatment. There should be the same expectation that Reservists attend post-deployment screening and follow-up treatment, if problems are detected, as regular members.

Section 7 Privacy, disclosure and sharing of mental health information

29. Recommendation 7.1: The common multidisciplinary mental health service proposed for what are now separate mental health services should help to promote the sharing of health information among mental health practitioners – see Recommendation 3.11. A common clinical record shared by doctors, psychologists and others is a very important advantage of a common mental health service.
30. Recommendation 7.2: Policy to overcome the non-sharing of health information, as expressed in the recent amendment to DI(G) 16-20 Paragraph 9 and Health Directive 810 should be implemented. In the event of the common multidisciplinary mental health service not proceeding, implementation of this policy should be independently monitored by 12 monthly audit against agreed benchmarks for the next three years. Redress procedures will need to be put in place if benchmark levels are not reached.

31. Recommendation 7.3: (re-presented) Paramedics and medical clerks working in Defence Health Services should be educated and counselled about the importance that members can consult doctors in confidence. Failing that, they should not be able to continue working in health services or disciplined for breaches in Defence medical services.

Section 8 The Medical Employment Classification (MEC) system and Mental Health

32. Recommendation 8.1: Guidelines to guide the application of the MEC system should be developed so as to better define what levels of present or possible future severity of common illnesses (particularly mental illnesses) are compatible with deployability, as determined by their ability to tolerate the withdrawal of medical or care support under operational conditions over a 21 or more day period.

The guidelines would be based on, and further extend the Medical Risk Assessment Framework set out in HD 282. The guidelines would be indicative and take into account the clinical discretion in decision-making of the individual doctor assessing an individual member and their circumstances.

33. Recommendation 8.2: The proposed strategy for the development of a policy on the use of anti-depressant medication on deployment is supported.
34. Recommendation 8.3: The concept of differentiating deployment into risk levels should be explored to investigate if it is possible to increase the proportion of members able to deploy at acceptable levels of risk.
35. Recommendation 8.4: The recent trial by the Chief of Army for members, no longer deployable to continue in the ADF in nominated roles such as training has value and should be continued.

Section 9 Rehabilitation in the ADF and Mental Health

36. Recommendation 9.1: The current occupational health model in relation to members with chronic mental conditions needs further development. This will further involve not only the member and the care team, but also their commanding officer.
37. Recommendation 9.2: Support for alternative employment in the member's unit, or elsewhere in their base depends on the mental health literacy of officers as well as other ranks. Rehabilitation for members with chronic mental illnesses including the desirability of alternative employment should therefore be a component of the mental health literacy training in training, promotional and officer training courses, as set out in Section 6.
38. Recommendation 9.3: Participation in on- or off-base rehabilitation programs aimed at returning the member to work is also important. These programs realistically may need to prepare the member for return to work outside the ADF. The principles of rehabilitation (a graduated return to military life which combines

both treatment for mental illness and military training) at the former Military Training and Rehabilitation Unit (MTRU) in the UK is worthy of further study.

39. Recommendation 9.4: On-base 'rehabilitation platoons' stigmatise their members and, as a practice should be discontinued.

Section 10 Transition from the ADF

40. Recommendation 10.1: The ADF and DVA should have joint responsibility for a comprehensive transition service that works closely with the ADF Transition Centres and extends to at least 12 months post-discharge. It should resolve the duplication in services now being offered by the IPSS and TMS. ADF should fund pre-discharge activities and DVA post-discharge activities within this joint responsibility.
41. Recommendation 10.2: The Lifecycle pilot adds value to existing programs (IPSS/TMS) in improving staff training and support. If successfully evaluated it should be rolled out nationally.
42. Recommendation 10.3: In principle families should have an involvement in Transition programs. This could be at the Transition Seminars involving the Stepping Out program that may need some redesign.
43. Recommendation 10.4: It is important that members leaving the ADF with mental health (or other problems) are fulsomely acknowledged for their contribution to the ADF, particularly so as their health had deteriorated while they were in the ADF. This could take the form of a letter of thanks from CDF or Passing out Parade.
44. Recommendation 10.5: A Keeping in Touch program post-discharge with joint responsibility by the ADF and DVA extends this healing process. In doing so, it is likely to make an important contribution to the proactive management of any emerging mental health problems.

Section 11 Mental health and families in the ADF

45. Recommendation 11.1: At a broad conceptual level, the ADF needs to welcome the member's family as well as the member into the broad 'Defence family'. Acknowledgement of this in itself is important.
46. Recommendation 11.2: More concrete expressions of this acknowledgement are necessary.

These could include participation by families in post-deployment readjustment program (SRARP (see above) and POPS) and pre-deployment briefings (as occurs in the US) as well as transition activities (see Section 10). It could also include attention to family impact on postings and post-deployment exercises and training activities that require members to spend further long periods of time away from their families.

47. Recommendation 11.3: (re-presented) Social workers in DCO can have an important role in the delivery of primary care mental services where family issues are involved. They should form part of the proposed multidisciplinary mental health team on base. Their services should be available not only to families of members but members themselves where family issues are involved.

Section 12 Mental Health research and surveillance in the ADF

48. Recommendation 12.1: The conduct of a prevalence survey of mental health conditions in the ADF should be a high priority. Different options exist and the aim should be to choose the one that best produces robust, useful data and at reasonable cost. If online methods prove suitable for collecting valid and reliable data, they have many obvious advantages.
49. Recommendation 12.2: The ADF's strong commitment to development and evaluation of innovative programs should continue. New programs for members returning from deployment to forward bases with adjustment problems and traumatic stress symptoms should be a high priority for development and evaluation.
50. Recommendation 12.3: The Mental Health Research and Surveillance Advisory Committee has made an important contribution to the Directorate of Mental Health. It should be reestablished as a subcommittee or group of the oversight group proposed for the Directorate of Mental Health.
51. Recommendation 12.4: The PRTG has done valuable work eg the development of the Electronic Psychology Records and Information System (EPRIS). It will increasingly focus on the new directions for mental health taking place the ADF such as the further development and evaluation of the Mental Health Strategy and the delivery of services in multidisciplinary mental health teams.
52. Recommendation 12.5: The decision by COSC to investigate commercial off-the-shelf e-health products to provide a fast-track interim solution to the lack of a comprehensive health information system can be strongly supported. The products should possess the functionality equivalent to what exists elsewhere in the community. This should include occasions of service, diagnosis, quality of life and other psychometric measures of symptom severity at secondary levels of mental health care.

Section 1 Overview

1.1 Terms of reference

Background

The Minister for Defence Science and Personnel, the Hon Warren Snowdon MP, and the Minister for Veterans' Affairs, the Hon Alan Griffin MP, wish to initiate a review of mental health care in the ADF and transition to non-military life.

Purpose of the Review

The purpose of the review is to independently assess and benchmark, from both a mental health best practice and administrative perspective, the current models of mental health support in the ADF, and the mechanisms of transition of those medically discharged with a mental health condition from the ADF to DVA. The review is to consider the extent to which the mental health needs of serving, and transitioning ADF members are being met.

Structure of the Review

An eminent person will be appointed to conduct the review. That person will be supported by a joint secretariat of Defence and DVA officers and have the capacity to draw on appropriate experts as required. All costs will be met by Defence.

Timings

It is expected that the review will take approximately six months to complete with a report due to Ministers by 15 December 2008.

Issues for Consideration

The review should be cognisant of a number of election commitments already identified by the Government to address mental health issues. These include:

- ADF mental health 'Lifecycle' package;
- Applied Suicide Intervention and Skills Training Program (ASIST);
- Independent inquiry into suicide in the ex-service community;
- Make community mental health care ex-service friendly;
- Through the Australian Centre for Post Traumatic Mental Health (ACPMH), develop psychological resilience initiatives for new recruits and improve screening and early intervention mental health checks; and the,
- Study of barriers to veterans' social and occupational rehabilitation.

The review should take into account the work from the Inter-Departmental Working Group looking at rationalising the administrative burden for veterans dealing with multiple agencies and the transitional arrangements.

The review should draw on investigations into individual suicides, including Boards/Commissions of Inquiry, to examine the recommendations, the subsequent responses and action taken.

Terms of Reference

The specific tasks of the review are to:

Compile a stocktake of the full range of mental health programs across the ADF and DVA:

1. Establish what the linkages are between the various mental health programs by mapping them together;
2. Provide advice on the effectiveness of the range of programmes in meeting these objectives;
3. Provide advice on any impediments or blockages that may exist and that inhibit the implementation of programmes;
4. Identify any gaps in the programs or duplication of the programs within or between Defence and DVA. This gap analysis should focus on the lifecycle of the member inclusive of ADF service, transition to civilian life and subsequent civilian employment;
5. Provide advice and recommendations on any programme deficiencies on any identified gaps or duplication in the mental health programs and transition arrangements; and
6. Provide advice on the processes of managing an individual throughout and beyond the transition period including giving consideration to boundaries of responsibility.

ADF/DVA Governance Board

It is proposed that a joint ADF/DVA governance board be set up to oversight the review and provide advice to SECDEF, CDF and SECDVA on the progress of the review. The proposed members of the Board are:

Mr Martin Bowles, Head Defence Support Group
LTGEN Ken Gillespie, Vice Chief of the Defence Force
Mr Ed Killesteyn, Deputy President, Repatriation Commission
MAJGEN Paul Alexander, Head Defence Health Services
Mr Barry Telford, General Manager, Policy and Development Division, DVA

1.2 Methodological approach

The review proceeded around very extensive consultations with both ADF members and Defence civilians, and members of DVA and Ex-Service Organisations all of whom are listed in the acknowledgments. Most particularly consultations with ADF members consisted of visits to the eight bases listed below

HMAS Cerberus Lavarack Barracks, Townsville
Kapooka RAAF Townsville
RAAF Wagga Kuttabul
Holsworthy (4RAR) Enoggera (particularly 2HSB)

The visits to the base typically involved a series of meetings with the Commanding Officer and other senior staff as well as senior health staff, junior Officers, Non Commissioned Officers and Other ranks. Extensive notes were taken at these meetings and these were used to generate a number of emergent themes.

A number of interviews were conducted with Defence leadership including the CDF, VCDF, Chiefs of all three Single Forces in the Department of Defence, Commander Joint Health Command and the Head of the Defence Support Group.

These themes were used to assemble the relevant literature relevant to these themes. This involved accessing the peer-reviewed research literature principally using Medline, but also the so-called 'grey' literature on the Internet for research and other materials not published in peer-reviewed journals.

These in turn were subjected to rapid literature reviews. These are set out below. Time constraints meant their main purpose was not to draw definitive conclusions. Rather they were to scope the literature to identify main key papers and systematic review and summarise the most important points that their authors were making.

- Appendix 1 Rapid literature review of critical incident management programs
- Appendix 2 Rapid literature review of interventions to reduce alcohol misuse
- Appendix 3 Rapid literature review of suicide prevention programs
- Appendix 4 Rapid literature review of resilience training programs
- Appendix 5 Emergent themes from public submissions to the review of mental health services in the ADF.
- Appendix 6 Rapid literature review of screening for mental illness in military populations
- Appendix 7 Rapid literature review of barriers to mental health care in the military and stigma
- Appendix 8 Rapid literature review of mental health promotion and literacy programs
- Appendix 9 Rapid literature review of PTSD and best-practice treatment
- Appendix 10 Rapid literature review of Adjustment disorders and best-practice treatment
- Appendix 11 Rapid literature review of combat exposure and Post Traumatic Stress Disorder

Time constraints meant that no new research studies to fill important gaps in the literature were possible. The most important of these gaps was the absence of a recently conducted prevalence study of mental health problems in the ADF.

A very extensive file of ADF technical documents and analyses were also made available, including some requested by me.

Public submissions from individuals and groups proceeded at the same time as these consultations and rapid literature reviews were being conducted. 78 submissions were received of which 52% were from individuals and 48% from groups. These were analysed in relation to the emergent themes noted above.

The views expressed in this Appendix 5 where these emergent themes are presented are those of the individuals and groups making the submissions. They do not represent the views of the author. They represent a range of perceptions and insights relevant to the study and are an important input. Themes are based on frequent expression.

Six Boards of Inquiries concerning recent suicides in ADF members were also sighted.

A narrative was generated from all these data sources following a data reduction exercise within each of the emergent themes that seemed to best capture the totality of the presented material. This is presented in the following chapters, a chapter devoted to a particular theme. Inevitably it was necessary to make acts of judgement as the information presented was not always complete and sometimes was contradictory. It is also impossible to avoid all value judgements in doing this.

Section 2 The ADF's Mental Health Strategy

2.1 Overview

The ADF Health Status Report (2000) recommended an ADF Mental Health Strategy (MHS). The Directorate of Mental Health (DMH) was established in 2002 to develop and deliver the MHS. A working group that developed the ADF MHS made 73 recommendations that evolved into eight, becoming six key initiatives. These were:

1. Integration and Enhancement of ADF Mental Health Services;
2. ADF Mental Health Research and Surveillance;
3. Enhanced Resilience and Wellbeing;
4. Critical Incident Mental Health Support (CIMS);
5. Suicide Prevention Program; and
6. Alcohol, Tobacco and Other Drug Services (ATODS).

These initiatives led to a number of programs being overseen by the DMH and the principal ones since its inception set out below:

Integration and Enhancement of ADF Mental Health Services:

- Twenty two Regional Mental Health Teams (RMHTs) have been established along with two other Mental Health teams in operational areas. They are responsible for the delivery of the MHS in their region and were intended to include a Convenor, Medical Officer, Psychologist, Psychiatrist, Chaplain, Defence Community Organisation (DCO) Social Worker and a command representative. They are responsible to the local Commanding Officer;
- All Hours Support Line, a 24 hour helpline available to members seeking MH support or counselling. It is operated by McKessons, a health call centre operating company operated by Mental Health nurses using computer-based protocols, principally offering a triage service rather than a triage and advice service;
- A Psychiatric Helpline, a 24 hour helpline available to Mental Health professionals seeking advice in the management of patients with acute Mental Health problems;
- Development of policy documents including Health Directives and Defence Instructions (DIs);
- ADF MH literacy fact sheets which have been widely disseminated through ADF as well as the development of the ADF MHS website;
- Acute Mental Health on Operations (AMHOO) non-mandatory courses for Mental Health professionals for further education in the management of acute MH problems on deployment;
- A Traumatic Stress Symptoms (TSS) course to Mental Health professionals is delivered by Australian Centre for Posttraumatic Mental Health (ACPMH) Modules 1 (3 days) and 2 (7 days);
- A Post-deployment Readjustment Program was designed in collaboration ACPMH.

ADF Mental Health Research and Surveillance:

- A Mental Health Research and Surveillance Advisory Group was established;
- ADF-wide prevalence study of MH problems to be conducted.

Enhanced Resilience and Wellbeing:

- ADF Wellbeing Forum leading to a production of a Handbook;
- Chaplaincy Spirituality and Wellbeing project;
- Resilience training of recruits principally at the Army Recruit Training Centre, Kapooka (ARTC) and now recruit training establishments in other single services as well as the Royal Military College (RMC).

Critical Incident Mental Health Support (CIMS): This was developed in conjunction with ACPMH to assure best practice. It offers a framework to mitigate and alleviate possible psychological injuries following a Critical Incident or potentially Traumatic Event. It employs a Train the Trainer (T4T) approach to present the following programs:

- Commander's Guide to CIMS (1-hour);
- Peer providers (eg Grade 1 Psychological Examiners and all ranks to offer CIMS in the absence of a Mental Health professional);
- Mental Health Providers (3-days) (eg Chaplains and Grade 2 Psychological Examiners);
- Mental Health Professionals (3-days);
- Professional and Provider Refresher (3-hours) course;
- T4T course and Trainer Update courses.

Suicide Prevention Program (SPP): This is presented at four levels:

- Level 1: SPP Introductory Training (30 minutes) aimed at improving suicide awareness in recruits (as endorsed by the Learning Culture Inquiry)¹, officers, and all members at beginning of each financial year); An innovative on line version of the awareness is available to all Defence members.
- Level 2: Keep Your Mates Safe - Suicide Prevention training (KYMS – SPP) (3-hours peers, junior officers and managers);
- Level 3: Applied Suicide Intervention Skills Training (ASIST), a comprehensive 2-day 'first aid' course aimed at Peers to provide peers, leaders and commanders with the skills to provide direct suicide prevention assistance to a person at risk of suicide (in collaboration with Living Works and Lifeline). An ASIST T4T course aimed at Mental Health professionals is also offered;
- Level 4: Suicide Clinical Upskilling aimed at Mental Health professionals and Clinical Upskilling T4T;
- A suicide prevention package is now available online.

ADF Alcohol, Tobacco and Other Drug Program (ATODS)

- ATODS Introductory Training (30 minutes) aimed at improving awareness of problems of use of alcohol, in recruits, officers, and all members at beginning of each financial year;

¹ Podger A, Harris C, Powell R (2006) Final report of the learning culture inquiry: Inquiry into the learning culture in adf schools and training establishments. Department of Defence, Canberra: 1-133.

- ATODs Advanced Awareness Training (2-3 hours) aimed at junior officers and supervisors;
- Keep Your Mates Safe – Alcohol (half day) aimed at troops;
- Alcohol and for Health Professionals and Command;
- Motivational Interviewing (1-2 day workshop) and Motivational Interviewing T4T;
- Outpatient Alcohol Treatment Program (OATP) for members with ‘at-risk’ drinking behaviour;
- Cannabis Intervention brief.

ATODS-related activities not undertaken by DMH include:

- An Alcohol Rehabilitation and Education Program (AREP) is a triservice national inpatient facility at RAAF-Richmond for members with alcohol-dependent problems.
- The Royal Australian Navy delivers a single force Alcohol and Drug Program operating both on ship and land. These are two levels of Alcohol and Drug Program Advisors (ADPAs) as well as an ADP Coordinator (ADPCs) in each Navy region. ADPAs exist at all naval bases and on all ships. They hold TAFE Certificate IV qualifications in Alcohol and Other Drug Work – ADPCs hold Diplomas in Alcohol and Other Drug Work.

The program operates at 4-steps:

Step 1

One-to-one counselling with ADPA (usually arising out of a disciplinary breach - incident report or random breath testing - for both alcohol and now illicit drugs);

Steps 2 and 3

Attendance at an OAT program conducted by an ADPA or ATODS counsellor (in absence of ADPA); this is accompanied by individual follow-up with an ADPA;

Step 4

Admission to the AREP facility at RAAF- Richmond.

Other activities of the DMH include:

- preparation of responses for Questions to Ministers;
- provision of technical and human resources advice;
- participation in the five-member countries of Technical Panel-13 which has a charter to develop collaborative reports, articles and research projects related to military mental health

2.2 The Directorate of Mental Health

COL Tony Cotton directed the DMH along with the Defence Force Psychology Organisation (DFPO) from its inception in 2002 through 2005. Subsequently, the DMH and the DFPO have operated separately, the DMH being directed first by

GPCAPT Len Lambeth and currently by LTCOL Stephanie Hodson and the DFPO by COL Peter Murphy.

As well as the Director there is a SO1 Mental Health position and desk officers responsible for the delivery of the three principal MHS programs (SPP, CIMS and ATODS) as well as other programs such as Integration of MH services (Regional Mental Health Teams), Mental Health Training Coordination, Wellbeing and Resilience. There are also a small number of research and administrative positions and one position on secondment at ACPMH.

Only a minority of staff positions of the DMH are established (4 of 12 in February 2008). The remainder (including the Director position) are on secondment from a Single Force for a 2-year period, or are on contract. In recent years, many of the (established or unestablished) positions have also been vacant. This situation has recently improved though most positions (uniformed or contract) remain short-term. The health research section of the Psychology Research and Technical Group (PRTG) has also recently transferred from the Directorate of Psychology (DPsych) to DMH.

Expenditure for the DMH and its MHS activities in 2006/07 is set out below:

DMH	\$444,000
SPP	\$183,000,
ATODS	\$241,000
Other MHS	\$305,000
RMHTs	Unfunded as previously.
Total	\$1,169,000

There have been some significant successes in the strategy including a world class, evidence based Critical Incident Mental Health Support Program, the online suicide training (which almost three thousand members completed in the first six months), world leading resilience training, and a comprehensive operational mental health support program. There has also been the development of Defence policy and procedure in the areas of mental health provision, suicide prevention and the prevention of the misuse of alcohol.

Some of the MHS programs listed in Section 2.1 above however, did not proceed or are no longer active. The Post-deployment Readjustment Program did not proceed beyond the pilot stage.²

The Mental Health Research and Surveillance Advisory Group has found difficulty in fulfilling its intended role as much mental health-related research such as the work of Psychology Research and Technical Group (PRTG) was conducted outside DMH. The ADF-wide prevalence study of MH problems did not proceed beyond the pilot stage. The ADF Wellbeing Forum was not active in 2007-8. The Chaplaincy Spirituality and Wellbeing project did not proceed beyond literature review stage.

² There were a number of pilot versions. The first was a longer six week program trialled in Townsville where individuals attended one day a week. Based on the outcomes of this pilots shorter versions were trialled in Darwin and later Brisbane but not progressed.

Several mental health research projects sponsored and associated with DMH but also the DFPO, 1Psych and other agencies though have been conducted.

2.3 Mental Health Strategy programs

2.3.1 Activity levels

RMHTs

Twenty three of the 26 teams were currently active,³ however there were some gaps in membership. Fifteen RMHTs had a command representative. Frequency of meetings varied from 'do not meet' (5) to bimonthly (4).

Activity levels (number of courses and number of people attending) for the ATODS, SPP, CIMS and other programs for both 2007 and the period 2002-7 are set out in the Table below.

	Courses 2007	Number of people 2007		Courses 2002-7	Number of people 2002-7
ATODS*					
Alcohol Drug Aware Training	7	394		16	690
Alcohol Other Drugs for ADF	15	307		56	607
Alcohol Other Drugs for MH professionals	1	13		33	370
Cannabis Intervention brief	0	0		2	12
KYMS – Alcohol	1	26		11	232
Motivational interviewing	0	0		13	119
Motivational interviewing T4T	0	0		4	45
SUICIDE*					
ASIST	37	675		252	4718
ASIST T4T	1	27		10	188
KYMS – Suicide	5	74		20	357
KYMS – Suicide T4T	0	0		4	41
Suicide Clinical Upskilling	0	0		2	16
Suicide Clinical Upskilling T4T	0	0		1	15
CIMS					
MH professionals	2	13		52	256
MH providers	4	24		64	381
Peer providers	0	0		19	61
Professionals & Providers refresher	16	145		22	228
T4T	1	9		5	65
Trainer update	0	0		1	29
Other courses					
AMHOO	0	0		2	46
TSS Module 1	0	0		1	19
TSS Module 2	0	0		1	14

³ Department of Defence Directorate of Mental Health (2008) Summary of Regional Mental Health Teams: 1-13.

* Figures for Suicide Introductory training (awareness) not available

2.4 Research and evaluation relevant to critical incident management programs

A rapid review of the research literature on critical incident management programs is attached in Appendix 1. The evaluation of the CIMS Framework concluded that it was developed as an alternative to the Critical Incident Stress Management model (CISM), and is consistent with current best practice in its adoption of a 'multi-modal, stepped approach' to responding to critical incidents or potentially traumatising events^{4,5}.

2.5 Research and evaluation relevant to alcohol, tobacco & other drugs programs

A rapid review of the research literature on interventions to reduce alcohol misuse both in military and civilian populations is attached in Appendix 2. It concluded that brief alcohol interventions in primary care settings have the potential to reduce misuse of alcohol in people who are not alcohol dependent. Methodological limitations in these studies in both civilian and in military populations limit the strength of these conclusions and further research should be conducted. These findings are most relevant to the Out Patient Alcohol Treatment Program (OATP).

There is only limited evidence on the effectiveness of workplace programs comparable to the other ATODS programs that are more oriented to primary prevention. Australia Post has put in place a broad lifestyle program 'Workscreen' at a number of its workplaces. It consisted of an employee health awareness campaign and brief interventions for high risk behaviours. It had strong management support. There was no reduction in excessive alcohol consumption though there was moderately high level of participation among those identified as drinking excessively.⁶ The Building Trades Group Drug and Alcohol Safety and Rehabilitation Program operates in NSW, Queensland and ACT. Developed by workers for workers, it uses peer-education strategies and a harm minimisation approach focussing on safety. Apprentices exposed to the program showed an improvement in attitudes to alcohol 5 months after training. Among these apprentices, those with high identification with their organisation and receiving high support for the training also reported a significant reduction in alcohol use.⁷

⁴ Lewis V, Weiland P, Parslow R, Densley K. (2008) Critical incident mental health support in the ADF - implementation evaluation. Draft final report (June 2008): Australian Centre for Posttraumatic Mental Health, The University of Melbourne.

⁵ It should be noted that ACPMH was involved in the development of CIMS materials for DMH and is not therefore completely independent of the delivery of the program. Its evaluation is therefore more external/internal than external in nature.

⁶ Richmond R, Kehoe L, Heather N et al (2000) Evaluation of a workplace brief intervention for excessive alcohol consumption: The Workscreen project *Prev Med* 30: 51-63.

⁷ Pidd K (2004) The impact of work lace support and identity on training transfer. A case study of drug and alcohol safety training in Australia. *Int J Train Develop* 8:274-88.

The evaluation of ATODS conducted by Turning Point, Melbourne concluded that the ATODs program should continue to be supported as the principal alcohol, tobacco and other drugs initiative in the ADF.⁸ Its evaluation approach is process and formative. It concluded that the ATODs program had delivered a multilevel evidence-based education and training program. It noted that:

- the scheduling of training courses had been somewhat irregular;
- the potential of the Train the Trainer initiative seemed limited;
- ATODS training should be included as a component in officer training courses.

It recommended that impacts on both policy and individual behaviours be documented in the future. It also recommended that broader changes in ADF policy towards alcohol and illicit drugs be introduced. There should be certainty in ongoing funding and additional staffing.⁹

2.6 Research and evaluation relevant to suicide prevention programs

A rapid review of the research literature on suicide prevention programs is attached in Appendix 3. It concluded that, while the evidence-base for the relative effectiveness of suicide prevention approaches is not extensive, there are sufficient recurrent themes to envisage the key features of a successful intervention. These were:

- Embedding the prevention program within a broad-based community education, treatment and support service that minimises stigmatisation;
- Delivery of the following core program components:
 - Gatekeeper and clinician training
 - Early detection and screening protocols
 - Immediate risk reduction (access to lethal weapons, exposure to stressors, use of alcohol and drugs)
 - Peer or buddy watch systems
 - Appropriate medication regimes;
- Existence of a strong institutional context for program delivery that enables systemic change, as suggested by the success of the US Air Force and school-based SOS programs.

It should be noted that, while ASIST courses (which broadly conform to the gatekeeper model) have been evaluated many times around the world, the evaluations are restricted to the levels of satisfaction and perceived utility by attendees and not their impact in reducing suicide or suicide attempts.

The SPP has not been evaluated.

⁸ Berends L, Roberts B, Pritchard E. (2005) Evaluation of the Australian Defence Force Alcohol, Tobacco and Other Drugs Services Program. Turning Point Alcohol & Drug Centre, Fitzroy: 1-90.

⁹ The key finding of the evaluation of the AREP program again by Turning Point was that the group counselling at AREP was generally consistent with evidence-based national and NSW guidelines on residential treatment for alcohol and drug problems. Ongoing improvement was acknowledged as a goal for AREP and a number of areas were recommended for attention.

2.7 Regional Mental Health Teams

An internal evaluation of the RMHTs has recently been conducted by DMH. Interviews were conducted with 23 of 26 RMHT convenors, including 1 in the 3 teams which were inactive.¹⁰

Eighty seven per cent of convenors believed that the MHS partially addressed the needs of members but did not cover depression and anxiety and resilience training. The view was expressed that the MHS had increased mental health literacy in the ADF. Seventy per cent of convenors expressed the view that the response of members was positive.

Two thirds of convenors rated their teams as broadly successful. Nevertheless, only 30% expressed high levels of satisfaction of participating as a member of the team – with 17% expressing lower levels of satisfaction and half of the convenors expressing high levels of dissatisfaction. Sixty five per cent identified the main barrier to functioning of the RMHTs as lack of spare capacity including lack of participation by other than psychologists. Some staff were unavailable reflecting in part an absence of an ability to backfill, particularly for doctors and administrative staff. There has been a perception that DCO has withdrawn from the RMHTs¹¹

While three RMHTs reported feeling fully able to deliver MHS programs in their regions, seven were not running programs at all. Some RMHTs had not delivered programs - SPP (6) CIMS (6) and ATODS (5). Half the teams again nominated lack of staff as the main obstacle to delivering MHS programs. Five teams identified lack of support from DMH. Three teams identified lack of resources other than staff. Three described available materials as being poor (out-of-date, not relevant and based on an ineffective lecture-style format). Seventy eight per cent of convenors believed that better delivery of the MHS required more personnel, time and resources.

Most teams had a number of people able to deliver the SPP and ATODS though fewer for ATODS. Just under half of the RMHTs had been able to access trainers and almost half of these only with difficulty mostly ATODS. Fifty seven per cent of teams had not been able to attend SPP and CIMS T4T training outside their region. Backfilling of the trainee's positions, local training and longer period of notice for courses were nominated most frequently as the best way to improve this.

Teams were evenly split in regard to their relationship with DMH – just over half describing this as non-existent or limited, though just under half described the opposite. Just under 80% believed that DMH needed a higher level of visibility, regular communication and contact with the RMHTs.

¹⁰ Department of Defence Directorate of Mental Health (2008) Summary of Regional Mental Health Teams: 1-13. (see above)

¹¹ DCO policy is that DCO staff can be part of a RMHT but not participate in training for MHS programs.

2.8 Overall assessment

The establishment of the MHS by the ADF in 2002 was far-sighted. The Strategy compares favourably with mental health strategies in other Australian workplaces. It also compares well with what exists in military forces in other countries. Some of these military forces have mental health policies and programs in place, particularly in relation to PTSD. Others have individual mental health promotion programs in place such as the Rx2000 Mental Health Initiative of the Canadian Forces.¹² They do not seem however to have the suite of programs at a whole of forces level that the ADF does. The enthusiasm and commitment of ADF members in delivering these programs adds to the ongoing achievement of the MHS. This has meant that programs are generally well received by members.

Having made this fundamental point, it is necessary to consider the problems and barriers to the full success of the MHS and how these can be identified and overcome, leading to improvements of the MHS in the future.

The main problems and barriers identified by stakeholders largely confirmed the ones that are apparent in the description of the MHS and DMH outlined above. DMH has been understaffed and some, including key staff did not have established positions. At times it is possible to describe the Directorate as being almost non functional, but this has turned around with new staff positions being created and being filled recently. The lack of desk officer positions responsible for delivery of the principal MHS programs has had a marked adverse effect on the delivery of the MHS programs by the RMHTs. The DMH, as a consequence was not able to offer central direction in policy and implementation as well as support to the RMHTs.

The RMHTs in their turn were unfunded. It was not part of a member's primary role responsibility to participate in a RMHT. Some professional groupings did better than others in contributing to RMHT work and meetings. Deployment by team members also impacted on team membership and levels of activities. Organisation for the delivery of MHS programs suffered. Travel budgets for members to attend and trainers to visit were often mentioned. So also was the outdated use of lecture-based methods of presentation, rather than scenario-based approaches to produce not only gains in knowledge but also attitude and behaviour change.

That said, the work of the DMH continued. Many RMHTs functioned well and MHS strategies were delivered in many regions, as the activity figures above indicate.

Apart from additional funding at both central and regional levels, how can the MHS be improved? This can be answered in two parts. The first is in terms of improving the MHS in its current form. The second and more important is in terms of a reconceptualised MHS that could take quite different form in the future.

¹² National Defence and the Canadian Forces Backgrounder Mental Health Programs - Update (<http://www.forces.gc.ca/site/news-nouvelles/view-news-afficher-nouvelles-eng.asp?id=1804> – accessed 10 Jan 2009).

Considering first how the MHS could be improved, it is appropriate to note that the MHS consisted of a broad mission and particular programs with attached budgets. An evaluation model would suggest that the following should occur. There should be a clear articulation of a strategy and accompanying objectives. This requires an assessment of a strategy and clear accompanying objectives. An assessment of the profile of current needs and their prioritisation is required. Key stakeholders as well as the evidenced-based research literature should be further consulted. From these it should be possible to undertake a gap analysis and identify a number of programs to fill these gaps. Their development and rollout may well then have required evaluative input. More importantly they would have needed a business case, including risk identification and specification of Key Performance Indicators to measure Achievements against Objectives.

This process should have identified that the ATODs and possibly the SPP could have taken other forms. While the current ATODS programs could well have been included in the policy on alcohol use and misuse, other approaches would have been included. These might have included policies in relation to the cost and availability of alcohol on bases and whether approaches to alcohol fitted within a mental health or disciplinary model. These might have included Tobacco and Other Drugs (the TODS in ATODS) which seem to have a much lower priority within the program.

It is also likely the SPP would take a somewhat different form without such a central place accorded the ASIST program. While it broadly conforms to the gatekeeper model which has evidence-based support, ASIST has not, as yet demonstrated its impact in reducing suicide or suicide attempts. The suicide prevention program would benefit from a strategic review. It should consider whether any of the features identified in the rapid review of the research literature on suicide prevention programs, particularly the US Air Force model reported by Knox et al (2003) have a more prominent place.¹³

It is clear some other programs should be included within the MHS. This clearly includes Resilience training which was identified as one of the original six initiatives of the MHS. This will be discussed further below. It should also include bullying in the light of recent suicide cases where bullying was an acknowledged feature. This would add another dimension to the ADF's Workplace Equity and Diversity Plan as well as its proscription of unacceptable behaviours including bullying and harassment. It may be that first, the MHS should include other dimensions and second, that all these various dimensions might be reconceptualised in new ways that would increase their impact on ADF members. This is discussed further under resilience training below.

2.8.1 Resilience training

As noted, resilience training was identified as one of the original six initiatives of the MHS. However funding difficulties have meant and has not had a central place in the delivery of the MHS until recently. However this is about to change with the Australian Government's Mental Health Lifecycle Initiatives for Veterans and Former

¹³ Knox KL, Litts DA, Talcott GW et al. (2003) Risk of suicide and related adverse outcomes after exposure to a suicide prevention programme in the US Air Force: cohort study. *BMJ*, 327:1376-8.

Serving Members, including a study of psychological resilience and a pilot study of resilience building. This is an important initiative for which the Government deserves credit. LTCOL Andrew Cohn's significant contribution to the development of resilience training courses at the Army Recruit Training Centre, Kapooka should also be acknowledged.¹⁴

Resilience training aims to increase a member's ability to withstand the stresses that can be expected during their service life. These are not only combat-related involving possible exposure to critical incidents. They also include working and living on bases and on deployment. They involve both interaction with others including the chain of command. They also involve effects of military life on personal relationships and families.

Components of a resilience training courses might include such topics as:

- Psychological 'first aid';
- Arousal reduction;
- Stress inoculation;
- Anger and fatigue management;
- Use of alcohol and other drugs
- Life and relationship skills;
- Handling corpses.

There are plans currently to expand the innovative resilience training program developed by LCOL Cohn currently at all three recruit schools and RMC and soon to include Australian Defence Force Academy (ADFA). There will be a 2-hour presentation on resilience combined with 1-hour presentation on arousal reduction.

The program will further develop to include not only cognitive but also emotional, and behavioural Cognitive-Behavioural Therapy (CBT) components. This will occur in collaboration with US researchers through TP13. The program will be marketed as the development of a Mental ARMOUR for military service with ARMOUR as an acronym for Anxiety Response Management (behavioural), Observe (Emotional), Utilisation of realistic thinking (cognitive), Respond to the situation.

It is also planned that the resilience study would be conducted in conjunction with the annual Longitudinal ADF Study Evaluating Retention (LASER) survey, both in conjunction with ACPMH. If conducted pre- and post- recruit training, it would also support the evaluation of the new recruit training program.

A rapid review of the research literature on resilience training programs is attached in Appendix 4. It concluded that while research on resilience has expanded over the years there are still gaps in empirical and theoretical definitions and measurement. Research on resiliency is mostly limited to children and adolescents and needs to be expanded to the broader adult population, particularly resiliency in military personnel.

¹⁴ The work of MAJ Margaret Goodman and MAJ Andrew Moss at ARTC and LT Joseph Hwang and LT Andrew Butcher should also be acknowledged.

This means that it is important that this program, as well as other innovative MHS programs such as bullying should be rigorously evaluated.

It is important that attention be paid to the presentation and marketing of resilience training to ensure that it has maximum impact on ADF members. It is possible that some elements of existing programs could be combined with the resilience programs.

Resilience training courses need to operate alongside other programs such as CIMS, pre-deployment briefings, access to appropriately trained mental health staff on deployment and post-deployment briefing. This is in addition to access to evidence-based mental health services.

While beyond the scope of this review, it is worth noting that the skills learnt in resilience training courses extend the behavioural repertoire of ADF members to include not only so-called 'hard' skills but 'soft' skills that some believe are valuable in the new asymmetric warfare.

Institutional as well as individual strategies may be important in building resilience, as well as reducing needless stress on individuals. This is part of the work of the Defence Force Psychology Organisation. In addition, some large organisations eg local government authorities in the UK have developed frameworks and policies to reduce occupational stress in their organisation in order both to raise productivity, retain workers and reduce occupational compensation payouts. These frameworks and policies are worthy of further consideration.¹⁵

2.8.2 Need for the Mental Health strategy to be evidence-based and evaluated.

It is highly desirable that the MHS should be evidence-based to the greatest extent possible and, as noted that the innovative elements such as resilience training and bullying should be rigorously evaluated. It will also be important that the presentation and marketing of the new and redrawn Mental Health Strategy is done in a similar way to the proposed resilience training program.

2.9 Conclusions and recommendations

The establishment of the MHS by the ADF in 2002 was far-sighted. The Strategy compares favourably with mental health strategies in other Australian workplaces. It also compares well with what exists in military forces in other countries. The enthusiasm and commitment of ADF members in delivering these programs adds to the ongoing achievement of the MHS. This has meant that programs are generally well received by members.

The rollout of the ADF Mental Health Strategy has been patchy. This has reflected the lack of proper funding for both the Directorate of Mental Health and the Regional Mental Health Teams. The proper staffing and establishment of the Directorate of Mental Health is essential for the optimal delivery of the MHS. So too is the optimal

¹⁵ Stellman JM (ed) (1998) Encyclopaedia of Occupational Health and Safety International Labour Organisation 4 vols.

functioning of the RMHTs. This is likely to occur in the new proposed regional groupings, the Regional Mental Health Units – see Section 3.5.

Recommendation 2.1: The Directorate of Mental Health needs to be fully staffed and core positions need to be established as triservice rather than on loan by single forces.

Recommendation 2.2: An oversight group to the Directorate of Mental Health should be established to consist of senior Defence health, single service health and Defence personnel staff as well as non-Defence clinical and academic experts. The purpose of such a group would be to sustain the strategic direction and delivery of the Mental Health Strategy.

Recommendation 2.3: The Mental Health Strategy needs further development for it truly to be a Strategy rather than a small number of specific programs as at present.

- It should specifically include components in resilience training (including stress inoculation, mental health first aid as well as personal and relationship life skills), mental health literacy and bullying.
- The Strategy should be evidence-based to the greatest extent possible and the innovative components should be rigorously evaluated.
- Attention to presentation (marketing) of the revised Mental Health Strategy so as to have maximum impact on ADF members will also be important.

Section 3 The delivery of mental health services in the ADF

3.1 Overview

3.1.1 Mental health services on bases

The ADF has a range of organisations and service providers committed to delivering a high standard of care to ADF members. The key agencies include Joint Health Command, Single Service Health assets, Chaplains, the Defence Community Organisation. They also have relationship with and utilise organizations such as the Veterans and Veterans Families Counselling Service (VVCS).

Mental health services on bases are delivered predominantly by doctors at the Medical Centre and psychologists in the Psychology Support Sections (PSSs). Both doctors and psychologists provide these services alongside a number of other duties. Doctors provide all other primary medical services as well as annual or regular medical examinations. Psychologists provide Post-Operational Psychological Screening (POPS), vocational selections including a range of the services some examples being appeals, briefs to recruits, suicide awareness at annual induction training and prior to deployment as well as measurement of organisational climate in units. There are, as a result, long waiting lists in many of the 17 PSSs located around Australia. Psychologists are advised to limit themselves to the management of 'psychological injuries' which do not meet the diagnostic criteria for DSM-IV mental illnesses.

ADF members are directed to seek all medical, including mental health services through Defence Health Services. These are provided at no cost to members. This is similar to members of the community using public mental health treatment services (for secondary level care). It is different though to community members attending GPs who typically pay a significant co-payment for medical and pharmaceutical services and, until recently, substantial fees for counselling by psychologists (for primary level care). GPs can now refer patients for a course of such counselling at minimal cost to them – see Section 4.4.1 for outlines of the Better Outcomes to Mental Health Care and Better Access to Mental Health Care Initiatives.^{16 17}

Some members however, unwilling to disclose their medical, including mental health problems to the ADF, may seek private medical care, unrelated to the ADF. This though is in breach of ADF regulations and if discovered could lead to disciplinary action.

Both doctors and psychologists may be in uniform, civilians in the APS or on contract - Contract Health providers (CHPs).

¹⁶ General Practice Education and Training Limited (GPET) About AGPT (<http://www.agpt.com.au/GPETtheCompany/AboutGPET/> accessed Jan 9 2009).

¹⁷ Australian General Practice Network Better Outcomes to Mental Health Care Initiative (<http://www.primarymentalhealth.com.au/site/index.cfm?display=15130> - accessed Jan 9 2009)

Doctors work alongside nurses (typically without mental health training) and are supported by medics. Psychologists are supported by psychological examiners and psychological assistants. Psychologists in Psychology Support Teams (PsSTs) who deploy in the Health Support Battalion (HSB) or Combat Service Support Battalions (CSSBs) within the Land Command Army work alongside and cooperate with psychologists in PSSs while on bases in the National Support Area (NSA).

ADF members with mental health problems may self-refer to either doctors or psychologists. Their commanding officers may also make referrals sometimes where career and military discipline or care issues are involved. Doctors and psychologists may also cross-refer between each other.

In addition, doctors and psychologists may make referrals to other practitioners. Doctors may make referrals to psychiatrists (reserves, civilian on contract on- and off-base). Both may make referrals to other psychologists (private or in the Veterans and Veterans Family Counselling Service (VVCS)). They may make referrals to social workers and other staff in the Defence Community Organisation (DCO) for family-related matters.

ADF members in acute mental health difficulties are able to access the All Hours Support Line, a 24 hour helpline available to members seeking mental health support or counselling. It is operated by McKessons, an international company specialising in health call centres operated by mental health nurses using computer-based protocols. Defence has contracted them to provide acute support and triage, but not on-going counselling services

Members with suicidal ideation and threatening self-harm will be subject to appraisal by a Risk Management Team. If deemed at risk, the member will be accompanied to the casualty department of a public hospital for admission. In the usual event that this does not occur, they will be admitted to the Medical Centre on base (if it has inpatient beds) and if they have no family or close friends at their homes. A member of their unit will be appointed to maintain a Suicide Watch, if the member is at risk of suicide in the Medical Centre. Staff in Medical Centres frequently express misgivings about these care arrangements.

Members who need to be scheduled for involuntary treatment can not be maintained within the Defence Health Service and must enter the public mental health services of the local jurisdiction. There is no Military Mental Health Act overriding local regulations and the legislation from which they derive. Nor is there such an Act covering circumstances when scheduling is necessary on deployment in other countries.

Members with chronic mental health problems, often post-deployment require rehabilitation and will be referred to the ADF Rehabilitation Program (ADFRP) - see Section 9.¹⁸ A clinical team led by the Medical Officer, will be responsible for their clinical aspects of their rehabilitation. The Rehabilitation Coordinator will appoint a Program Case Manager (PCM) who will be responsible for their occupational aspects

¹⁸ Some members with chronic physical health problems may also develop mental health complications requiring ongoing treatment.

of their rehabilitation. The PCM nominated by a company on contract, who is often an occupational therapist organises all other care and supports the member's Return To Work (RTW).

Members whose rehabilitation or treatment does not lead to RTW in the ADF will transition to discharge from the ADF – see Section 10.

The Regional Mental Health Team at the 2nd Health Support Battalion (2HSB) at Enoggera operates a distinctive service involving a medical officer, clinical psychologist, psychiatrist and practice manager working alongside a medical rehabilitationist – see Section 3.3.1 below.

3.1.2 Mental health services on deployment

Doctors, psychologists and chaplains accompany members on deployment. Psychologists and chaplains are embedded with troops and provide mental health support and pastoral care respectively. They also share Critical Incident Mental Health Support (CIMS) in the event of a critical incident with 'fly-in/fly-out' psychologists (as well as social workers from DCO when there is a major incident involving large numbers of members). These latter psychologists will also be involved in the extraction of the member if necessary, up to one third being mental health-related. The role of psychologists and psychological examiners in pre-deployment briefing and post-deployment screening is discussed further in Sections 5 and 6. 1Psych Unit in Land Command is predominantly involved in the conduct of RtAPS – see Section 5. However the CO of 1PSYCH has technical control of all psychological assets on deployment and is able to request psychological taskings and support beyond the psychologist's home unit.

One psychologist (with one psychological examiner) deploys with 1000 members so as to be able to meet access targets of a unit visit every 5 weeks. These occur through roving visits between units interspersed with return to base. Nine doctors deploy to provide services to 5000 members that meet targets for access to medical care that do not exceed one hour. Somewhat fewer chaplains deploy. Previously psychiatrists have deployed alongside psychologists.

3.1.3 Single force variants of mental health services

As well as being members of their triservice Area Health Service within the Joint Health Support Agency (JHSA) doctors, psychologists and other health practitioners have also been members of their Single Forces Health Services – Army Health, Air Force Health, Navy Health, Land Command Health and Special Operations Command (SOCOM) Health.

Army (including Land Command and SOCOM) have much larger numbers of psychologists, including psychologists in uniform than Navy and Air Force, proportionate to the size of the service. Psychologists do not normally accompany RAAF on deployment as RAAF typically deploy as part of land based operations. As a result, their operational psychological support is supplied by Army through Land Command Psych. Return To Australia Program Screenings (RtAPSs) are normally conducted by Land Command Psych (1Psych Unit) at the end of the deployment

period with POPs being conducted by civilian psychologists back at RAAF bases. Psychologists do not also normally accompany Navy on ship voyages.¹⁹ Navy Reserve psychologist provides the support in the Maritime environment, and where this is not possible it is provided by Land Psych Assets.

Members in groups such as aviation (helicopters), Navy divers, and submariners have special arrangements for psychological support, the reporting of which may be affected by restrictions imposed by their high level security clearance.

Reserves also have their own distinctive arrangements. They generally deploy for shorter periods than regular members (e.g. 2-8 weeks) during which time they enter Continuous Full Time Service (CFTS). Until the recent operation to the Solomon Islands (and once in East Timor), they did not typically deploy outside Australia as teams or units but rather as individuals into pre-existing regular units. Reservists provide most of the specialist medical and nursing workforce on deployment. As they return from deployment at times other than with the regular unit in which they are serving, they are more likely to miss RtAPS screens. Because they do not serve on bases, they are also more likely to miss POPS screens as well.

The Navy has a distinctive Alcohol and Other Drugs Program - see Section 1.1. It also uses the Divisional Officer system. In this, both Commissioned and senior Non-commissioned Officers take on additional pastoral care responsibilities for more junior sailors. They do this in addition to their primary job responsibilities. The Divisional system is under challenge however. This is a result of the introduction of cost-efficiencies in the navy restricting the time available for activities beyond primary job responsibilities. It is also the result of pastoral care becoming more complex such as offering financial advice. The Senior Sailor Management Scheme is one response to this challenge.

3.2 Professional groups involved in delivering mental health services

3.2.1 Psychologists

Most psychologists in Defence are members of different Defence Psychology groupings. The largest grouping has been the tri-service Defence Force Psychology Organisation (DFPO) which was established in 1999 out of the Single Services – see Section 3.5 though in regard to recent developments.

Since 1999 however, the Single Services have reasserted operational control and single force groupings still exist, as listed below:

- Navy Psychology;
- Air Force Psychology;
- Land Command Psychology;
- Special Operations Command (SOCOM) Psychology.

¹⁹ Doctors may also not go on naval ship voyages.

The Principal Psychologist Committee, chaired by the Director of the DFPO has technical oversight and formulates policy for both the DFPO and single service organisations.

An organisational chart showing the distribution of these psychology groups within the ADF is included over.²⁰

The DFPO was established in 1999 out of single forces groupings. These earlier groupings were established in the Second World War to provide job allocation/reallocation services, investigation into discipline, clinical examinations and advice to officer selection boards.

As set out in a DFPO publication, the mission of Defence Psychology is to enhance ADF capability, operational effectiveness and force preservation. Defence Psychology has three components or ‘pillars’ to achieve this mission.²¹ These are organisational health and effectiveness, performance enhancement; and psychological health and readiness.

Organisational health and effectiveness includes selection systems, retention initiatives; organisational development; climate measures; culture change; attitude and opinion surveys; change management; strategic HR management; and social issues.

Performance enhancement for individuals, teams and units includes cognitive effectiveness, team building; skill acquisition; leadership theory; training design; dynamic decision making; error management; intercultural competence; and stress control.

Psychological health and readiness can also involve individuals, teams and units. It includes mental health support; health promotion; support to trainees; counselling and coaching, stress inoculation; resilience training; self-efficacy; operational readiness; and screening.

The enabling foundations for Defence Psychology are professional development and governance; delivery that is timely, pragmatic and culturally-appropriate; and an applied research capability committed to translating research findings into practical outcomes.

The Psychology Research and Technical Group (PRTG) provides this applied research capability.²² It conducts research using data from RtAPS and POPS screening. It was also responsible for the development of the Electronic Psychology Records and Information System (EPRIS) which is being increasingly used – see also Sections 12.4 and 12.5.

²⁰ Directorate of Mental Health Australian Defence Force (2008)

²¹ Department of Defence. Defence Support Group (undated) Defence Ψ Psychology. Sharpening the edge of military capability

²² Department of Defence. Joint Health Command, Defence Force Psychology Organisation (<http://www.Defence.gov.au/health/about/i-dfpo.htm> - accessed 10Jan 2009)

DFPO has a policy-making group and maintains and updates the Psychology Manual (PSYMAN). It provides technical leadership and policy direction for the 17 PSSs around the country and PsSTs on bases and on deployment.

The DFPO also has responsibilities in intelligence, conduct after capture as well as a number of legacy training roles involving eg the Australian Federal Police (AFP) and the Australian National Antarctic Research Expedition (ANARE).

As Defence Psychology states, a Defence psychologist should hold a recognised four-year psychology degree plus 2-years of suitable supervised experience to be registered as a psychologist in an Australian jurisdiction. They develop a broad range of specialist skills as well as general skills such as communication and leadership. Nevertheless most Defence psychologists are generalist in educational background and remain so in the ADF as a consequence of widely differing postings. Most ADF psychologists are not therefore clinical or health psychologists recognised by membership of their Specialist College or eligibility to receive Medicare benefits – see Section 4.4.1.

Uniformed psychological examiners can deploy in support of troops on operations to undertake psychological screening, CIMS and psycho-education. Civilian psychological assistants engage in the conduct and marking of psychology tests and other administrative duties such as booking clients, filing reports and compiling statistics.

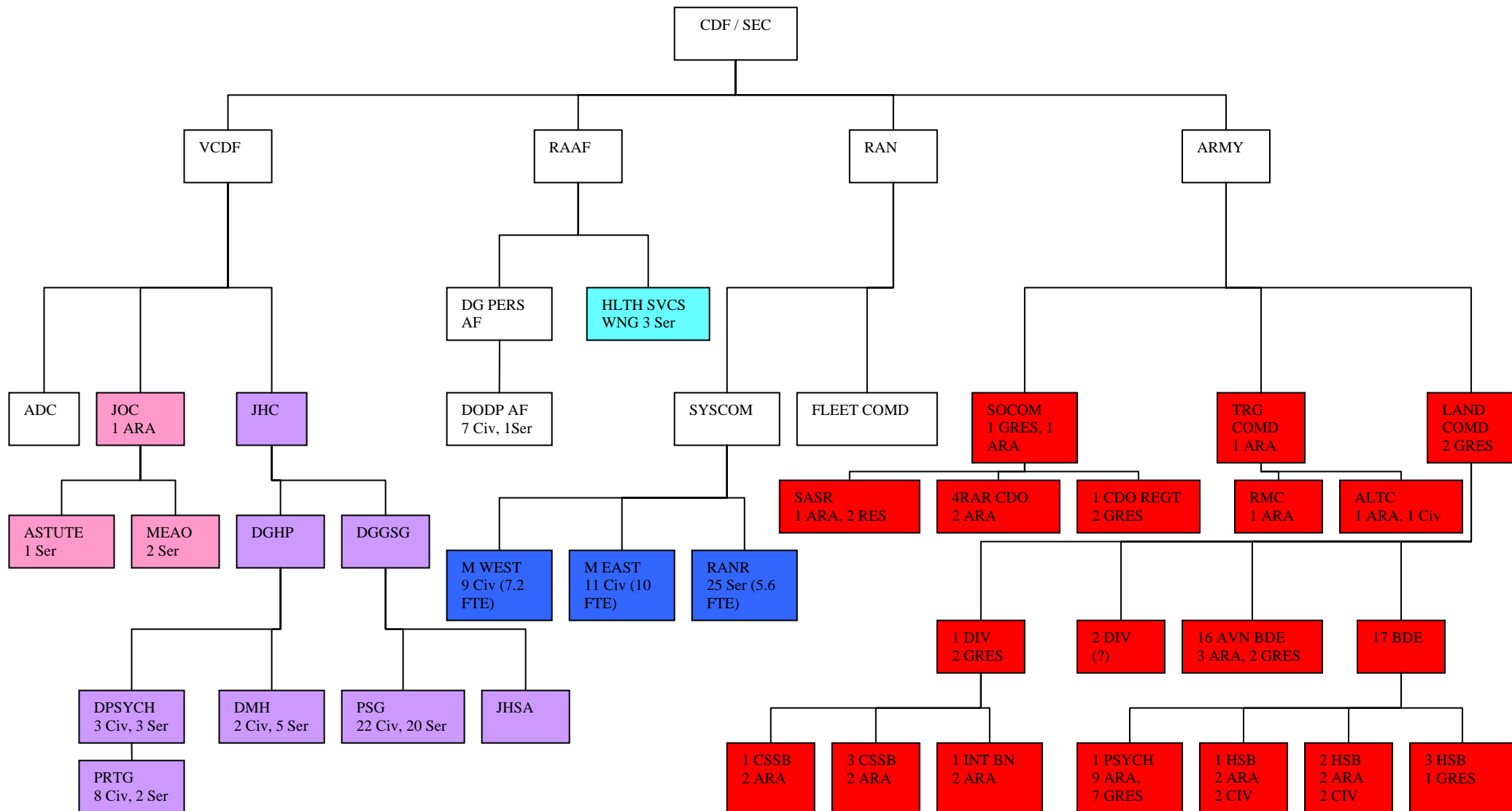
3.2.2 Doctors

Doctors work both in uniform on deployment and in uniform and as Contract Health Practitioners (CHPs) as members of their Single Forces Health Services within their triservice Area Health Service. They serve in medical centres and Health Service Battalions (HSBs) on base. There is no medical grouping comparable to the DFPO.

Many uniformed doctors enter Defence as a result of taking up a Defence scholarship which provides financial support during their medical education. A condition of holding a Defence scholarship is that holders serve in Defence for the number of years they were sponsored plus one year.

Medical recruitment agencies place doctors with GP Vocational Registration as CHPs. They acquire their knowledge and skills in mental health through their medical education and postgraduate training program or clinical experience required to acquire Vocational Registration. Their education being generalist in nature they will have a variable interest in mental health and for example may not be involved in any of the activities forming the Better Outcomes to Mental Health Care Initiative of the Australian Government – see Section 4.4. Few will have additional training in mental health outside the ADF. Their training in mental health within the ADF is discussed in Section 4.4.

There are relatively few psychiatrists in the ADF. Those that do, serve in the Reserves or work as CHPs – see Section 4. However doctors working with the ADF are able to access the Psychiatric Helpline, a 24 hour helpline available to mental health



- Operational health command chain
- Joint Health Command chain
- Army
- Navy
- Air Force

Ser = Serving Psychology Officer (ARA, RAN RAAF, full-time or part-time uniformed officer)

Civ = Civilian Psychologist

ARA = Regular Army Psychology Officer

GRES = Reserve Army Psychology Officer

Notes:

1. Units at the same level on this chart are not necessarily at equivalent hierarchical levels within the ADF (not possible due to print area restrictions!). The purpose of the chart is only to display chains of command within formations and the location of psych assets.
2. Psychological Examiners have not been included in the chart. Psychological Examiners (Army) number 57 full-time and 34 part-time personnel.
3. Due to manning shortfall not all positions are filled.
4. The above chart displays some of the more prominent (with regard to activity and/or health duties) GRES officer positions across the organisation. Total GRES officer positions by state (including those listed in the chart) are as follows:

State	Total Positions	Positions Vacant
ACT	22	3
NSW	39	18
QLD	17	3
VIC/TAS	18	6
SA	11	7
NT	2	0
WA	13	6

Abbreviations

CDF	Chief of Defence Force
SEC	Secretary of Defence
VCDF	Vice Chief of Defence Force
RAAF	Royal Australian Air Force
RAN	Royal Australian Navy
ARMY	Australian Regular Army and Australian Army Reserve
DG PERS AF	Director General Personnel – Air Force

professionals seeking advice in the management of patients with acute mental health problems.

3.2.3 Chaplains

Chaplains provide pastoral care to members on bases as well as on deployment, as embedded chaplains in units, (full-time chaplains only on deployment). They do this in addition to providing religious ministry to members of the same faith and denomination. They also provide pastoral care to members' families particularly in times of loss and grief. Chaplains have roles both in the DMH and the RMHTs, particularly as deliverers of CIMS and suicide prevention, two of the MHS strategies. The chaplain in the DMH is developing a program for the care and wellbeing of ADF caregivers and for chaplains in particular.

Chaplains have 3-year theological training, have at least two years post-ordination pastoral ministry experience and do a 4-week course in the ADF Chaplains School including pastoral care in a military setting – see also section 4.4.1. Some chaplains may do further study such as a 3-month hospital placement in Clinical pastoral Education. Chaplains are expected to complete a CIMS for MH providers and an ASIST course.

The number of chaplains of a particular faith or denomination reflects the number of adherents of that faith and denomination in the ADF. While mainly Christian, there are Jewish chaplains in the Reserves. There are no Buddhist or Moslem chaplains due to reasons of insufficient numbers as well as theological schism within the Muslim faith.

3.2.4 Mental health nurses

Mental health nurses typically form part of community mental health teams outside the ADF in Australia. There are however few mental health nurses in the ADF. This reflects both a relative national mental health nurse workforce shortage in Australia as well as, apparently, relatively poor pay rates for mental health nurses in the ADF – see Section 4.3.

3.2.5 Social workers

There are large numbers of social workers in the ADF almost all located in the DCO. Social workers provide important care and other assistance principally to members' families for family-related problems. There are few clinical social workers in the ADF and able to provide therapeutic counselling with ADF members. This is unusual as, like mental health nurses, social workers typically form part of community mental health teams (secondary level) in Australia outside the ADF.

3.3 Organisations involved in delivering mental health services

3.3.1 2nd Health Support Battalion (2HSB), Enoggera

The Mental Health Unit (MHU) at 2HSB, Enoggera has distinctive features and was a model for the new structure of Mental Health services introduced in 2008-9 – see Section 3.5 below. The MHU here consists of:

- medical officer (two part-time);
- clinical psychologist (two part-time again)
- psychiatrist (part-time on contract) who promptly consults with patients and admits as necessary and participates in fortnightly case conferences;
- practice manager

A medical rehabilitationist operates alongside the MHU and is able to incorporate patients with chronic mental illnesses into his rehabilitation program. There is no mental health nurse.

The MHU receives referral from doctors on the base and beyond, as well as Command and the PSS.

It is possible to admit patients with mental illnesses into 2HSB on a limited basis.

3.3.2 Defence Community Organisation

As stated on their website, the mission of the DCO is to support ADF families in peace and war.²³ Services are offered to members' families though, it was reported no longer to members directly. Services and programs are delivered by DCO Area teams located on or near to major ADF bases. DCO also provides assistance in the case of illness, hospitalisation and financial difficulty and in managing casualties and estates at times of bereavement.

DCO staff include:

Defence Social Workers (DSWs) provide counselling and undertake casework in relation to personal, family and service-related problems and issues. They also assist families through community development programs, group work and educative programs and referrals to appropriate community services. They also provide advice, assistance and professional reports to command, particularly for requests based on compassionate or family grounds.²⁴

Military Support Officers (MSOs) are uniformed and support and advise families in relation to service matters including liaising with units and command particularly in the event of an illness or death of a member.

²³ Department of Defence. Defence Community Organisation (<http://www.Defence.gov.au/DCO/default.htm> - accessed Jan 10 2009)

²⁴ Department of Defence. Defence Community Organisation Services Having difficulties (http://www.Defence.gov.au/DCO/having_difficulties.htm - accessed Jan 10 2009)

Regional Education Liaison Officers (REDLOs) are professional teachers advise families in relation to educational issues particularly when relocating from one jurisdiction to another and their different educational systems.

Family Liaison officers (FLOs) provide community-based information and assistance to families particularly when they are settling in a new area following a new posting as well as during the deployment of the ADF member within the family.²⁵

DCO operates the National Welfare Coordination Centre, a 24 hour telephone helpline for family emergencies occurring outside of business hours.

The DCO website states that counselling services, delivered by DCO DSWs are available to all members of the ADF and all members of their family. Discussion with a DSW is confidential and nothing is documented on ADF records. No information is disclosed unless there are concerns for the safety and welfare of the client or others, or serious breaches of the Defence Force Discipline Act. Members or partners can contact a DSW for a range of issues including resilience building; relationship issues (couples counselling available); social isolation, work issues, anxiety, depression, alcohol, drugs, grief and loss, mental health issues and suicide and suicide prevention.

A Strategic Review of DCO however has been recently completed and it is unclear if these counselling services will continue in the future to be offered. For example it has been reported social workers may become less involved with mental health counselling for which they are deemed to have insufficient training – see Sections 4.4.1 and 11. There are also concerns about providing counselling where the matters discussed and the advice recommended do not become known to ADF medical staff – see Section 7.1.

3.3.3 Veterans and Veterans Families Counselling Service (VVCS)

The VVCS has a close relation to the ADF but is independent of it. It is managed by the Department of Veterans Affairs (DVA) as a counselling service for veterans. It is supported by veterans, particularly Vietnam Veterans as its previous name, Vietnam Veterans Counselling Service indicates. However with the heightened operational tempo of recent years, many veterans are still members of the ADF. They are therefore eligible for counselling from the VVCS. The ADF contracts with VVCS to provide this (members only). DVA does this similarly for veterans who are no longer ADF members (members and their families).

The major ADF bases around Australia contract VVCS to do counselling work on its behalf, to a varying extent. The extent of this is, for example much higher in Townsville than Darwin. In Townsville, VVCS operates out of the Lavarack Medical Centre as well as its own office. Its caseload there of 1600 in 2007 included 650-700 ADF members and their families. It has seven counsellors on staff with 24 others on contract though no doctors or psychiatrists. VVCS is able to provide services without significant waiting time in contrast to the PSSs at Lavarack Barracks which has a 3-4 week waiting list and elsewhere in Townsville. More generally it is able to

²⁵ Department of Defence. Defence Community Organisation Education assistance (<http://www.Defence.gov.au/DCO/Education.htm> - accessed Jan 3 2009)

supplement mental health services at Lavarack Barracks which are under strain principally due to the current heightened operational tempo.

Psychometric tests for the diagnosis of DSM-IV mental illnesses eg PCL-C for PTSD are administered to veterans on arrival at VVCS with test results being available for the use of counsellors during consultations. It is unclear however what capacity VVCS has to manage any DSM-IV cases diagnosed in this way. It is VVCS policy to refer complex cases to other agencies.

VVCS as an organisation has recently signed a Memorandum of Understanding (MoU) with the ADF establishing clear policies and practices. Specifically this involves VVCS sending a clinical report back to the ADF for insertion in the member's medical records, following a referral from the Medical Officer, as case manager to VVCS. This will not be done for self-referrals, though a numerical count of these cases will be maintained and numbers sent to the ADF periodically.

3.4 National planning and operations of mental health services

Joint Health Command (JHC) (formerly Defence Health Services Division (DHSD)) is now a component of the Vice Chief of the Defence Force Group (VCDF) – previously Defence Support Group (DSG).²⁶ It currently comprises two branches, the Health Policy Branch and the Garrison Health Support Branch. The Directorate of Mental Health (DMH) is located within the Health Policy Branch – see Section 2.2. The Defence Force Psychology Organisation (DFPO) was also located within this Branch but has been subject to recent changes – see Section 3.5 below. A more detailed outline of the activities of the DMH is described in Section 2.2. A more detailed outline of the activities of the DFPO and its successor groupings was presented in Section 3.2.1 above.

3.5 The new Defence Health and mental health service model

In July 2008 the Committee of Service Chiefs (COSC) agreed to a number of new Defence health service command arrangements.²⁷ Specifically they agreed:

1. the Commander Joint Health will be responsible for all garrison health care and exercise technical control as Surgeon-General of all ADF activities. COSC redesignated the Head Defence Health Services to become Commander Joint Health
2. that the Chief Defence Force (CDF) invite the Secretary of Defence to transfer Defence Health Service division (DHSD) from the Defence Support Group (DSG) to the Vice Chief Defence Force (VCDF) group;
3. to the creation and appointment of a third one-star general in DHSD and dual-role these officers as Director-General of Single Service Health Services;

²⁶ Department of Defence. Joint Health Command (<http://www.Defence.gov.au/health/> - accessed Jan 10 2009).

²⁷ Department of Defence (2008) Defence Health Services Command Arrangements Addendum 50/08.

4. to direct Commander Joint Health to develop Service Level Agreements (SLAs) with Chief Navy (CN), Chief Army (CA) and Chief of Air Force (CAF) for the delivery of garrison health support;
5. that Commander Joint Health will appoint regional health directors and lead the development of Regional Levels Agreements;
6. to centralise unit-level health support within hub facilities for the provision of garrison health support. Exactly what will be centralised will be specified in the Regional Levels Agreements;
7. that the Commander Joint Health is the Lead Capability Manager for health materiel;
8. to invite Chief Information Officer (CIO) and the Chief of Capability Development (CCD) to investigate commercial off-the-shelf e-health products to provide a fast-track interim solution to the lack of a comprehensive health information system;
9. that Commander Joint Health sponsor a review of Area Health Services personnel and equipment establishments and examine in detail alternative models to deliver garrison health support;
10. that Commander Joint Health examines alternative operational health delivery models.

As part of the COSC agreed review of delivery of garrison health support and a more general health reform program JHC have proposed a new model of mental health service delivery for consideration. This model includes:

- consideration of the formation of a Mental Health Branch (Civilian SES Level 1) position to provide oversight of the ADF Mental Health Strategy and all levels of mental health service delivery in the ADF;
- the establishment of a uniformed Director Mental Health position (COL);
- the establishment of five Regional Mental Health Units (RMHUs) to replace the 26 Regional Mental Health Teams;
- that each RMHU be multidisciplinary in nature and staffing
- consideration of the establishment of an ADF mental health inpatient facility
- additional staffing to support the PSG (now 13 psychologist, 5 mental health nurses, 5 social workers and two psych examiners)

These new arrangements, if accepted, aim to better promote the rollout of the Mental Health Strategy programs.

As a result of the COSC decisions, the Commander Joint Health will also have greater influence on the stability of the uniformed health workforce in garrison. This should reduce disruptions to garrison health services (as uniformed health providers deploy) with possible beneficial effects on the delivery of psychology services.

There have been changes to the DFPO. Its planning function remains within the Health Policy Branch as the Directorate of Psychology. The operational function has been relocated to the Garrison Health Support Branch as the Psychology Support Group (PSG) providing oversight and direction of Psychology Support Sections around the National Service Area.

3.6 Epidemiological assumptions in developing ADF's mental health services

The prevalence of mental conditions in ADF members is unknown but can be expected to differ from that in the Australian population. This is because screening at recruitment and transition-out of members from the ADF on medical grounds if not deployable, create a 'healthy worker effect'. This means that all else being equal, the prevalence of mental and physical illness can be expected to be generally lower than in the Australian community. Its magnitude is unknown. It is known however that the Standardised Mortality Rate (SMR) for full-time ADF members in 2001/2 – 2006/7 is 0.54 for all cause mortality (indicating prevalence levels almost half of community rates) and 0.60 for suicide (indicating prevalence levels 60% of community rates). As a first order approximation, it might be expected that the healthy worker effect roughly halves prevalence in the community for ADF members.

Against this though, ADF members are exposed to considerable occupational stress that might increase prevalence levels for these (so-called) high prevalence mental conditions - anxiety, depression, adjustment disorders and substance use. This occupational stress is not only associated with the combat experience but other aspects of the deployment experience including separation from family for members with partners. It also includes particularly for young, single members, other aspects of garrison life sometimes in regional and remote settings away from the family of origin and usual social networks. Service life is also by its nature, demanding - physically, mentally and socially. The last of these is important as failure in intensive social interaction situations with possibly dire consequences can produce shame, guilt and loss of face, with all of these being very stressful.

A prevalence survey comparing ADF members with the rest of the Australian population might be thought to estimate the countervailing effects of the healthy worker effect and high occupational stress. The 2007 National Survey of Mental Health and Wellbeing showed that 16.5% of ADF members met criteria for at least one mental condition in the past 12 months compared with 20.2% for the rest of the Australian population. The most commonly reported problems were anxiety disorders, affective disorders and substance use disorders.²⁸

However there are problems interpreting these results. First, it included not only serving members but also ex-service members and individuals with overseas qualifying services. Second, comparisons of prevalence between this group and the rest of the Australian population were not age-adjusted.²⁹

²⁸ Australian Bureau of Statistics (2008) 4326.0 - National Survey of Mental Health and Wellbeing: Summary of Results, 2007 (<http://www.abs.gov.au/ausstats/ABS@.nsf/Latestproducts/4326.0Main%20Features32007?opendocument&tabname=Summary&prodno=4326.0&issue=2007&num=&view=> accessed Jan 3 2009)

²⁹ A similar study was conducted in Canada and estimated that 14.5% of Canadian serving members and veterans met criteria for at least one mental disorder in the past 12 months. The most commonly reported problems were depression, alcohol dependence and social phobia although other problems such as posttraumatic stress.

Certainly, as noted, conclusions about whether lower levels of health exist in the occupational group and what are the causes of these lower levels can not be made by simple comparison with the rest of the populations because of the presence of the healthy worker effect. Usually occupational epidemiological studies, where a healthy worker effect is present are conducted within that occupational group. Nested case-control studies are used to demonstrate that particular subgroups within the occupational population have particular problems. In the ADF these could be eg recruits or members returning from deployment. Studies of trends in disease prevalence (or even better incidence) over time in the occupational population (here the ADF) are also used. One might expect it might be possible to compare one occupational population with another eg mining workers, police and paramedics. Usually however differences in circumstances and situations of the two occupational population groups make results of these studies again difficult to interpret.

Such studies in any event do not exist

3.7 Planning principles in developing mental health services in the ADF

A number of planning principles should guide the development of a new model for the delivery of mental health services in the ADF. These are:

First, health services in general and mental health services in particular in the ADF have two defining characteristics:

- they constitute an occupational health service since services are provided to meet the health needs directly emanating from service life such as musculo-ligamentous injury and PTSD;
- they also constitute a normal health services since members are required to seek their normal health care, such as respiratory infections and hypertension from Defence Health Services.

This helps explain why some care arrangements in the ADF exist in the ADF and not in the community. These include comprehensive free health care to ADF members, the presence of chaplains, DCO, VVCS (for veterans), and the mental health strategy programs. The chain of command and Defence more generally have an orientation towards pastoral care with regard to the individual member.³⁰ Community health services by comparison are general health services alone and do not act as occupational health services.

Second, programs and treatments should be evidence-based to the greatest extent possible. This would be even better if knowledge about evidence-based treatment could be combined with epidemiological data to establish needs-based staffing benchmarks which should operate at a population level (staff per 1000 population ratios).

³⁰ It is not possible to provide the full range of primary, secondary and tertiary health service within the ADF particularly when there are difficulties or caps on recruitment. In these circumstances, recourse to public and private practitioners and services will be needed on occasions for which ADF does not have full control. This will be particularly true where bases are in rural and remote settings.

Andrews and colleagues forming the Tolkien II group at the University of New South Wales come closest to doing this for Australian conditions. They nominate evidence-based treatments for the 15 most important mental conditions.³¹ They estimate:

- the prevalence of these conditions in the Australian population;
- the current coverage of the Australian population in receipt of these evidence-based treatments for these conditions; as well as
- the estimated costs of extending coverage of these treatments and estimated extra number of conditions successfully treated.

However the cost estimates are not converted to needs-based staffing benchmarks. They are based on a very large number of judgments and estimates and are not as yet endorsed as a basis for mental health service planning in Australia. Also, as noted, epidemiological studies estimating prevalence of the high prevalence mental conditions in the ADF in comparison with the rest of the population do not exist. Even if these were estimated, it is well beyond the timeframe and scope of this review to estimate needs-based staffing benchmarks.

It has to be concluded therefore it is not possible to generate needs-based staffing benchmarks as a basis for planning mental health services in the ADF. It is possible though to make some general observations. As noted, prevalence for mental health conditions are probably about half those in the Australian population somewhat offset by the probably higher levels of occupational stress in service life. Desirable mental health staffing levels (not current levels) are likely overall to be less than desirable levels (again not current levels) for the Australian population overall. These staff are likely to have to provide a different configuration of services eg for adjustment disorder post-deployment and PTSD that could be argued to be related to service life.

Third, there should be a proper balance of primary, secondary and tertiary levels of care. This will need to be considered in conjunction with which services should be provided on-base and off-base and which by the ADF and State public and private health services. It can be confidently assumed that all primary and some secondary services would be provided by the ADF on-base either directly by the ADF or on contract.

Four, there should be a proper balance of individual treatment services and other more preventive approaches that may not be individually-based. These latter services will have different names - public health by doctors, community development by social workers and organisational approaches by psychologists.

Five, the quality of mental health service provision should be at least equal to that existing in the Australian community. It could be argued that it should be higher to maintain the high level of mental readiness, and restore if it deteriorates, that is required in ADF members. This would also protect the high level of public investment in the training of ADF personnel.

³¹ Andrews G and the Tolkien II team (2006) Tolkien II : a needs-based, costed, stepped-care model for Mental Health Services : recommendations, executive summaries, clinical pathways, treatment flowcharts, costing structures. World Health Organization, Collaborating Centre for Classification in Mental Health, Sydney: 1-376.

Six, as default, mental health services should reflect modern mental health service models that exist in the community, except where the contingencies of service life indicate otherwise.

Modern (primary) health services in Australia retain the GP as the health practitioner of first contact. Medicare institutionalises these arrangements. Modern (secondary) community mental services have become deinstitutionalised and mainstreamed in recent years. Services are now typically delivered by mental health teams in community settings. Patients with chronic mental health problems need additional support involving case management, supported housing, vocational and social rehabilitation as well as income maintenance. In Victoria this has taken institutionalised form as the Psychiatric Disability Rehabilitation and Support Services.

3.8 Overall assessment - mental health services in the National Service Area

This overall assessment is based on a review of all technical and research documents, stakeholder input and public submissions. A summary of themes arising out of both individuals and organisation submissions relevant to *Developing a model for the delivery of mental health services in the ADF* are included in Appendix 5.

3.8.1 Mental health services model at the primary care level on bases

The current model for the delivery of mental health services in the ADF is very different to that which exists in the community. At the primary care level, the medical officer (GP-equivalent) may not act as the health practitioner of first contact which is overwhelmingly the case for both public health services and publically-subsidised private health services (through Medicare). This role (whoever performs it) is an important one in order to triage the prospective patient through the system, making more likely that the patient receives the most appropriate treatment and health care expenditures are most efficiently allocated. The GP, as well as being the health practitioner of first contact, usually has an ongoing oversight role with the patient. This role, when well executed is similar to a case manager role.

An important rationale for GPs being the health practitioner of first contact is that the presenting reasons for around 40% of GP consultations are mental health problems. Further, the presenting symptoms for these are frequently somatic (physical, bodily) in nature. GPs by their training should be able to make diagnoses of DSM-IV mental illnesses and provide basic counselling (focused psychological strategies) and psychotropic medication. It is acknowledged that currently they sometimes fail to do this expertly.

In the ADF, unlike the community, this role of health practitioner of first contact for mental health is shared between psychologists and Medical Officers. Psychologists frequently provide services to members on self- and commander-referral (as well as on referral from medical officers). This reflects in part that psychologist services are much more available to the ADF members (on base) than they are to the rest of Australians in their local community. Also since psychologists provide non mental

health-related services such as psychology and guidance services for job training and selection, consulting a psychologist is more normal in the ADF than in the community. In addition, primary care counselling in the ADF is at no cost to members. This contrasts with the community where, until recently, primary care counselling had been provided by private psychologists who charged fees that were not subsidised by government – see though Section 4.4.1 for recent developments. Finally, psychologists have been well organised within the Defence Force Psychology Organisation which has provided a variety of important services such as recruiting and human resources to the ADF for a number of decades.

The availability of psychologists on base may also have an unintended adverse effect on the involvement of medical officers in the delivery of primary care level mental health care. Hard pressed doctors may well have had the view that mental health care was the domain of the psychologists. Those without a particular interest or expertise in mental health would come to this view very readily. Staffing and training issues are also relevant here – see Section 4. It was frequently reported that Medical Officers do not have a very significant level of involvement in mental health care. This is even though psychologists with suitable clinical, health and counselling backgrounds are not widespread in the ADF. This situation should not be allowed to continue and proposals for redress are set out in Section 4.5 and 4.6.

Having more than one health practitioner of first contact for mental health could be argued to be inefficient particularly because psychologists have not normally performed this role as practitioner of first contact in the past. Nevertheless, it could be argued that as long as one health practitioner performs this first-contact triage role, the system can work. This is not unknown – the health practitioner on duty, not necessarily the GP has performed this role in some Victorian community health centres in the past. Nurses more widely, in emergency departments and acute mental health services frequently triage patient care pathways. In addition, commanders are used to referring a member directly to a psychologist. Furthermore it would be undesirable for ADF members to feel that they too did not have direct access to the psychologist.

What is essential however is that the psychologist and the medical officer have as close as possible working relationship in dealing with members with mental health problems. They should work as part of a team. This would have as a very important consequence that medical and psychology clinical notes would be included on the one patient record. This would largely overcome the problem of communication of information between doctors and psychologists working in different establishments because of medical-in-confidence or psychology-in-confidence reasons. Lack of communication has been identified as major problem in a number of recent Board of Inquiries concerning suicide of members – see Section 7.

This is unlikely to happen under current arrangements with the Medical Officer working as part of the Medical Centre/Hospital and the psychologist working as part of the Psychology Support Section. It is proposed therefore that all health services involving mental health and counselling by a psychologist should occur within a team setting, located and delivered within the Medical Centre/Hospital. All other non-mental health psychological work can continue to be delivered from the Psychology

Support Section. It is recognised that significant facilities issues are associated with this recommendation.

To reinforce that this represents a break from the past and to be consistent with other organisational changes involving mental health and psychological services outlined below in this Section, it is proposed that the Psychology Support Section be renamed Mental Health and Psychology Support Services for all administrative purposes. Medical officers and others such as chaplains and social workers should be part of this to some extent in an advisory capacity. Signposting requires no change with non-mental health work occurring within the Psychology Support Section. Mental health clinics involving GPs, psychologists and others occur within the Medical Centre/Hospital and require no special designation.

With the establishment and operation of this multidisciplinary team, local arrangements for the specification of the health practitioner of first contact for mental health problems can develop that are suitable to local stakeholders including commanding officers.

These primary-level, health service arrangements should be properly staffed and their medical officers, psychologists and others properly trained, if they are to be successful. Workloads will be subject to countervailing pressures. Better triaging should lower workloads. Cutting waiting lists and putting more services in place for better follow up of POPS will increase workloads. These issues will be further addressed in Sections 4 and 5.

As noted, chaplains and social workers should be involved in primary-level mental health services. Chaplains can be involved in pastoral care where this is appropriate (as well as having an advisory role) and social workers can be involved where family issues are involved. Where these issues are present, social worker services should be able to deliver services not only to the families of the members but also to members themselves.

This is consistent with Recommendation 19 and Recommendation 3 of the Strategic Review of the DCO as follows:

- DCO should remain engaged in the development and delivery of the ADF Mental Health Strategy (Recommendation 19).
- DCO services to members should be prioritised according to the severity of the issue and the extent of the family dimension of the issue (Recommendation 3).

3.8.2 Mental health services model at secondary-level in regions

To improve service provision Joint Health Command has developed a proposal to establish five multidisciplinary Regional Mental Health Units (RMHUs). This proposal for secondary level care is supported. This is essentially because it is important that there be capacity for the delivery of secondary-level mental health services within the ADF. This will supplement the provision of secondary-level services delivered by private psychiatrists and other practitioners (eg VVCS) and funded by the ADF, outside military bases.

It should be possible to mount some PTSD services at the RMHUs also involving social and vocational rehabilitation where there is a rehabilitation service provider onsite – see Section 9.

If the RMHU is onsite at a hospital, more suitable suicide watch arrangements (secure facility and appropriate staffing) may be more possible than exist at present. The proposal to establish a new rehabilitation model, if successful could reduce the need for suicide watches.

These arrangements seem very similar to the Departments of Community Mental Health establish as a key component of the UK Defence Mental Health Services.³² These will consist of multidisciplinary teams consisting of consultant psychiatrists, and clinical psychologists, community psychiatric nurses, mental health social workers, service liaison officer and administrative support.³³ A survey of staff and users revealed high levels of satisfaction with these services.³⁴

These arrangements are also very similar to the Mental Health Programs of the Canadian Forces, as stated on their website.³⁵ These are specialised mental health services, available at the larger CF bases. Psychiatrists, psychologists, social workers, mental health nurses, addictions counselors and Health Services Chaplains normally staff the Mental Health Programs. Physician referral is required to access Mental Health Programs.

Larger centres in the Canadian Forces will normally have general mental health programs and operational trauma and stress support programs. Elements of these programs will be available at smaller bases depending upon population size and local resource availability. At all locations when services are not available within the CF, service members will be referred to the appropriate civilian resource.

However, while the RMHUs can be expected to be based in large military bases with hospitals on-site, many members will work on bases remote from the RMHUs. It will be onerous for them to travel very frequently to, or stay on these major bases where the RMHUs are located, to receive all secondary-level mental health services. While this at times will be necessary, it would be preferable at others, if some care which is normally considered to be secondary in nature could be delivered at their local bases.

This could occur if shared care arrangements were established whereby the clinical psychologist or part-time psychiatrist at the RMHU visited other bases to provide services. Management of individual patients could be shared between the visiting specialist and the primary care practitioner (GP or psychologist). More generally, with this arrangement, the visiting specialist will be able to further develop the mental

³² Reid G UK Defence Mental Health Services 10th International Military Mental Health Conference Estonia (powerpoint presentation) (www.ksk.edu.ee/file.php?ID=1027 - accessed 10 Jan 2009).

³³ The other two key components are inpatient care to be contracted out to be delivered by an Independent Service Provider (The Priory) and the establishment of the Academic Centre for Defence Mental Health (ACDMH) at King's College London under Prof Simon Wessely.

³⁴ Finnegan, A Finnegan S (2007) Assessing the effectiveness of the British Army's mental health service *Brit J Nurs* 16:725-30.

³⁵ National Defence and the Canadian Forces Mental Health Programs (<http://www.dnd.ca/health-sante/ps/mh-sm/pg-eng.asp> - accessed 10 Jan 2009).

health skills of the primary care practitioners. This will mean that more mental health patients can be managed on the base without needing to travel to the RMHU.

However whether members travel to the RMHU or the visiting specialist travel to the member's base, an adequate travel budget to support this will be essential.

Desirably other mental health practitioners than medical officer, psychologist and psychiatrist should be part of the RMHU. These include most importantly mental health nurses and clinical social workers. Mental health nurses can play an important role in the provision of group therapy. Clinical social workers can play an important role where family and other welfare issues are important in care.

The mental health nurses workforce is in short supply in Australia including in the ADF. As noted, while there are many social workers in the ADF, working in DCO, few have training as clinical social workers. New positions for these will therefore need to be created.

3.8.3 Mental health services model at a national tertiary care level

To further improve service provision Joint Health Command has developed a proposal to establish an inpatient mental health ward. This proposal can also be supported, as it is important that there be capacity for the delivery of tertiary care level mental health services within the ADF. This will supplement the provision of tertiary care services delivered outside military bases within the acute public hospitals and the public mental health system, especially in the area of delivery of group based treatment programs. The funding of tertiary level services necessarily requires significant funding. That said the proposal should be relatively modest.

It should be possible to mount major PTSD services at the national inpatient facility in addition to those mounted at the RMHUs. A proposal for a new rehabilitation model for members with chronic mental conditions is discussed in Section 9. Telepsychiatry services could also be located at this facility (or indeed a RMHU).

Given the need to rebuild mental health services in the ADF, there will inevitably be competing priorities in the allocation of funds in spite of the fact that all are important. This will operate in the funding between primary-level, secondary-level and tertiary levels services. A judgement will need to be made where the most pressing problem is at the present time.

3.9 Overall assessment - mental health services on deployment

Proposals relevant to the delivery of mental health services on deployment are presented in other chapters such as for the introduction of resilience training for members – see Section 6, the further education of health practitioners in mental health issues in preparation for deployment - see Section 4 and the redesign of RtAPS – see Section 5. The role of the chaplain providing pastoral care is supported. Medical officers with better mental health education is also important and the Acute Mental Health on Operations (AMHOO) course should be fully rolled out - see Section 4. The

previous practice of including a psychiatrist to accompany psychology assets on deployment has value.

3.10 Overall assessment - national mental health service planning and operations

It is apparent there is considerable overlap in the planning functions of the Directorates of Mental Health and Psychology. This can be a cause of tension between the two Directorates. More importantly it creates a confusion in setting guidance for the oversight and direction of ADF mental health services for the Psychology Support Group which until recently formed, with the Directorate of Psychology the Defence Force Psychology Organisation.

Stakeholders frequently commented on this. They also commented on disciplinary differences in perspective about the prevalence of mental conditions in the ADF, the adequacy of present arrangements for mental health service delivery and the size of the mental health workforce needed. These differences more generally, reflected differences in world view about the roles of disciplines in both mental health and beyond. Medicine and psychology are the main disciplines involved in this debate. Others such as social work would also be involved if their participation in mental health service delivery was greater.

That this is a problem of more than theoretical significance can be seen from the fact that lack of communication of information between doctors and psychologists working in different establishments was the major problem identified in a number of recent Board of Inquiries concerning suicide of members – see Section 6.4. While the lack of communication represents uncertainties about privacy obligations on professionals and versus the obligation to also observe duty of care, it also represents the differences between the work of the two disciplinary groups and their different work settings.

Lack of empirical data on the prevalence of mental conditions in the ADF make this discussion more difficult but it is possible to proceed – see Sections 3.5 and 3.6 above.

Some principles concerning the nature of future, desirable organisational arrangements are clear.

First, there should be no overlap in planning work done by the two Directorates. One option would be that the Directorate of Mental Health takes over full control for mental health planning with the Directorate of Psychology abandoning this function to focus entirely on non-mental health aspects of psychology. Under this option this would mean that the PSG and the PSSs around the NSA would also have to split their activities between mental health and non-mental health activities and relate to DMH for the former and DPSYCH for the latter. While this could conceivably happen at the PSG at national level, it would make no sense for the PSSs at base level.

Second, the grouping should be multidisciplinary. It is not credible to consider the opposite - that the Directorate of Psychology should gain control for mental health planning and the Directorate of Mental Health is closed. A monodisciplinary grouping

which includes mental health as only one of its many activities is not suitable for this role.

Alternatively, the two Directorates could be combined and, within the combined Directorate - to be known as the Directorate (or Branch) of Mental Health and Psychology - different individuals and groupings would take responsibility for the planning of both mental health and other than mental health services. Within this combined Directorate there should also be a multidisciplinary approach of doing business. This should extend to the implementation of policy at national level as well as the Regions and bases.

A SES Band 1 level Director would be necessary to lead this combined entity, assisted by the four EL2 currently in post, though in roles to be determined by the new Director.

An external advisory group to the expanded Directorate of Mental Health and Psychology would maintain strategic direction and oversight of the delivery of the Mental Health Strategy. It should consist of senior Defence health, single service health and Defence personnel staff, senior mental health staff from the Department of Veterans Affairs as well as non-Defence clinical and academic experts.

It is logical that this reorganisation should continue with the PSG becoming multidisciplinary and becoming known as the Mental Health and Psychology Support Group. Psychologists with specialist training but also interest in clinical, health and counselling psychology will likely assume responsibility for mental health work, but other full or part time practitioners eg psychiatrists, medical officers and mental health nurses, social workers could also be involved. Psychologists will assume primary responsibility for non-mental health work. Even without expert knowledge, it is possible to see that other groups such as human resources specialists and teachers could be involved and free up scarce psychologist resources. The Mental Health and Psychology Support Group in principle should also provide operational direction to other psychologists in single forces whether uniformed, APS or CHPs. While single force requirements will be important here, a suitable arrangement should be considered by the Commander Joint Health and the new Director-Generals of Single Service Health Services.

Third, as argued in Section 3.7 above, planning and operations for mental health services should reflect a proper balance of individual treatment services and other non-individual more preventive approaches such as the Mental Health Strategy. There can be full agreement then that the 'medical model', if this is understood to be a service wholly based on individual treatment of members should not dominate.

3.11 Conclusions and recommendations

The model for the planning and delivery of ADF mental health services is in need of substantial modification and further development. In general, the model should move to the formation of multidisciplinary teams wherever possible. It is important that duplication of policy roles in planning does not continue. It is important that separation of practitioner roles in delivering mental health services comes to an end.

Primary care on bases

Recommendation 3.1: Psychology Support Sections on bases should combine to form teams with health professionals providing mental health care services in medical centres/hospitals and be renamed Mental Health and Psychology Support Services (MHPSS).

Recommendation 3.2: Social workers in DCO can have an important role in the delivery of primary care mental services where family issues are involved. They should form part of the proposed multidisciplinary mental health team on base. Their services should be available not only to families of members but members themselves where family issues are involved.

Recommendation 3.3: The role of chaplains in primary care mental health services is supported.

Secondary care in regions

Recommendation 3.4: The proposal to create triservice Regional Mental Health Units (RMHUs) can be supported

Recommendation 3.5: An important part of the roles of clinical specialists in RMHUs is to visit bases to support primary care mental health practitioners particularly through participation in 'shared care' arrangements.

Tertiary care nationally

Recommendation 3.6: The proposal to establish a tertiary-level, triservice inpatient mental health facility can be supported but should have lower priority than the rapid and sustained development of high quality primary mental care facilities on bases.

National planning and operations for mental health services

Recommendation 3.7: The Directorates of Mental Health and Psychology should merge to become the Directorate (or Branch) of Mental Health and Psychology (DMHP) with a SES Band 1 level Director to lead this combined entity.

Recommendation 3.8: An oversight group to the Directorate of Mental Health should be established to consist of senior Defence health, single service health and Defence personnel staff as well as non-Defence clinical and academic experts. The purpose of such a group would be to sustain the strategic direction and delivery of the Mental Health Strategy.

Recommendation 3.9: The Psychology Support Group should be renamed the Mental Health and Psychology Support Group (MHPSG) and should become multidisciplinary in nature.

Section 4 The ADF mental health workforce – staffing and training issues

4.1 Composition of the mental health workforce

There are enthusiastic commanders and health staff in the regions committed to caring for and improving the mental health of ADF members. Their ability to do so however, is impacted on by resource issues.

The number of mental health workers (potentially) in the ADF are set out in Table 4.2 over, within Single Forces, by their Regular, Reserve or APS status.³⁶ The number of chaplains within Single Forces, social workers within the Defence Community Organisation as well as Contract Health Practitioners by professional background derived from the same source is also set out in Table 4.1.

Table 4.1a Chaplains

	Navy	Army	Air Force	TOTAL
Chaplains				
Full time	25	60	30	115
Part time	26	67	46	139
Standby Res		13		13

It is assumed that approximately 5% of chaplains occupy executive roles at any given time.

Table 4.1b Defence Community Organisation

Role	Full time	Part time	TOTAL
Social Workers	75	7	82

Table 4.1c Contract Health Practitioners

Role	Full time	On call & sessional	Total
General Practitioners	127	69	196
Psychologists	7	6	13
Psychiatrists		11	11
Mental Health Clinicians	2		2
Alcohol and Drug Counsellors	3		3
Nurses	322		322

It is notable that there are:

- many more psychologists in the Army than Navy and Air Force. There are very few psychologists in the Air Force;
- only two Regular psychologists in the Navy and no Regular psychologists in the Air Force;
- very few psychiatrists in the three services, all in the Reserves, none in the Regular forces;

³⁶ Directorate of Mental Health (2008) ADF – Potential Mental Health Workforce: Australian Defence Force, Canberra:1.

- large number of doctors in the Air Force Reserves;
- large number of Social Workers, all in the Defence Community Organisation;
- large number of General Practitioners and Nurses on contract.

4.2 Staffing levels for mental health practitioners in the ADF

As noted in Section 3.7, it was reluctantly concluded that it was not possible to generate needs-based staffing benchmarks as a basis for planning mental health services in the ADF. That being the case, it is necessary to consider the level of demand for mental health services. Stakeholders, from all levels within Defence Health Services consulted during this review were unanimous on this point. There are major staffing shortages in the provision of mental health services in the ADF.

At base level it was clear that the Psychology Support Sections (PSSs) have critical staffing issues as a result of:

- positions unfilled (uniformed, Reserves and CHPs),
- the current Defence wide APS staffing caps which have impacted upon the staffing of APS psychologists; and
- the deployment of the Psychology Support Teams who work alongside the PSSs on some bases.

This has a number of adverse consequences, as follows:

- there are frequently waiting lists of four weeks or more;
- Mental Health Strategy and resilience training programs are not delivered;
- large number of POPS are not conducted on time;
- staff are obliged to triage referrals and to delay consultations for self- and medical officer referrals;
- consultations for members transitioning-out need to be postponed delaying the date of discharge for the member;
- the imposition of risk on the ADF in the event that a suicide of a member occurs on base.

There were also some reports of waiting lists at medical centres for mental health problems.

There are also reports of shortage of mental health beds and time-limits on general beds for patients with mental conditions in ADF hospitals. Doctors are not always available on naval ships.

At central planning level, it was also the judgement of the then Head of the Defence Health Services Division, the current Director of Psychology and the four most senior uniformed psychologists that shortfalls in staffing and resources were among the most important problems of mental health services in the ADF.

As a measure of this, 8-10,000 POPS were outstanding until recently. This was not solely due to a shortage of psychologists or due to reasons within JHC control however; the catch-up on these imposes a heavy staff burden on psychologists, given

Table 4.2 ADF – Potential Mental Health Workforce

Role	Navy				Army			Air Force				Totals Tri-Service			
	APS	Reg	Res	Total	Reg	Res	Total	APS	Reg	Res	Total	APS	Reg	Res	Total
Medical Officers*		26	72	98	60	78	138		50	152	202		136	302	438
Psychiatrists**			2	2		5	5			6	6			13	13
Nursing Officers		35	45	80	96	162	258		106	113	219		237	320	557
ATODS***		10		10					4		4		14		14
Psychologists	20	2	34	56	75	89	164	8		5	13	28	79	128	235
Psychological Examiners					57	34	91						57	34	91
Medics/ Medical Assistants/ Medical Operators/ Medical Technicians/ Underwater Medical Clinicians****		254	78	332	563	164	727		135	29	164		952	271	1223
PTIs*****		68	1	69	137	26	163		77	5	82		282	32	314

*Army has 101 Reserve medical specialists who are not included in the numbers above as they are not perceived to be likely to provide mental health support to members.

** Psychiatry services are also procured on a sessional basis. For financial year 2008 to date (mid-Nov) \$550,000 has been paid for psychiatry services in addition to services procured from contractors and reservists.

*** Navy have 1 National AOD Coordinator, 9 AOD Program Co-ordinators and train AOD Program Advisors at a rate of 1 per hundred members.

**** Including Operating Theatre Techs who rotate through the Wards.

***** PTIs – Physical Training Instructors - have all received basic medical training Rehabilitation Services are provided nationally on a sessional basis and it is not possible at this time to quantify numbers of professionals providing these services. At any given time 25% of medical officers would be in health management roles. In addition at any given time a percentage would be in training roles.

that a proportion of these will detect mental health problems requiring follow-up and treatment.

The number of psychologists in the DFPO in 2008 is similar to 1999, yet deployment levels are now more than two fold than then, and there is now an ADF Rehabilitation Program with patients with chronic mental conditions requiring management. As noted above, there are very few psychiatrists in all forces and few psychologists in the Air Force. There are no social workers outside the DCO.

In May 2008 there were 22 uniformed and civilian vacancies among 121 psychologist positions, 29 vacancies among 79 mental health support positions.³⁷ In June 2008, in Defence Health generally, there were 173 vacancies of 664 uniformed health positions (doctors, nurses, dentists, medics, psychologists etc). There were also 407 APS for 387 established APS positions.

There is then a substantial vacancy rate among uniformed staff and a very small over-establishment of civilian staff. Because of Defence wide public service staffing caps, if a vacancy occurs in a civilian position automatic replacement is not guaranteed and prioritisation for filling that position is required.

Overall, it is apparent that the mental health workforce draws substantially on Reserve, APS and CHP practitioners. ADF members frequently state though a preference for uniformed staff, not only because of their longer continuity of service but also because of their greater understanding of service conditions.

4.3 Other staffing issues

There are unavoidable difficulties recruiting health staff with an interest or expertise in mental health into the ADF. These reflect workforce shortages in some practitioner groups in the mental health service more generally in Australia. These include mental health nurses and psychiatrists but not psychologists.³⁸ Public mental health services in Australia have not been well funded, leading for example to low numbers of acute mental health beds that are restricted usually to patients with acute psychotic episodes rather than say, suicidal attempts. There are further difficulties in staffing mental health services in provincial and remote areas where military bases are frequently located.

One important and more beneficial trend in the community is that private clinical and health psychology is expanding with their public-supported funding through the Better Access to Mental Health Care Initiative within the Medical Benefits Schedule

³⁷ CDRE Walker RH (2008) Head (then), Strategic Health Policy and Plans Branch, ADF.

³⁸ Mental Health Workforce Advisory Committee (MHWAC) (2008) Australian Health Ministers Committee includes Brief papers regarding the supply of psychiatrists and psychologists as follows - Mental Health Workforce: Supply of Psychiatrists, February 2008; Mental Health Workforce: Supply of Psychologists, February 2008; Mental Health Workforce: Supply of Mental Health Nurses, September 2008.

(<http://svc074.wic018v.server-web.com/mhwac.asp> (accessed Jan 9 2009))

of Medicare Australia. This is occurring as work for psychologists is contracting in the human resources management with the training of many human resources consultants without psychologist training.

4.4 Education for mental health practitioners in the ADF

4.4.1 Educational standards in the wider community

Different educational standards apply for psychologists and clinical psychologists. A State-registered psychologist must have completed an approved 4-year university degree in psychology plus 2-further years of approved supervised training. In NSW this 2-year additional training involves at least 60 hours of individual supervision (principal and secondary supervisor), supervision in groups, up to 40 hours, participation in workshops between 30-60 hours.³⁹ Total supervision hours should be at least 160 hours. Increasingly psychologists are acquiring a Masters degree in psychology. For example, at senior officer level in the ADF, seven psychologists hold Masters degrees and two hold PhDs.

Continuous Professional Development is an ongoing requirement of registration.

Clinical psychologists are specialist psychologists with a minimum of six years university training, including approved postgraduate clinical studies and placements in psychiatric settings. In order to become a full member of the Australian Psychological Society (APS) College of Clinical Psychologists, two years of further approved supervision in the clinical field is required.⁴⁰ They are specialists in the assessment, diagnosis and treatment of psychological problems and mental illness. They are trained in the delivery of a range of (non-drug) techniques, strategies and therapies with demonstrated effectiveness in treating mental health disorders.

Medical officers acquire their mental health skills during their undergraduate education. Contract Health Practitioners must have postgraduate training and be a Fellow of the Royal Australian College of General Practitioners (FRACGP) and have Vocational Registration with Medicare Australia. The Australian General Practice Training (AGPT) Scheme prepares recent medical graduates to become FRACGPs and exposes them to mental health problems and their management.⁴¹ GPs frequently develop interests in particular areas of medicine, and may or may not an interest in mental health. Uniformed doctors, often having held a Defence Force Scholarship enter the ADF after 2-years hospital experience.

Barriers to delivery of quality mental health care in General Practice, are being addressed through the Better Outcomes in Mental Health care initiative of the Australian Government Department of Health and Ageing.⁴² This includes: Education

³⁹ NSW Psychologists Registration Board Application Process and Forms (<http://www.psychreg.health.nsw.gov.au/applicfrms.htm> accessed Jan 9 2009)

⁴⁰ Australian Psychological Society APS College of Clinical Psychologists (<http://www.groups.psychology.org.au/cclin/> accessed Jan 9 2009).

⁴¹ General Practice Education and Training Limited (GPET) About AGPT (<http://www.agpt.com.au/GPETtheCompany/AboutGPET/> accessed Jan 9 2009).

⁴² Australian General Practice Network Better Outcomes to Mental Health Care Initiative (<http://www.primarymentalhealth.com.au/site/index.cfm?display=15130> - accessed Jan 9 2009)

and training for GPs; The 3 Step Mental Health Process; Focussed Psychological Strategies; Access to Allied Psychological Services (ATAPS): and Access to Psychiatrist Support.

The Better Access to Mental Health Care Initiative, discussed in Section 4.3 above, complements the range of initiatives funded under the Better Outcomes in Mental Health Care Program. It imposes professional entry standards for the receipt of Medicare Benefits not only on GPs, psychologists and clinical psychologists but also on social workers involved in providing ongoing client management.⁴³ These involve Focused Psychological Strategies - GPs and psychologists, the latter as part of the Medicare Allied Health and Dental Care initiative. They also involve Psychological therapy (clinical psychologists), again as part of the Medicare Allied Health and Dental Care initiative. Focused psychological strategies and Psychological therapy are described below.

Focused Psychological Strategies: These are specific mental health care treatment strategies derived from evidence based psychological therapies. They are described on the website of the Clinical Research Unit for Anxiety and Depression.⁴⁴ They have been shown to integrate the best research evidence of clinical effectiveness with general practice clinical expertise. While these are derived from cognitive behaviour therapy and interpersonal therapy, they are not the same as 'fully fledged' CBT therapy or interpersonal therapy. Rather, they consist of a range of specific strategies drawn from CBT and interpersonal therapy. These include eg psycho-education; behaviour modification; exposure techniques; activity scheduling; and relaxation techniques.

GPs applying Focused Psychological Strategies are strongly recommended to have completed appropriate mental health training, such as training recognised through the General Practice Mental Health Standards Collaboration. GPs claiming Service Incentive Payments for 3 Step Mental Health process services, or providing Focussed Psychological Strategies (FPS), continue to require Level 1 or Level 2 training respectively and registration with Medicare Australia.

Psychological Therapy: It is recommended that cognitive-behaviour therapy be provided as well as psycho-education.⁴⁵ However, other evidence-based therapies - such as interpersonal therapy - may be used if considered clinically relevant.

Social workers can also apply services under the Medicare Allied Health and Dental Care initiative and must also be registered in the jurisdiction in which they practise.

Chaplains hold three year degrees in theology and have at least two years post-ordination pastoral ministry experience.⁴⁶ The Association for Supervised Pastoral

⁴³ Australian General Practice Network Better Access to Mental Health Care Initiative (<http://www.primarymentalhealth.com.au/site/index.cfm?display=15129> - accessed Jan 9 2009)

⁴⁴ Clinical Research Unit for Anxiety and Depression. Welcome to GP care <http://www.gpcare.org/> accessed Jan 9 2009).

⁴⁵ Better Access to Mental Health Care – Psychological therapy and Focussed Psychological Strategies (FPS) services (http://www.health.vic.gov.au/communityhealth/downloads/mbs/gps/mental_health_pat_links_gp.pdf - accessed Jan 9 2009)

Education in Australia (ASPEA Inc) is a professional association for practitioners and supervisors who are involved in pastoral ministry.⁴⁷ The Association encourages, promotes and provides supervised pastoral education as part of professional education for ministry.

4.4.2 Training & ongoing education for ADF's health practitioners in mental health

Psychologists joining the Army in addition do a 6-week Regular Officer Basic Course (ROBC) at the Army Logistic Training Course (ALTC) involving military familiarisation, basic mental health and job selection skills, Albury and may do a further Regular Officer Advanced Course (ROAC) at the Royal Military College (RMC), Duntroon.⁴⁸ Psychologists with provisional registration can undergo their approved supervised training to obtain full registration as an army intern psychologist.

There a proposal awaiting approval for a Masters of Military Psychology at The University of Adelaide and other universities. This degree has four units and two placements in mental health or human factors/organisational psychology.

Training for doctors in military medicine has little mental health content. Continuous Professional Development short courses in mental health - eg Black Dog on depression and Traumatic Stress Symptoms - are regularly presented by ACPMH and the Directorate of Mental Health. Doctors are infrequent attendees of these courses. This may be because doctors need release from duties or a Rostered Day Off to attend.

Doctors with other MH professionals are able to attend the Acute Mental Health on Operations (AMHOO) short course if they are going on deployment for further education in the management of acute MH problems on deployment.⁴⁹ These courses are not yet mandatory.

On completion of their New Entry Officer Course, chaplains attend the next available 4-week Chaplain Division One Course at the ADF Chaplaincy College. This includes pastoral care and other specialised training. They attend regional seminars and denominational retreats on topical issues. Chaplains are expected to complete CIMS and ASIST training. Some chaplains enhance their individual expertise through postgraduate study and attendance at mental health clinics, upskilling workshops, periodical theological seminars and attendance at Clinical Pastoral Education (CPE), a three month placement at a local hospital.

⁴⁶ Anglican Defence Force Chaplaincy. Chaplaincy In-Service Training (<http://www.anglicanadf.org.au/inservice.htm> - accessed Jan 9 2009).

⁴⁷ Association for Supervised Pastoral Education in Australia (ASPEA Inc) (<http://www.aspea.org.au/> - accessed Jan 9 2009).

⁴⁸ Psychologist (www.Defencejobs.gov.au/global/templates/jobPdf.aspx?jobArea=army&jobTag=Psychologist&entryTypeId=5 - accessed Jan 9 2009)

⁴⁹ Joint Health Command Department of Defence Mental Health Support to Australian Defence Force Members whilst on Exercise, Operational Deployments and in Garrison Support (<http://www.Defence.gov.au/health/DMH/i-support.htm> - accessed Jan 9 2009)

Other mental health providers include psychological examiners. Psychological examiners receive basic post-recruit training for 4 weeks at the Army Logistic Training Centre. There are three levels of TAFE courses across their military career. Currently the Grade II level course for promotion to CPL includes a range of mental health courses from which they can acquire a CERT IV in Mental Health – non clinical. This is similar in structure to the RAN ADPAs – see Section 2.1. As part of a current review of the psych examiner role in Army, this is likely to become a CERT IV in Mental Health and ATODS. Grade III (or SGT/WO) will hold Diploma level qualifications.

Medics and general nurses may be called on to provide mental health care on deployment but have no explicit mental health training. They may attend short courses relevant to the Mental Health Strategy conducted by the Directorate of Mental Health.

4.5 Assessment in relation to staffing – conclusions and recommendations

This overall assessment for both staffing and training – see Section 4.6 - is based on a review of all technical and research documents, stakeholder input and public submissions. A summary of themes arising out of both individuals and organisation submissions relevant to *The ADF mental health workforce – staffing and training issues* are included in Appendix 5.

PSSs on bases have critical staffing issues and this is having major impacts on the delivery of mental health services in the ADF. This in part reflects difficulties in recruiting and retaining psychologists and other mental health professionals in the wider Australian community, particularly in provincial and remote areas. It is also exacerbated by the current staff allocation caps within the ADF.

There are a number of possible staffing strategies that could be considered to overcome these staffing issues.

Recommendation 4.1: Additional staff should be allocated in the mental health arena accompanied by an increase in APS positions in JHC. Any reallocation under existing staffing caps will see the imposition of deficits in other areas of health care delivery. An overall increase in the Mental Health budget is also necessary in order to deal with critical staffing issues.

Recruitment and retention strategies should be modified. Most importantly medical recruitment agencies should be directed to target GPs who can demonstrate an interest in mental health care such as their conduct of GP Mental Health Care Plans and their review, GP Mental Health Consultations and GP provision of focussed psychological strategies.

More generally it will be necessary to offer pay and conditions that is attractive to CHPs, whatever their professional background. This will need to be supported by suitable marketing strategies. Not all CHPs will feel comfortable with military culture or wish to be located on bases and creative solutions may be necessary to accommodate this. It is noteworthy that VVCS in Townsville had seven counsellors

on staff with 24 others on contract while the two PSSs in Townsville suffered very curtailed staffing levels.

Recommendation 4.2: Recruitment strategies for CHPs need to offer pay and conditions more attractive to CHPs. They should aim to recruit GPs with a demonstrated interest in mental health.

Members who are veterans could be referred to VVCS particularly now there is an MOU between the ADF and VVCS, specifying requirements for report-back following an ADF- referral to VVCS. More generally other third party agencies could be sought to provide contracted services on or off base.

Recommendation 4.3: The use of third party providers (and specifically VVCS) should be considered as providers of mental health services both on and off base.

Recommendation 4.4: Options such as telepsychiatry have obvious attractions for the provision of mental health care in remote settings and could operate out of the proposed tertiary level in-patient facility or RMHU – see Section 3.5.

As psychologists are a scarce resource in the ADF, it is possible that some of their training and organisational work could be conducted by other professional groups. As noted in Section 3.10 above, work for psychologists in human resources management area is contracting in the community with human resources specialists without psychologist training doing this work.

Examples of this have included contract work for the Australian National Antarctic Research Expedition (as formerly known) and Australian Federal Police, participation in officer selection boards, officer selection for the Royal Military College and selection of military police, intelligence, officers of cadets, bomb disposal specialists.

More generally, it represents a more efficient usage of existing psychological assets. Screening of all ADF members or just those returning from deployment represents a very large commitment of scarce human resources. If the ADF wants to move to regular rounds of screening, it will need to resource this practice having established first adequate staffing levels on bases. It is not defensible to commit to regular rounds of screening to the detriment of staffing PSSs on bases.

As proposed in Section 5, it is very difficult to sustain two post deployments screens when PSSs have major staffing issues. There are a number of difficulties in the delivery of the RtAPS and POPS as currently occurs. It is argued in Section 5 that the RtAPS assume a new form requiring lower lesser levels of staffing. Psychologists conducting RtAPS in theatre or on ships returning to Australia would be better located in PSSs on base. This would make more effective post-deployment screening possible and partly redress the critical staffing in the PSSs.

Recommendation 4.5: Psychology assets should be more efficiently deployed with use of non-psychologists where this is possible and redesign of post-deployment psychological screening so as to increase the availability of psychologists on base for primary mental health care on base.

4.6 Assessment in relation to training – conclusions and recommendations

It is necessary to substantially increase the involvement of doctors in mental health care. Their variable level of involvement in this form of care represents a major shortcoming in the provision of mental health care services in the ADF. They should be expected to become more involved in continuous professional development in this area as proposed below. To promote this:

Recommendation 4.6: A position should be established within the DMH for a relatively junior medical officer to liaise with medical officers in the ADF and promote their involvement and training in primary mental health care.

The Masters of Military Psychology proposal can be supported if it incorporates streams in both clinical and organisational psychology.

Chaplains provide valued pastoral care to members. Pastoral care can be regarded as an important form of mental health care, not requiring trained mental health practitioners. Further training in clinical pastoral education associated with the Association for Supervised Pastoral Education in Australia would extend their competence and confidence in this work. Chaplains have ongoing needs for mentoring and debriefing, as chaplains are dispersed and professionally isolated in their role as embedded chaplain on deployment.

The provision of pastoral care is of sufficient importance that if ADF Chaplaincy did not want further involvement in this area, other arrangements to provide pastoral care should be explored.

Recommendation 4.7: Pastoral care training for chaplains should be increased

The level of education and learning in mental health needs to increase in both initial officer training courses and continuous professional development. The Centre for Military and Veterans Health (CMVH) have produced a needs-based framework for the conduct of continuous professional development in Defence Health. Australian Centre for Posttraumatic Mental Health (ACPMH) has produced an ADF Mental Health Strategy Training Framework.⁵⁰ It contains many valuable recommendations including in regard to provision of mental health care on bases. These include:

- assessment, treatment planning and short-term treatment using an evidence-based framework such as Cognitive Behavioural Therapy;
- care coordination – mental health professionals would benefit from learning principles and skills such as understanding of inter-professional boundaries, reporting and referral processes and case consultation; and
- mood and adjustment disorders treatment – it is important that mental health professionals have an awareness of diagnostic criteria for these disorders and the ability to develop a treatment plan based on a thorough assessment and conduct brief cognitive behavioural treatment.

⁵⁰ Australian Centre for Posttraumatic Mental Health (2007) ADF Mental Health Training Framework. Australian Centre for Posttraumatic Mental Health, Melbourne: 1-80.

It is important that all CHPs attend initial short courses in military familiarisation relevant to their practice so that their work is relevant and well focused - and seen to be so by members who consult them.

Recommendation 4.8: Expanded initial induction and continuous professional development programs are necessary, aimed at substantially increasing the proportion of health staff who are competent to deliver simple cognitive behavioural therapy, care coordination and the management of non-complex mood and adjustment disorders. Goals for the proportion of staff attending these courses should be set and progress towards these goals should be monitored annually. Appropriate release and travel arrangements will be necessary for this to occur.

All CHPs should attend initial short courses in military familiarisation relevant to their practice.

Recommendation 4.9: AMHOO should be rolled-out - all health and psychology staff about to deploy should be required to attend.

Section 5 Screening for mental health problems – RtAPS and POPS

5.1 Description of the RtAPS and POPS program

All ADF members returning from deployment are required to take part in the Return to Australia Psychological Screen (RtAPS) and Post Operational Psychological Screen (POPS). This applies to all Single Forces, special groupings such as the Special Forces and Reserves. Defence civilians and contractors may also participate. This process is one of the most comprehensive of any military in the world and was developed in collaboration with the ACPMH, Macquarie University and internationally recognized experts in military mental health.

In the Army, RtAPS is conducted during the last two weeks in theatre - usually by 1Psych Unit or members of Psychology Support Teams (PsSTs) - or in the first few weeks back in Australia if missed in theatre. In the Navy it is conducted by civilian, or reservist psychologists who join the ship on the return home. 1Psych Unit conducts RtAPS for the Air Force in theatre.⁵¹

The RtAPS comprises three parts:

1. A group brief on Return from deployment issues relevant to the member and their family;
2. Completion of a psychological screening instrument by members individually; and
3. One-on-one interview with a psychologist/psychological examiner by members individually.

Higher or lower scores obtained in the screen decide whether the psychologist or the psychological examiner respectively conduct the member's interview.

The RtAPS psychological screening instrument comprises the following, mainly psychometric instruments:

- Personal details;
- Deployment Experience Questionnaire (DEQ);
- Major Stressors Inventory (MSI);
- Traumatic Stress Exposure Scale – Revised (TRES-R);
- Kessler Psychological Distress Scale (K10); and
- Posttraumatic Stress Disorder Checklist - Civilian (PCL-C).

The interview covers five key areas: a validation of members deployment experience including a review of the most positive and negative aspects of the deployment; a review of both traumatic and non-traumatic exposures in order to accurately document the members' experiences; a review of the members coping strategies while deployed; a review of potential reintegration issues; a summary recommendation

⁵¹ The RTAPS was voluntary when first introduced into the Air Force.

including any requirement for follow-up. Command is notified of any immediate referrals.

The POPS should be conducted on base by Psychology Support Sections or Single Forces military and civilian psychologists at 3-6 months. The member again completes the psychological screening instrument and engages in the one-on-one interview with a psychologist or psychological examiner depending on their scores on the psychological screen. There is no group brief as psycho education is tailored to individual needs in the one on one interview process.

The POPS comprises the following, again mainly psychometric instruments which are a little different from those in the RtAPS screen:

- Personal details;
- Kessler Psychological Distress Scale (K10); and
- Posttraumatic Stress Disorder Checklist - Civilian (PCL-C);
- Alcohol AUDIT questionnaire.

Repeat application of instruments at the POPS makes possible monitoring of any high scores attained at the RtAPS. Persistently high levels are a cause for concern.

Previously, debriefing interviews occurred in groups rather than one-on-one. There were concerns that while groups can have positive effects (members providing support to each other) mitigating the adverse psychological impacts of the deployment experience, they can also have negative effects (members being exposed to the traumatic experiences of each other and reliving their own). Group debriefs no longer occur post-deployment.⁵²

There are a number of reasons for the conduct of the RtAPS and POPS⁵³:

1. screening and counselling for deployment-related mental health symptoms - members can discuss deployment-related problems at the time of interview and these problems can be followed up, or referred to other mental health practitioners;
2. research relating to mental health, human factors and organisational performance of members; and
3. surveillance - officers receive results relevant to operational tempo, overall deployment experience, traumatic exposure, career intentions, morale, primary positive and negative experiences, major stressors, anticipated difficulties on return to Australia, mental health, follow-up referrals for the group which they commanded on deployment.

The RtAPS and POPS more generally signal the significance that the ADF attaches to the contribution of members on deployment as well as a concern for their welfare. This is important to both the member and the Australian public.

⁵² Hodson S (2002) Key predictors of post-trauma symptomatology in military peacekeeping veterans. Unpublished PhD thesis Macquarie University:1 -137.

⁵³ See eg Twomey A (2007) restricted):ADF Mental Health Surveillance Deployment Baselines Jan 03 – Aug 06. Technical Brief 02/2007 Defence Force Organisation, Canberra (1-42).

The RtAPS and POPS have a number of similarities to the post-deployment phase of the US Battlemind program. As stated by Castro et al (2006)⁵⁴:

‘The post-deployment Battlemind training focuses on transitioning from combat to home. The acronym “BATTLEMIND” identifies ten combat skills that if adapted will facilitate the transition home. The post-deployment Battlemind training consists of two training modules to be conducted at different times post-deployment. The first training module is intended to be given within the first two weeks of returning home. The focus of this initial transition training is on safety, relationships, as well as normalizing to common reactions and symptoms resulting from combat.

The second training module is designed to be given at 3-6 months post-deployment. This follow-up post-deployment training is designed so that Soldiers can conduct their own “Battlemind Check” of themselves as well as that of their buddies, allowing them to know when to seek help. The training ends by addressing those barriers which prevent Soldiers from seeking help. The Battlemind training is designed to be given in small groups to encourage interaction and discussion, requiring approximately 35-40 min to complete.’

There is also a post-deployment Battlemind program for spouses. More recently population-based post-deployment health assessments at less than one week and at four months have been added. These consist of a brief validated screening survey plus primary care interview. The screen is not anonymous but linked to clinical care (Apparently only soldiers with high scores at the screen proceed to have a primary care interview.)

Post-deployment Battlemind training is part of a larger program – see again Castro CA, Hoge CW, Cox AL (2006). ‘BATTLEMIND is the Soldier’s inner strength to face fear and adversity in combat with courage. This is resiliency. Key components include: self-confidence (take calculated risks, handle future challenges) and mental toughness (overcome obstacles or setbacks, maintain positive thoughts during times of adversity and challenge).’ It is stated that each training module is: strength-based; evidence-based; experience-based; team-based; action-focused; and explanatory.⁵⁵

There is also a pre-deployment and an in-theatre Battlemind training program – see again Castro CA, Hoge CW, Cox AL (2006) - ‘designed to build soldier resiliency by developing his/her self-confidence and mental toughness. The training focuses on soldier strengths, identifying specific actions that Soldiers and leaders can engage in to meet the challenges of combat. The pre-deployment training consists of unique modules for soldiers, leaders, reservists, and families’ The in-theatre Battlemind

⁵⁴ Castro CA, Hoge CW, Cox AL (2006) Battlemind Training: Building Soldier Resiliency. (<ftp://ftp.rta.nato.int/FullText/RTO/MP/RTO-MP-HFM-134/MP-HFM-134-42.pdf> accessed at 9 Jan 2009).

⁵⁵ Bliese P (2007) Soldier Transitions: Health Assessment and Battlemind Training. (powerpoint presentation) Research US Army Medical Research Unit – Europe (USAMRU-E) ([http://www.eucom.mil/english/CommandStaff/ECJ1/ECJ1-RQ/DCCSBriefs2007/Soldier%20Transitions%20Health%20Assessment%20&%20Battlemind%20Training%20Research.ppt#568,1,Soldier Transitions: Health Assessment and Battlemind Training Research](http://www.eucom.mil/english/CommandStaff/ECJ1/ECJ1-RQ/DCCSBriefs2007/Soldier%20Transitions%20Health%20Assessment%20&%20Battlemind%20Training%20Research.ppt#568,1,Soldier%20Transitions%20Health%20Assessment%20and%20Battlemind%20Training) accessed Jan 9 2009).

program involves event-driven debriefing that occurs following a potentially traumatising event during deployment as well as time-driven debriefing that occurs at specified time points during deployment to address the cumulative effects of the deployment.^{56 57}

5.2 Description of other mental health screening in the ADF

The incoming Australian Government, as part of its Mental Health Lifecycle Initiatives for Veterans and Former Serving Members initiative for Defence and Veterans Affairs is providing funds to develop a system of routine mental health checks in the ADF to improve screening, prevention and early intervention and will in part involve ACPMH.

Australian Defence Force Recruiting (DFR) conducts a psychological screen on applicants wishing to join the ADF. Results for these tests influence whether applicants are accepted or not. Psychological selection of recruits of which this screening is a part is currently contracted-out to a third-party organisation.

5.3 Assessment

This overall assessment is based on a review of all technical and research documents, stakeholder input and public submissions. A summary of themes arising out of both individuals and organisation submissions relevant to *Screening for mental health problems – RtAPS and POPS* are included in Appendix 5. A rapid review of the research literature is included in Appendix 6.

The most obvious benefit of the RTAPs and POPS is symbolic - it signals very clearly that ADF leadership are prepared to commit substantial resources to enhancing the individual welfare of members coming at the end of their exposure to the dangers of deployment. The Australian public would want this to happen. They should also 'normalise' the experience of discussing personal problems with a psychologist and break down barriers and stigma of mental illness in the ADF. Members may gain benefit from the discussion of problems with the psychologist.

It potentially provides important information to commanders about the collective experiences of members under their command, relevant both to their duty of care to the members as well as information on the level of operational performance of this group.

There is little published research about post-deployment mental health screening in Australia in contrast to the US and UK whose military have different experiences and cultures. It is difficult therefore to make a definitive judgement about the value of RtAPS and POPS for the ADF.

⁵⁶ Castro CA, McGurk D (2007) Battlemind Psychological Debriefing Department of Military Psychiatry Walter Reed Army Institute of Research (WRAIR) (powerpoint presentation (http://209.85.173.132/search?q=cache:Sx0D0D2XzqEJ:https://www.battlemind.army.mil/assets/files/battlemind_psychological_debriefing.ppt+castro+battlemind+psychological+debriefing&hl=en&ct=clnk&cd=1&gl=au accessed at 9 Jan 2009).

⁵⁷ US deployments until recently have been for 12 months twice as long as Australian deployments.

In fact this is not straightforward, as the rapid review of the research literature included in Appendix 6 makes clear. There does not appear to be a consensus in the research literature in regard to the value of screening for mental health screening in military populations. In fact there is very lively transatlantic debate on the value of screening for mental problems in military and veteran population involving the Kings Centre for Military Health Research, UK and the Walter Reed Army Institute of Research, US.

The King's College group make the point strongly that this form of screening does not fulfil the traditional criteria used to establish the value of screening programs.⁵⁸ It is possible that the activities associated with screening have value for other reasons but this would need to be separately established. The evaluation of the post-deployment Battlemind programs (post-3-days) shows benefits but these are short-term (3-months). As the rapid review makes clear, there are also methodological concerns about this study that does not appear to have been published in a peer-reviewed journal.⁵⁹

The rapid review also concluded that further rigorous and well-designed studies are necessary to demonstrate the value of psychological screening in military population research.

The King's College group's scepticism about mental health screening post-deployment relate to the fact that these programs do not fulfil the traditional criteria used to establish the value of screening programs.

These are based in large part on the classic paper on the validity of screening by Cochrane and Holland (1971). These are, in the authors' words, as follows:

- *Simplicity.* In many screening programmes more than one test is used to detect one disease, and in a multiphasic program the individual will be subjected to a number of tests within a short space of time. It is therefore essential that the tests used should be easy to administer and should be capable of use by para-medical and other personnel.
- *Acceptability.* As screening is in most instances voluntary and a high rate of co-operation is necessary in an efficient screening programme, it is important that tests should be acceptable to the subjects.
- *Accuracy.* The test should give a true measurement of the attribute under investigation.
- *Cost.* The expense of screening should be considered in relation to the benefits resulting from the early detection of disease, i.e., the severity of the disease, the advantages of treatment at an early stage and the probability of cure.
- *Precision {sometimes called repeatability}.* The test should give consistent results in repeated trials.
- *Sensitivity.* This may be defined as the ability of the test to give a positive finding when the individual screened has the disease or abnormality under investigation.

⁵⁸ Cochrane AL, Holland WW (1971) Validation of screening procedures. Br Med Bull, 27:3.

⁵⁹ Castro CA, Hoge CW, Milliken CW et al (2006) Battlemind Training: Transitioning Home from Combat. (<http://209.85.173.132/search?q=cache:EqBjUG72p7UJ:stinet.dtic.mil/cgi-bin/GetTRDoc%3FAD%3DA481083%26Location%3DU2%26doc%3DGetTRDoc.pdf+castro+hoge+battlemind+transitioning+home&hl=en&ct=clnk&cd=4&gl=au> accessed at 9 Jan 2009)

- *Specificity*. This may be defined as the ability of the test to give a negative finding when the individual does not have the disease or abnormality under investigation.

What is the opportunity cost of this program? In other words, how costly is the program and could these resources have been used better elsewhere? How strongly do members value and support the program? Are there many false positives, a result that potentially labels members in their own mind and the minds of others as having stigmatised 'mental health problems'? Are there many false negatives, a result providing false reassurance that members with real problems do not have them?

Members generally express support for the POPS - 84.9% of members in a survey sample agreed that 'Going through this interview is a worthwhile process for ADF members'.⁶⁰ Nevertheless, 62.1% felt that 'ADF personnel with a genuine mental health problem might be reluctant to respond honestly to psychology questionnaires because this might end up jeopardising their military career'.

There are many anecdotal reports that members (possibly ones without problems) do not value the RtAPS – the so-called 'tick and flick' response. The timing for the RtAPS is wrong - members at the end of their deployment are full of expectancy about returning home and do not want to risk delays to this arising from the necessity for follow-up consultations if they reveal mental health problems in the screen or at interview.

There are other problems though. There is a powerful incentive to conceal health problems given that good health is necessary to deploy and to continue one's career in the ADF. There is also the further incentive that mental health problems are stigmatised in the ADF as they are more generally in the community, as is further discussed in Section 6. One might expect then that the level of problems reported in non-anonymous research and surveillance findings will under-represent real levels. French et al (2004) in fact identified this problem in their study of barriers to mental health screening associated with the beliefs of British military personnel.^{61 62}

The main problem at present though, is that it is quite unclear what happens to members who have mental health problems detected at RtAPS/POPS screens. What proportion of them take-up and receive follow-up treatment? Do resources currently exist for this to happen and in a reasonably expeditious time period? Further are they referred to secondary level mental health practitioners such as psychiatrists and clinical psychologists with the clinical skills to diagnose DSM-IV conditions and manage them using evidence-based treatments. A serious problem confronts screening programs like the RtAPS and POPS that generate previously unrecognised clinical needs but is unable to provide the services to service this need. Is it in fact ethically justified to create an expectation and then not be able to meet it?

⁶⁰ Swann J (2005) Evaluation of 7BDE POPS campaign, Psychology Research and Technology Group, Canberra:1-18.

⁶¹ French C, Rona RJ, Jones M, et al. (2004a) Screening for physical and psychological illness in the British Armed Forces: II: Barriers to screening - learning from the opinions of Service personnel. *J Med Screen* 11: 153-7.

⁶² There is some empirical confirmation for this in the ADF with PRTG staff stating that K(10) measuring anxiety levels being higher in anonymous studies than non-anonymous RTAPS/POPS screens.

To compound all these problems further, until the catch-up in the latter half of 2008, there were 8-12,000 POPS not undertaken.

Rona et al (2005) in their own words concluded that there was not sufficient information on the cost-effectiveness of a screening program, but it could possibly divert scarce resources from more effective health care activities.⁶³ Support structures for veterans and service personnel rather, should be improved alongside improving recognition and management of health problems with good attention to confidentiality.

The problem identified by Rona et al (2005) Rona et al (2005) in fact seems to be occurring. There are major staffing issues in the Psychology Support Sections on base as discussed in Section 4.2. This situation has multiple causes but one of which is the 'diverted scarce resources' devoted to RtAPS and POPS.

The ADF needs to properly resource the PSSs as argued in Section 4.5. It could be argued it needs also to properly resource the RtAPS and POPS so that newly discovered need can be serviced by clinical psychologists and psychiatrists perhaps in a shared care arrangement with primary care practitioners, again as argued in Section 3.8.2.

As discussed in Section 4.5, psychologists are a scarce resource in the ADF, it is possible that some of their training and organisational work could be conducted by other professional groups. As noted in Section 3.10 above, work for psychologists in human resources management area is contracting in the community with human resources specialists without psychologist training doing this work.

For the reasons set out above, RtAPS and POPS should not be exempt from an examination of psychologist tasking. The possibilities are that the RtAPS and POPS consist only of briefs or group programs, cease completely until such time as their value can be demonstrated or move from two to one full screen only .

Other screening

All mental health screening, including the proposed annual mental health screening to be introduced as part of the Government's Lifecycle package places a heavy burden on staff, particularly because it will reveal previously unrecognised need requiring follow-up and referral again to secondary as well as primary care level mental health professionals.

It may be that the web-based versions of the Composite International Diagnostic Interview (Third Version) currently being trialed by the WHO would make remote, web-based solutions possible and impose minimal burden on staff.

It would seem that psychometric instruments in the ADF can be used for screening purposes where they are not anonymous and subject to underreporting or research

⁶³ Rona RJ, Hyams KC, Wessely S. (Commentary) (2005) Screening for Psychological Illness in Military Personnel. JAMA 293: 1257-60.

purposes where they are anonymous and less subject to underreporting but not both. There is a place for both but not together.

Many ADF members believe that current recruitment processes do not sufficiently screen individuals with mental health problems arising out of eg difficult family backgrounds. Screening though is not an exact science – some recruits with difficult family backgrounds succeed and some recruits without difficult family backgrounds fail. Whatever the levels of psychological screening, recruits will continue to enter the ADF with varying levels of psychological resilience and life skills. While the stringency of psychological screening at recruitment can be debated, the importance of resilience training and excellent mental health policies, programs and practices can not. It is important that both should operate well in recruit schools as previously recommended by the Learning Culture Inquiry.⁶⁴

5.5 Conclusions and recommendations

A middle way in post-deployment screening suggests itself and that is that only the POPS in its full form should be retained. This would be not only in full, but with a group briefing added as well as additional resources provided so that any newly discovered need could be serviced in full. The RtAPS would continue but only in the form of group briefs but without screen or debrief. This would also have the effect that some of the 'diverted scarce resources' could be returned to base. Post-deployment mental health problems could be serviced by self-referral to the PSSs where consultation, follow-up and referral if necessary could occur and in an expeditious fashion.⁶⁵

It is appreciated that this proposal will impact on deployable psychology assets. It is not intended that it should reduce numbers of psychologists embedded with troops on deployment. The proposal is rather that it reduce the number of psychologists engaged in the conduct of RtAPS.

It is interesting to note however that of the three countries participating in Technical Panel 13 of The Technical Cooperation Program (Australia, United States, United Kingdom, Canada and New Zealand) that there is no consensus on the number of post-deployment screens - Australia and the United States (both two), Canada and New Zealand (both one) and United Kingdom (none).⁶⁶

Clearly if there are other ways that psychologists can be better assigned in the NSA such as their training and organisational work being conducted by other professional groups that should be considered first.

⁶⁴ Podger A, Harris C, Powell R (2006) Final report of the learning culture inquiry: Inquiry into the learning culture in adf schools and training establishments. Department of Defence, Canberra:1-133.

⁶⁵ Currently there will typically be 3-5 immediate referrals and about 30 recommendations for follow-up before three months in a group of 600 returning personnel.

⁶⁶ Steele N, Twomey A (2008) A Post Deployment Mental Health Screening, Surveillance and Research in TTCP countries Technical Panel 13 - Psychological Health and Operational Effectiveness, The Technical Cooperation Program:1-37.

A feature of Battlemind that is worth adopting is that both RtAPS and POPS involve members' families.⁶⁷ This is for the good reason that partners are often more aware of post-deployment difficulties in members than the members themselves and more able to remove barriers to care and mobilise needed resources.

Problems of underreporting linked to concerns around confidentiality remain. These are discussed further in Section 6.3.

Recommendation 5.1: The POPS should retain its present form but with an added brief involving families and with additional resourcing so that follow-up and referral for members with possible problems can occur. This requires adequate and timely access to secondary care as well as primary care level mental health professionals. It also needs an appropriate record system to monitor that follow-up and referral is happening. It also requires that members can feel confident, subject to the usual 'duty of care' caveats, that their any mental health problems discussed remain confidential and discussion of them will not be detrimental to their ADF careers.

Recommendation 5.2: It is proposed that only the 'briefs' components of the RtAPS be retained. The psychological screen and one-on-one counseling components should be discontinued. The group brief should involve members' families as well as members and take place on an occasion which has both educational and social purposes (eg meeting/talks followed by a BBQ). A suitable name for it would be the Short Returning to Australia Reengagement Program (SRARP). Resources on base should be increased so that members with early post-deployment problems should have adequate access in the first instance, to primary care level mental health staff.

It is possible to consider that a full second screen could return in the future. It would need to be demonstrated however that one screen has positive benefits for members, that mental health services on base are fully staffed and that there are additional staff to both conduct and properly followup two post-deployment screens.

⁶⁷ Walter Reed Army Institute of Research (WRAIR). Spouse. Battlemind. Training. Training. Training. Helping you and. Helping you and. Helping you and your Family Prepare for Deployment (undated) (http://209.85.173.132/search?q=cache:bWRPOh6x6ooJ:https://www.battlemind.army.mil/assets/files/spouse_battlemind_training_predeployment_brochure.pdf+spouse+battlemind+training&hl=en&ct=clnk&cd=2&gl=au accessed at 9 Jan 2009)

Section 6 Military culture and mental health

This section will first consider stress and resilience in relation to ADF members. The ADF has been a pioneer in the area of resilience training for recruits and currently is an international leader in the field. Resilience training would also be valuable on a number of occasions other during a member's lifecycle through the ADF. It will then consider stigma of mental illness as a barrier to members seeking care.

6.1 Stress and resilience

6.1.1 Recruits and recruiting

Some common scenarios have been described as follows. Many recruits are under 20 years, living away from home for the first time, subject to high operational demands with few comparable previous experiences, living on base possibly with few friends and have easy access to alcohol on base. They may have few life or relationship skills. It is not surprising therefore that a proportion of recruits at the Army Recruit Training Centre do not complete recruit training (13% of recruits with about 60% of these being for 'unsuitability' or psychological reasons). Those recruits who do complete, proceed to Category School which may or may not be their first choice.

Many recruits are unemployed when they first apply to join the ADF. It is believed a number have been subjected to family abuse and emotional trauma. Some are accepted by local Defence Force Recruiting managers who are able to overrule a recommendation by the psychologist who screened the applicant deeming them to be unsuitable. This is reportedly for reasons of reaching goals for recruiting number.

Recruits in all three Services undergo a Resilience training course. During their first week of training, recruits receive a 2-hour presentation in *Confronting fear* and in their second week, another 2-hour presentation on *Strategies coping with fear*. Introductory Training (30 minutes) aimed at improving suicide awareness, as endorsed by the *Inquiry into the learning culture in ADF schools and training establishments* is also presented to recruits.⁶⁸ Psychological first aid is currently not part of recruit training.

Recruits at ARTC take part in adventure training, high-wire and other activities believed to enhance their psychological resilience.

Psychologists from the Psychology Support Section provide counselling to recruits for a breach of discipline, following officer referral under a duty of care obligation or on recruit self-referral.

Since 1997, Army Recruit Instructor Trainers take a 3-week Recruit Instructor Development Course (RIDC). Their trainers in turn have completed a TAFE

⁶⁸ Podger A, Harris C, Powell R (2006) Final report of the learning culture inquiry: Inquiry into the learning culture in adf schools and training establishments. Department of Defence, Canberra:1-133.

Certificate IV course in Training and Assessment which consists of 14 units (12 core and 2 electives). There is a mental health component delivered by the PSS. This training has varied in length but consistently focused on counselling skills, immediate support and referral mechanisms. In 2009 strategies for recruit instructors to assist recruit implementing resilience building (including anxiety management, realistic thinking and behavioural coping strategies) has been introduced. Previously RIs had little mental health knowledge and skills.

6.1.2 Deployment

Some common scenarios have also been described as follows. The high operational tempo of recent years was very frequently noted by members in relation to the stress it imposed on members. This was so for several reasons. First, it imposes on members, long periods of separation from their families. The land based deployment cycle has been until recently 6 months in each 2-year period, but is now changing to eight months in each 3-years forming a pre-deployment, deployment and post-deployment cycle.⁶⁹ In fact, the periods of separation are longer with pre-deployment Force Preparation and periods of military exercises and training that may follow deployment.

These periods of separation are one important reason for members leaving the ADF. Some members believe a period of separation should not exceed 4-months as beyond this time, families do not cope well. With modern means of communication such as email, GPS mobile phones and Internet phone calls (Skype), member can be in contact with their families a number of times during the days. Family problems and pressures can bear in and members may feel these problems would be better addressed if they were at home.

As well, whatever the strategic importance of modern asymmetric warfare, there is no Great Cause as existed in the Second World War. It is believed this built morale and readiness for battle. The realities of modern warfare and peacekeeping are different. Dangers are real but may not be always apparent, so there is a need for constant vigilance. Theatres of war may also be in locations of physical discomfort with extremes of heat and cold.

There are also inevitable tensions within teams and their leaders when errors of judgement of both omissions and commission can cause loss of life. Leaders can be seen to be deficient and to practise double standards. Inequities are keenly felt. Team members can be seen not to have performed well, to have placed added burden or dangers on other team members. These members may feel shame, guilt and loss of face as a result. These members' main motivation may become simply to survive the deployment experience.

Members are also likely to face dangers and experience fear for which it is difficult to prepare during pre-deployment briefings. Traditional strategies invoked for facing dangerous situations such as to ignore your emotions and think of your mates may or may not be effective.

⁶⁹ Previously deployments were for 12-month periods but this was believed to be a frequent cause of marital breakups.

All this said, many members feel a sense of accomplishment and job satisfaction on deployment in doing what they are trained to do. Many become fitter, eat better, drink less alcohol and lose weight. While, some members feel embroiled in family problems and are frustrated by not being able to help, others feel well-distanced and less involved in these.

DCO offer family support pre- and during deployments and in the past have provided counselling support for families.⁷⁰ DCO are also involved in providing support if there is a casualty on deployment involving bereavement counselling, funeral arrangements, income support, relocation assistance and ongoing contact.

DCO staff are also trained to provide all relevant services to members including CIMS in the event that multiple casualties occur on deployment. Chaplains can provide pastoral care and embedded psychologists can provide counselling. Fly in/fly out psychologists are on-call to provide CIMS in the event of a Critical Incident.

There are other stressors. Special forces are most exposed to combat and its stressors but have passed stringent standards to be accepted for special forces and are well-prepared. Support staff accompanying them may not be as well prepared. Some members have deployed on several occasions and this may have a cumulative effect. There are less major but real stressors such as meeting weapon readiness standards prior to deployment after a long period of no or little target practice.

6.1.3 Forward bases operating at a high pace and operational tempo

Some forward bases in Australia are operating at a high operational tempo and high pace more generally. It is reported anecdotally that they have large numbers of members returning from deployment to land based operations with adjustment difficulties. This may require long periods of sick and convalescent leave during which time they are likely to be at home, off-base with possibly no family support and uncertain support from housemates. There may be fears that they are engaging in risky behaviour and become at risk of self-harm and alcohol and substance abuse. In addition to this, they may become uncooperative and disruptive and become the subject of military discipline proceedings which may make worse their mental health problems as well as their uncooperativeness and disruptiveness.

There are other stressors in base life. Alcohol is readily available and often at subsidised prices. There has traditionally been a heavy drinking culture in the ADF though this has diminished in recent years. Alcohol can sometimes be used to self-medicate to alleviate stress.

Transfers to other bases also mean families need to relocate. Partners with local jobs and with children established at local schools may not be happy about this, particularly if the new base is in an area of lesser amenity than the current one.

⁷⁰ In earlier times the chaplain, adjutant or Regimental Medical Officer might have provided this assistance.

Anecdotally and increased number of members are transferring and the families are remaining behind.

A final stressor involves the need to maintain good health so as to be eligible to deploy, which is necessary to continue a career in the ADF. Members make a large psychological commitment to service life both in a vocational and psychological sense. If they come to believe the ADF has lost interest in them as soon as they become sick, this may put in train, a sequence of reactions of anger and resentment against the ADF leading to failure to find new employment, illness and invalidism. This is discussed further in Section 9.

6.1.3 Reservists

As noted in Section 3.1.3 Reservists deploy for shorter periods than regular members (e.g. typically 2-8 weeks) during which time they enter Continuous Full Time Service (CFTS). They do not usually deploy as teams or units but enter as individuals into pre-existing regular units – though see Section 3.1. Compared to the regular members of the unit they are likely to feel more unsupported both during deployment and on return home.

In addition, they may return to work immediately without holidays unlike regular members. Further, their colleagues at their usual workplace may not be sympathetic to the reservist serving and going on deployment. This may manifest itself both in terms of hostile attitudes and an expectation that they need to work harder to catch-up for work missed while they were absent on deployment.

As noted again in Section 3.1.3 since Reservists return from deployment at times other than the regular unit in which they are serving, they are more likely to miss RtAPS screens. Because they do not serve on bases, they are also more likely to miss POPS screens as well. If problems develop post-deployment, they and their families are more likely not to recognise them as each interacts and shares experience less with other members and their families.

After return home and the completion of CFTS, Reservists may no longer be able to use Defence Health Services and will use normal community services . Reservists are covered under the relevant rehabilitation and compensation schemes but will need to have a claim approved to access this health support.

Research on mental health problems in Reservists internationally has not been large. The few studies conducted however do indicate an association between reservist status and mental disorders. Browne et al. (2007) sought to explain increases in mental health problems in UK reserve forces who had served in Iraq.⁷¹ Health status was measured using self-report of common mental disorders, post-traumatic stress disorder (PTSD), fatigue, physical symptoms and well-being.

The authors reported that ‘Reservists were older and of higher rank than the regular forces. They reported higher exposure to traumatic experiences, lower unit cohesion, more problems adjusting to homecoming and lower marital satisfaction. Most health

⁷¹ Browne T, Hull L, Horn O, et al. (2007) Explanations for the increase in mental health problems in UK reserve forces who have served in Iraq. *Br J Psychiatry* 190:484-9.

outcomes could be explained by role, experience of traumatic events or unit cohesion in theatre. PTSD symptoms were the one exception and were paradoxically most powerfully affected by differences in problems at home rather than events in Iraq. The increased ill-health of reservists appears to be due to experiences on deployment and difficulties with homecoming.'

For a variety of reasons then, Reservists are more likely to experience higher rates of mental health problems post-deployment and may experience more difficulties in their recognition and treatment.

6.2 The Defence Attitude Survey

The 2007 Defence Attitudes Survey compared opinions levels in relation to a number of mental health topics in the three Single forces and Defence civilians for the years 1999-2007. In general, opinion levels in the three single forces and Defence civilians did not differ greatly or vary across the study period. Around 70% were satisfied with their own life and personal circumstances, their health, their achievements and personal relationships. They rated their standard of living a little higher than the Defence civilians and their links to the general community somewhat lower. In relation to mental health issues more specifically:

- Around 50% rated their knowledge of mental health as good with this increasing in all four groups over the study period. Army rated their knowledge a little higher than Navy and Air Force;
- Around 60% of all four groups rated their mental health as good, all groups a little better recently;
- Fifty to sixty percent agreed that alcohol use was a problem in Defence most in Navy and least in Air Force;
- Around 50% of Navy and Army agreed that illicit drugs were a problem in Defence;
- Around 70% were satisfied with the information available about alcohol and drugs in Defence;
- Around 35% rated the stress in their current work as high, a little higher than in the civilian group;
- Around 25-30% rated the stress in their personal life as high, a little higher than in the civilian group;

6.3 Stigma of mental illness as a barrier to members seeking care

As the rapid review of literature on *Barriers to mental health care in the military and stigma* and Mental health promotion and literacy programs makes clear stigma and discrimination toward persons with mental disorders remains a problem in many countries - see Appendices 7 and 8. This includes in Australia.

There are also major barriers to the use of mental health services in Australia. As the National Survey of Mental Health and Wellbeing in 1997-8 makes clear that only 38% of adults and one quarter of children and younger people with a mental disorder

received treatment from a health service.⁷² The proportion of people with a disorder who accessed care was half that for comparable physical illnesses. Treatment rates varied according to the severity of the person's condition around 90% for severe disorders, 29% of people with moderately severe disorders and only 16% of people with milder disorders.

This may be associated with stigma associated with mental illness but also other factors such as unavailability of services and poor mental health literacy. Some will elect to seek assistance outside the health system or decide not to seek treatment at all.

ADF members are likely to share these views and practices. To what extent they differ from other Australians is not known. It is likely though, based on very frequent stakeholder comment, that there is greater stigma about mental illness in the ADF than in the general Australian community. It is well known that military culture in both Australia and other countries have high regard and esteem for physical and mental strength and toughness. These are essential characteristics that soldiers must be able to show in combat. It disapproves and scorns physical and mental weakness. Displays of weakness in relation to health and illness may also be interpreted as malingering. Mental illness is particularly likely to be seen as weakness and incompatible with the proper display of military behaviour. In some cases it may be greeted by disdain or contempt and the person with mental health problems victimised and bullied.

Values are changing however toward mental illness in both the ADF and the Australian community. It was widely stated that this is particularly true among leaders and senior officers. It is more variable among more junior officers and non-commissioned officers where some are supportive and tolerant of mental illness and others are not.

It is likely though that, irrespective of the views or actions of commissioned and non-commissioned officers, peers themselves may or may not be tolerant particularly if the individual's behaviour is placing an added burden on other members of the team. The individual themselves may have internalised stigma about mental illness either as a member of the Australian community or a member of the ADF and may be confused by their own thoughts and behaviour.

However, stigma towards mental illness has other origins. It is ADF policy that members must be deployable to remain in the ADF. This means that if a member presents with a persistent physical or mental illness to a Defence Health Service, they risk this negatively impacting on, and possibly terminating their career. This in itself is a considerable barrier to seeking care in the ADF and an incentive to either conceal medical problems including mental health problem and/or seek care outside the ADF even though this constitutes a breach of ADF regulations.

Failure to obey a proper order constitutes a breach of discipline. It is possible that this failure may originate from a mental health problem. The response to failure obey though is more likely to be disciplinary rather than therapeutic in nature.

⁷² Mental Health Standing Committee of the Australian Health Ministers' Advisory Council (2008). National Action Plan for Mental Health 2006-2011 Progress Report 2006-07:1-80.

There were also persistent reports of a breakdown in confidentiality when consulting about a mental health problem with Defence Health Services. This breakdown was stated not to originate from medical staff or psychologists but rather, paramedics and clerks in the health services 'gossiping'. In common with other small communities with high interaction levels, it may also originate in a confidence broken among friends and work mates or an unusual behaviour observed by others.

6.4 Recent suicides in the ADF subject to Boards of Inquiry

There have been 80 suicides in the ADF for the period 1997-2007. There have been 300 reported incidents involving a possible or actual suicide attempt for the years 2000-6. In the last few years a small number of these have been the subject of a Board of Inquiry. Six of these have been sighted and read. The five most common of their recommendations are summarised below.

1. Policies needed to be developed that would increase the sharing of relevant medical-in-confidence and psychological-in-confidence information between medical practitioners and psychologists.

More generally, policies needed to be developed that, while safeguarding the confidentiality of members' files would provide access to those with a need to know such as commanding officers. This could be advanced by eg incorporating a mental health section in the member's medical record or by the introducing multidisciplinary teams. There needed to be also improved reporting and feedback of clinical opinion following a referral to a mental health practitioner external to the ADF.

2. Mental health services in the ADF should be adequately resourced.

There should be improved mental health policy and its implementation in the ADF including for special groups. Military mental health programs should conform to community standards. An audit system to ensure policies and procedures should be implemented. There should be more resources for evidence-based mental health services. RtAPS and POPS should be audited regularly. A policy paper on use of antidepressant medication in ADF members should be developed.

3. Case management in multidisciplinary teams should be introduced for members diagnosed with a mental illness.

Medical officers should be recognised as key mental health practitioners. The delivery of clinical psychological services and mental health should be reviewed.

4. There should be better training for clinicians in the recognition of acute mental health problems particularly depression and self-harm and in various aspects of the diagnosis of PTSD and related conditions.

Policies should be introduced making staff in ADF hospitals more aware of, and more clinically responsive to suicide intention in admitted patients. This would include recording their self-harming behaviour in their files with on-referral of the patient to other hospitals. CHPs need induction training in military familiarisation and

especially the application of the MEC system. There should be an increase in number of psychiatrists in the ADF. Better pay and condition and military familiarisation policies should be introduced to support this.

5 Suicide prevention programs deserve very strong support.

There should be more feedback on the content and implementation of suicide prevention programs across the three services. Suicide awareness briefs should be better presented.

The incoming Government and the ADF have implemented, or are implementing most of these recommendations.

6.5 Policies and programs and relevant to stress, resilience & decompression

There is currently no mental health or pastoral care content in Officer and NCO promotional courses.⁷³ It was noted that NCO courses have been reduced in length and do not cover either pastoral care (as previously) or mental health.⁷⁴

As noted in Section 3.1.3, the Navy traditionally has operated the Divisional Officer system. Both Commissioned and senior Non-commissioned Officers take on additional pastoral care responsibilities for more junior sailors. They do this in addition to their primary job responsibilities. The Divisional system is under challenge. This is a result of the introduction of cost-efficiencies in the navy, restricting time available for activities beyond primary job responsibilities. It is also the result of pastoral care becoming more complex and involving eg offering financial advice. The Senior Sailor Management Scheme is one response to this challenge. The Navy also has a distinctive Alcohol and Other Drugs Program - see Section 1.1.

6.6 Assessment

This overall assessment is based on a review of all technical and research documents, stakeholder input and public submissions. A summary of themes arising out of both individuals and organisation submissions relevant to *Military culture and mental health* are included in Appendix 5. Rapid reviews of the research literature are set out in the following Appendices:

Psychological resilience	Appendix 4.
Barriers to mental health care in the military and stigma	Appendix 7.
Mental health promotion and literacy programs	Appendix 8.

⁷³ RMC is a partial exception. In the first six months, cadets do resilience focusing on completing training. In second six months, the command leadership package includes stress management, counselling and interview techniques, fatigue management and operational stress management.

⁷⁴ The RAAF NCO course at Amberley in Queensland is an exception to this and has significant mental health content.

Around 50% of members in the 2007 Defence Attitude survey rated their knowledge of mental health as good. Sixty per cent rated their mental health as good. However, more than 50% of members agreed that the use of alcohol and illicit drugs was a problem in Defence. Around 35% rated the stress in their current work as high with 25-30% doing so in their personal life. While these levels are not greatly different to Defence civilians, they provide no justification for inaction. Expressed differently, they indicate that 50% of members rated their knowledge of mental health and 40% their mental health as not good.

Resilience training is about to be expanded in the ADF with a study of psychological resilience and a pilot study of resilience building as part of the Australian Government's Mental Health Lifecycle Initiatives for Veterans and Former Serving Members - see Section 2.8.1. As noted there, resilience training aims to increase a member's ability to withstand the stresses that can be expected during their service life. These are not only combat-related involving possible exposure to critical incidents. They also include working and living on bases and on deployment. They involve both interactions with others including the chain of command. They also involve effects of military life on personal relationships and families. Components of a resilience training courses might include Psychological 'first aid', Arousal reduction, Stress inoculation, Anger and fatigue management, Use of alcohol and other drugs, Life and relationship skills and Handling corpses.

As part of the Lifecycle initiative, there are plans to expand the innovative resilience training program to include all three recruit schools. Parts of the program could also form part of both an expanded pre-deployment briefing in force preparation and officer training schools.

Nevertheless these programs need to be evaluated as there is limited evidence about their effectiveness. One study on pre-deployment stress briefing showed little reduction in medium-term psychological distress (though no harm).⁷⁵

There is evidence that mental health literacy programs can be effective and make a contribution to both the mental health and wellbeing of the community. This includes campaigns in occupational settings. Several of the studies in the rapid literature review on *Barriers to mental health care in the military and stigma* recommended more education for both officers and members to offset the effects of stigma in military culture. They could form a part of all training and promotional courses extending from recruit to non-commissioned officers and commissioned officers. They should also involve special groups such as military police and Reservists.

Recommendations from the six Boards of Inquiry on suicide were consistent with concerns raised by stakeholders and the research literature and are addressed at various parts of this review. The most common recommendation relating to policies around sharing medical- and psychological-in-confidence information between practitioners is discussed further in Section 7.

⁷⁵ Sharpley JG, Fear NT, Greenberg N et al. (2008) Pre-deployment stress briefing: does it have an effect? *Occup Med* 58: 30-4.

Mental health screening is proposed as part of the Government's Lifecycle package. Its contribution to promoting the mental health of members is discussed in Section 5.3.

There is little evidence in relation to the value of psychological of decompression programs at the end of deployments (short-term leave in a third country post-deployment).⁷⁶ While the concept has intuitive appeal, evidence to its benefits on its longer-term effects on PTSD and other deployment-related mental illness is scanty. The Canadian Ombudsman reported a positive reaction to the experience by Canadian Forces.⁷⁷ It is matter of leader's discretion whether to proceed or not with decompression programs

Similarly there is little evidence of the effects of the new deployment cycle - evidence for deleterious effects of lengthy deployment relates to periods over 12 months.^{78 79} There is no evidence available on group bonding activities (formal messes, sport and social occasions) or post-deployment reunions and ramp ceremonies. It is again a matter of leader's discretion whether to proceed or not with these.

6.7 Conclusions and recommendations

Mental health remains stigmatised in the ADF, as it does in the community. Mental health though, presents obvious extra challenges for armed forces, the ethos of which necessarily values physical and mental toughness as well as teamwork. There are many barriers to seeking mental health care in the ADF.

Recommendation 6.1: Pre-deployment briefings and other annual briefings should include education and training in mental resilience. As these programs are innovative in nature, they need to be evaluated.

Recommendation 6.2: Recruit schools should include education and training in mental resilience. Resilience training should also be introduced in promotional and officer courses so that this can later be communicated to lower ranks. Again, as these programs are innovative in nature, they need to be evaluated.

Recommendation 6.3: All training, promotional and officer courses should include sessions on mental health literacy and bullying. The presentation of these topics is challenging and needs to move beyond front of classroom 'briefs' to be more scenario-based and involve role playing. It should not be so short and embedded among large numbers of briefs to make no impression on members.

⁷⁶ Hacker Hughes JGH, Earnshaw NM, Greenberg N et al (2008) Use of psychological decompression in military operational environments. *Mil Med* 173: 534-8.

⁷⁷ National Defence and Canadian Forces (2007) Special report. From tents to sheets: An analysis of the CF Experience with Third Location Decompression after Deployment. (<http://www.ombudsman.forces.gc.ca/rep-rap/sr-rs/tld-dtl/rep-rap-01-eng.asp> accessed at Jan 8 2009).

⁷⁸ Rona RJ, Fear NT, Hull L, et al.(2007) Mental health consequences of overstretch in the UK armed forces: first phase of a cohort study. *BMJ* 335: 603.

⁷⁹ Adler AB, Huffman AH, Bliese PD, et al (2005) The impact of deployment length and experience on the well-being of male and female soldiers. *J Occup Health Psychol* 10:121-37.

Opportunities for even further strengthening Defence Policy in Discrimination and harassment through military discipline or other avenues should be explored.

Recommendation 6.4: Paramedics and medical clerks working in Defence medical services should be educated and counselled about the importance that members place on being able to consult doctors in confidence. If education and counselling is insufficient, they should not be able to continue working in Defence health centres, cautioned or disciplined.

Recommendation 6.5: For a variety of reasons, Reservists are more likely to experience higher rates of mental health problems post-deployment and experience more difficulties in their recognition and treatment. Policies need to be put in place to ensure that they have the same access to high quality post-deployment screening and treatment, if problems are detected, as regular members.

Section 7 Privacy, disclosure and sharing of mental health information

7.1 Current situation and assessment

This description and overall assessment is based on a review of six Boards of Inquiries, stakeholder comment and public submissions.

The most common group of recommendations of the six Boards of Inquiry (BOIs) on suicide addressed problems in the sharing of mental health information between doctors and psychologists. There were instances where medical practitioners were providing treatment to members in ignorance that the member was receiving care from a psychologist and of the information that the member had provided to the psychologist.

Further to this, a number of the BOIs also recommended that policies needed to be developed around both safeguarding the confidentiality of members' files and providing access to those with a need to know, such as commanding officers. This would increase the sharing of relevant medical-in-confidence and psychological-in-confidence information between medical practitioners and psychologists. This could be advanced by eg incorporating a mental health section in the member's medical record or by the introduction of multidisciplinary teams.

Stakeholders also commented on this. They noted uncertainties about privacy obligations on professionals and duty of care issues. This included one case before a State Psychologists Registration Board for allegedly excessive disclosure of information by a psychologist to a medical officer. This also included one case before a State Medical Board for allegedly excessive disclosure of information by a medical officer to a commanding officer.

Another reason for the non-sharing of information reported by stakeholders was the disciplinary differences in perspective about the roles of medicine and psychology in mental health, as well as their working in different monodisciplinary groups and locations.

Stakeholders noted however that problems in flow of information were two-way and there were occasions when psychologists were in ignorance of the psychotropic medication that a doctor had prescribed to the member who was consulting them. Non-sharing of information was a particular problem with CHP and locum doctors.

The ADF has recently moved to action the recommendations of the BOIs in the recent amendment to DI (G) 16-20 Paragraph 9.⁸⁰ This now states:

‘It is an important component of the provision of optimal health services to individual members that all Defence health practitioners who have a role in the

⁸⁰ Department of Defence (2008) Defence Instruction (General) PERS 16-20 AMDT NO 1 Privacy of Health Information in Defence Australian Government, Canberra: 1-12 (with Appendices).

care of the member are able to access the entire health record of an individual member. In this regard, it is the responsibility of the primary treating health practitioner(s) to share a member's personal health information with a member's other treating practitioner where such a disclosure is necessary for the provision of coordinated health services, or otherwise to the benefit of the individual member. This applies for example where a member suffers from a mental health disorder and is being managed by a Medical Officer, psychiatrist or psychologist. For optimal treatment, the treating practitioners will share and have access to all relevant Defence health information on the member's condition.'

DI (G) 16-20 also specifies what use will be made of the information received

'use of (health information) may include use by Commanding Officers (CO)... if it is necessary to enable the recipients of the information to **monitor or manage the impact of the individual's health condition, and for the purposes of managing consequences which could arise if a member is not fit to fulfil operational requirements.**'

The DI (G) 16-20 though also puts limits on the extent of disclosure. Thus it states at paragraph 16 (b) that

'Personal health information can be used or disclosed to others .. if ... the Defence health practitioner reasonably believes the use or disclosure is necessary **to lessen or prevent a serious and immanent threat to an individual's life, health and safety, or a serious threat to public health or public safety** including in military workplaces and safety critical areas.'

In situations which fall short of constituting 'a serious and imminent threat to an individual's life, health and safety, or a serious threat to public health or public safety', information can still be disclosed if the member agrees (following a properly informed consent process). Otherwise information can only be given, say, at a MECRB or an Army Personnel Review Board on the present and likely future impacts on the member's ability to work arising from the illness that does not require disclosure of the details of the illness itself.

Health Directive 810 has also been issued on the obligations for psychologists to place a summary (PS6) of their clinical notes in a sleeve of the member's medical record. This would include results from the members screening tests (RtAPS and POPS). Informed consent forms concerning disclosure and the circumstances when this might occur were developed with the Health Directive.

Nevertheless, while noting improved communication between doctors and psychologists in recent years, some stakeholders remained skeptical whether the recent amendment to DI (G) 16-20 and the issue of Health Directive 810 would lead to an increase in sharing of health information.

While doctors and psychologists work in separate monodisciplinary groups and different locations, it is likely that this will continue to form a barrier to implementation. If they were however to work in multidisciplinary teams in the same

location, as recommended in Section 3.11 and indeed, one of the BoIs, sharing of information should become part of normal practice.

The BoIs also recommended that there needed to be also improved reporting and feedback of clinical opinion following a referral to a mental health practitioner external to the ADF.

In this regard it is significant, as noted in Section 3.3, that VVCS has recently signed a Memorandum of Understanding (MoU) with the ADF establishing clear policies and practices.⁸¹ Essentially, this involves VVCS sending a clinical report back to the ADF for insertion in the member's medical records, following a referral from ADF command or mental health services to VVCS.

As noted in Section 6.3, there were also persistent reports of a breakdown in confidentiality when members consulted about a mental health problem with Defence Health Services. This breakdown was not sourced to medical staff or psychologists but rather, paramedics and clerks in the health services 'gossiping'. In common with other small communities with high interaction levels, the breakdown may originate also in a confidence broken among friends and workmates or an unusual behaviour observed by others.

7.2 Recommendations

Recommendation 7.1: The common multidisciplinary mental health service proposed for what are now separate mental health services should help to promote the sharing of health information among mental health practitioners – see Recommendation 3.11. A common clinical record shared by doctors, psychologists and others is a very important advantage of a common mental health service.

Recommendation 7.2: Policy to overcome the non-sharing of health information, as expressed in the recent amendment to DI(G) 16-20 Paragraph 9 and Health Directive 810 should be implemented. In the event of the common multidisciplinary mental health service not proceeding, implementation of this policy should be independently monitored by 12 monthly audit against agreed benchmarks for the next three years. Redress procedures will need to be put in place if benchmark levels are not reached.

Recommendation 7.3: (re-presented) Paramedics and medical clerks working in Defence Health Services should be educated and counselled about the importance that members can consult doctors in confidence. Failing that, they should not be able to continue working in health services or disciplined for breaches in Defence medical services.

⁸¹ (No author) (2008) Agreement between the Department of Defence and department of Veterans Affairs for the provision of mental health support by the VVCS – Veterans and Veterans families Counselling Service do Australians Defence Force personnel:1-23.

Section 8 The Medical Employment Classification system & Mental Health

8.1 Outline of the Medical Employment Classification system

The triservice Medical Employment Classification (MEC) system replaced older single force medical employment classification systems.

The MEC system has the following classifications⁸².

MEC 1 Members who are medically fit for employment in a deployed or seagoing environment without restriction.

MEC 2 Members who have medical conditions that require access to various levels of medical support or employment restrictions, however they remain medically fit for duties in their occupation in a deployed or seagoing environment. In allocation of subclassification of MEC, access to the level of medical support will always take precedence over specified employment restrictions.

MEC 3 members who have medical conditions that make them medically unfit for duties in their occupation in deployed or seagoing environment, The member so classified should be medically managed towards recovery and should be receiving active medical management with the intention of regaining MEC 1 or 2 within 2 months of allocation of MEC 3. After a maximum of 12 months their MEC 3 is to be reviewed. If still medically unfit for military duties in any operational environment, they are to be downgraded to MEC 4 or, if appropriate, referred to a Medical Employment Classification Review Board (MECRB) for consideration of an extension to remain MEC 3.

MEC 4 Members who are medically unfit for deployment or seagoing service in the long-term. Members who are classified as MEC 4 for their military occupation will be subject to review and confirmation of their classification by a MECRB.

There are also a number of MEC subclassifications

MEC 2 fit for deployment or seagoing services with

MEC 201 defined limitations on duties

MEC 202 pharmaceutical or other medical support. Failure to provide this support for 21 days or more is not likely to result in deterioration of the member's medical condition to the point that the member's health will be compromised in the short or medium term or operational effectiveness will be impaired.*

MED 203 Advanced Medical Assistant or Military Nursing Officer support.*

MEC 204 Specialist Medical Assistant/Phase 4 MEDASST, Specialist Military Nursing Officer or Advanced Practice Military Nursing Officer support.*

MEC 205 MO support* #

* May require limitations on the range of duties to be performed, as defined.

Members may only retain MEC 205 for a maximum of two years before being referred to MECRB.*

⁸² Department of Defence (2008) Defence Instructions (General) PERS 16-15 AMDT NO 2 Australian Defence Force Medical Employment Classification System :3.

MEC 3

- MEC 301 Medically unfit for deployment or seagoing services in the medium term. Fit for other duties and locations as defined by the MO.
- MEC 304 Non-effective on medical grounds for a period between 28 days and four months.

MEC 4

- MEC 401 Medically unfit for deployment or seagoing services in the long term. Employable within current occupation, within restrictions, as defined by the MO.
- MEC 402 Medically unfit for deployment or seagoing services in the long term in current occupation. May be suitable for allocation of a deployable classification in an alternative occupation or Service.
- MEC 403 Non-effective on medical grounds for a period in excess of four months.

There is a very important distinction between MEC 1/MEC 2 where members are able to deploy and MEC 3/MEC 4 where members are not able to deploy. If members are on MEC 3 and not able to deploy beyond 12 months they will generally move to MEC 4 and transition-out of the ADF on medical grounds.

This is different to the earlier systems when it was possible to be Home Only – that is to be able to continue as an ADF member while not being able to deploy. This change occurred at a time when many jobs were contracted out to be performed by civilians. These, up until then had been performed by members,

The previous Chief of Army has recently introduced a trial where some non-deployable members have been able to continue service in such roles as recruit instructors.

As stated in DI (G) 16-15, a review of a member's Medical Employment Classification can occur in a variety of circumstances such as when the member develops a medical condition requiring employment restrictions or absence from duties for more than 28 days; following a routine medical examination; when directed by their CO because of doubts of the appropriateness of their current MEC; or at a date specified by the MECRB. The MECRB has a personnel management function. The purpose of a MECRB is to endorse, or amend the MEC confirmed at a Medical Employment Classification Review – conducted by a Medical Officer with designated authority - and to assess the employability of an individual. The MECRB by contrast to a MECR is conducted by a board consisting of senior Defence personnel, entitlement and health staff.

As stated in DI (G) 16-15, the MECRB is also able to grant two types of waivers permitting a member to upgrade from a non-deployable to a deployable classification.

1. *Medical waiver:* A member not meeting to the ADF's medical standards may be upgraded to a deployable Medical Employment Classification (MEC 2) in exceptional circumstances but must be able to meet a number of criteria.
2. *Skills waiver* A skills waiver may be granted to a member who is permanently non-deployable but who possesses skills critical to the effective functioning of the ADF. The granting of a skills waiver does not change the fact that the member has been identified as being non-deployable in an operational environment.

In addition there is a Medical Risk Assessment Framework HD 282 that doctors use in making MEC decisions which takes into account the characteristics of the illness/injury individual member and their circumstances more generally.

8.1.1 The Army's PULHEEMS employment standards

The Army while conforming to the triservice MEC system superimposes its previous PULHEEMS employment standards.⁸³ The acronym 'PULHEEMS' is derived from the first letters of the qualities assessed when a medical examination is carried out. The PULHEEMS qualities are P (Physical Capacity), U (Upper Limbs), L (Locomotion), H (Hearing), EE (Eyesight), M (Mental Capacity), and S (Stability, reflecting the member's psychiatric stability in the military environment).

The standard of medical fitness in each quality is recorded on a scale of degrees from 1 to 8, with the exception of 'EE', which includes a degree of 9. The medical classification of a member is represented by a PULHEEMS medical assessment or profile (eg 2222 1/0 1/0 22) that indicates a member's degree of medical fitness under each of the PULHEEMS qualities.

The member's psychiatric stability in the military environment (coded S) has four grades:

- S2 Possesses psychiatric stability sufficient to satisfactorily endure the stress of combat and combat related duties;
- S3 Sufficiently fit and stable to endure the stress of combat-related duties, although having minimal symptoms or minor risk or recurrence of an earlier illness;
- S7 Not fit for combat or combat-related duties due to psychiatric illness. Has the potential to perform useful military duties outside the Area of Operations;
- S8 Fails to meet S7.

Schizophrenia, major mood disorders, delusional disorders and other psychoses are normally graded S8.⁸⁴ Minor psychiatric disorders which respond satisfactorily to treatment are graded S3, otherwise S8. Personality Disorders/Traits and Substance abuse and Alcoholism are not regarded per se as psychiatric disorders. Alcohol dependence or abuse may be linked to a specific psychiatric disorder in which case the grading will be determined by the underlying disorder. Notes exist for sleepwalking, eating disorders and sexual disorders.

Standards based on PULHEEMS profiles for a large number of employment categories within the ADF have been developed as set out in DI(G) PERS 159-1. These all specify S2 in regard of psychiatric stability in the military environment. Minimal psychiatric symptoms or minor risk or recurrence of an earlier psychiatric illness is therefore deemed not compatible with deployment.

⁸³ Department of Defence (2008) Defence Instructions (General) PERS 159-1 AMDT NO 2 PULHEEMS Employment Standards

⁸⁴ Department of Defence (2008) Defence Instructions (General) PERS 159-1 AMDT NO 2 ANNEX D The PULHEEMS System of Medical Classification – Clinical Aspects.

8.1.2 Other matters

Members are currently unable to deploy if they are being treated with antidepressant medication. COSC has considered a trial in which members being treated with antidepressant medication were able to deploy. There are however insufficient numbers to conduct such a trial. An alternative approach based on a literature review, advice and policy review from Defence forces in other countries will form the basis for a COSC paper recommending the deployment of individual on anti-depressants when there is no illness present. It has been pointed out that a group of members with physical disabilities are also using antidepressants for secondary depressive symptoms. It is possible that antidepressants will continue to be necessary for a period beyond when the physical disabilities have largely recovered.⁸⁵

One third of members being extracted from operational locations are for compassionate reasons with some of these being deemed to be mental health-related. 'Fly-in/fly-out' psychologists can be involved in these medical extractions.

8.2 Assessment of the Medical Employment Classification system

The MEC system gives effect to current ADF policy whereby it is necessary to be able to deploy to continue service as an ADF member. Deployability is compatible with certain restrictions imposed by the member's medical condition. It is also compatible with the need for increasing levels of medical support as specified within the MEC 2 subclassifications. It should though be possible for the member to remain medically fit without, in their absence being likely to result in deterioration of the member's medical condition for up to 21 days in the event that this support was not provided.

There is discretion built into the system through:

- guidance to doctors from the Medical Risk Assessment Framework (HD 282);
- Skills and Medical Waivers; and
- the MEC 201 subclassification.

The system ultimately though is dichotomous - deploy/not deploy (and if not deploy, transition-out after a short period of time) with the consequences noted.

As has been discussed in relation to screening, stigma and barrier to care, this policy whereby deployability is essential for a member to be able to continue service is an incentive for members to conceal their illness - see Sections 5 and 6. They do this to protect their careers either by not seeking care or seeking it covertly outside the ADF. This is notwithstanding the fact that, if they do deploy with their illness untreated, they may not perform well and need to be extracted. Alternatively their covert treatment in Australia and breach of regulations may well be discovered on deployment if they have an ongoing need for treatment.

⁸⁵ Rona RJ, Hooper R, Greenberg N, M et al (2006) Medical downgrading, self-perception of health, and psychological symptoms in the British Armed Forces Occupational and Environmental Medicine, 63:250-254.

Another difficulty with the system is that doctors necessarily have to exercise discretion in allocating members to a particular MEC classification and subclassification. This is necessary as the MEC system is only indirectly based on the level of impairment or clinical severity of disease including its prognosis under operational conditions. Rather, as noted, it is based on the member's likelihood not to deteriorate if there was a withdrawal of medical or care support for a period up to 21 days.

This comment also applies to the PULHEEMS standards which, while based on a coding system that should reduce the need for doctor discretion is also based largely on impairment levels. Interestingly it tolerates not even minimal symptoms or minor risk or recurrence of an earlier mental illness, with or without treatment.

It would seem worthwhile therefore to develop guidelines around the operation of MEC principles (tolerance of withdrawal of medical or care support for a period up to 21 days). This would build on the Medical Risk Assessment Framework (HD 282).⁸⁶ It uses risk analysis principles of risk identification, risk evaluation and risk treatment. The Likelihood and Consequences of an event are estimated and combined to form a risk level. These levels evaluated on the basis of ALARP (As Low As Reasonably Possible).

These guidelines could be illustrated in relation to a series of common illnesses bearing in mind a range of severities, their prognoses in operational conditions and the availability of medical support for them, perhaps in different deployment area zones.

This would make clear whether decisions about physical and mental illnesses are being made in a consistent fashion. It is clear, from stakeholder reports that broadly it is assumed that musculo-ligamentous injuries are more likely to get better than mental illnesses. This, generally may or may not be true. Whatever the case, it is also possible that some mental illnesses are more likely to get better (and some worse) than some musculo-ligamentous injuries. Evidence and reported experience from other armed forces are likely to be more useful than opinions here.

The guidelines could consider whether it is possible in making MEC decisions to differentiate the location of deployment into particular operational zones such as main supply base or forward operating base.

These guidelines of course could not be applied in an indicative and not mechanistic way. They would be a guide to the doctor. They would be developed by doctors and give full weight to the clinical discretion in decision-making of the individual doctor assessing an individual patient and their circumstances.

It is noted that the Canadian Forces do not take such a dichotomous stance with regard to deployment and medical fitness.

⁸⁶ Department of Defence (2007) Health Directive NO 282 Risk analysis of medical and psychological conditions.

8.2.1 The use of antidepressants on deployment

There is a lively debate about the use of antidepressants on deployment. Psychiatric opinion is broadly that if the condition is stable it should not constitute a risk.⁸⁷ In addition, new generation SSRI antidepressants have much lower side effect rates than old generation tricyclics. Others are concerned about the likelihood of breakdown on deployment, risk of self-harm or harm to others and the need for expensive medical extraction.

It is interesting that antidepressant use is common in US troops in Iraq (6%) and Afghanistan (8-9%).⁸⁸ It would appear this reflects new use of antidepressants as a treatment following exposure to a critical incident(s) in theatre. It is also noted that US soldiers are currently reporting high suicide levels which, though reportedly are related to interpersonal issues, could reflect this practice of prescribing antidepressants.

Antidepressants are commonly prescribed for the treatment of PTSD, anxiety and depression on Canadian home bases.⁸⁹

It would seem that there is a contradiction in current ADF policy towards antidepressant use. These are evidence-based treatments for depression which is a high-prevalence condition and the principal risk factor for suicide. Yet their use renders a member undeployable and unable to continue service (if the use is other than short-term). The trial of antidepressant use on deployment is therefore well-timed. Informed feedback from US and Canadian Defence mental health services on their use on deployment would also be useful.

8.3 Conclusions and recommendations

There are some problems with the operation of the MEC system or more particularly the policy that ADF members must be deployable to continue service in the ADF. This is a change from previous practice when a Home-Only member could continue in the ADF. Whatever else the merits of the current system, it encourages members to conceal their mental, and for that matter, physical health problems. These members run the risk of their health breaking down or necessary treatment not being able to be accessed while on deployment. This may require their medical extraction imposing a considerable cost burden on the ADF.

Recommendation 8.1: Guidelines to guide the application of the MEC system should be developed so as to better define what levels of present or possible future severity of common illnesses (particularly mental illnesses) are compatible with the likelihood of

⁸⁷ It is possible here that a formal Risk Analysis of Medical and Psychological Conditions under Health Directive NO 282 could be undertaken here.

⁸⁸ Thompson M (2008) America's medicated army. Time 171 (24):38-42. based on the Army's Fifth Mental Health Advisory Team report.

⁸⁹ Gutschi M, Vaillancourt R, Boddam R (2006) Antidepressant usage in the Canadian Forces. Military Medicine 171: 107-111.

a member not deteriorating with the withdrawal of medical or care support under operational conditions.

The guidelines would be based on, and further extend the Medical Risk Assessment Framework set out in HD 282. The guidelines would be indicative and take into account the clinical discretion in decision-making of the individual doctor assessing an individual member and their circumstances.

Recommendation 8.2: The proposed strategy for the development of a policy on the use of anti-depressant medication on deployment is supported.

Recommendation 8.3: The concept of differentiating deployment into zones should be explored to investigate if it is possible to increase the proportion of members able to deploy at acceptable levels of risk.

Recommendation 8.4: The recent trial by the Chief of Army for members, no longer deployable to continue in the ADF in nominated roles such as training has value and should be continued.

Section 9 Rehabilitation in the ADF and Mental Health

9.1 The ADF Rehabilitation Program

The ADF Rehabilitation Program (ADFRP) was established in 2006 to provide occupational rehabilitation services utilising a case management model as an adjunct to clinical treatment delivered by Defence Health Services. The ADFRP is aimed at ensuring that all injured or ill ADF members receive high quality, timely and well coordinated clinical and occupational rehabilitation⁹⁰ As stated on the Directorate's webpage, rehabilitation is a key component for facilitating the return of members to a state of readiness as soon as is practicable after injury or illness. Rehabilitation has two purposes: the restoration of physical and mental functioning and the restoration of productive work functioning.

The ADFRP extends the clinical rehabilitation process which is provided by Medical Officers and Allied Health practitioners within Area Health Services.

The principles of the ADFRP are:

1. Early intervention to reduce the impact of injury, illness and disease and contribute to enhanced capability;
2. Utilisation of evidence-based processes to establish clear and accurate expectations of the outcome of rehabilitation and reduce psychosocial complications;
3. Rehabilitation assessments and programs based on an individual's needs and the inherent requirements of service;
4. Workplace-based rehabilitation, where possible, to provide the most realistic environment to assess fitness for work;
5. Engagement of a Program Case Manager (PCM) to coordinate participation of the member, health staff, command elements and rehabilitation decision-makers in the development and execution of rehabilitation programs;
6. Maximising the potential for a positive rehabilitation outcome for the individual, the ADF and the community;
7. Provision of information regarding Defence members' rehabilitation rights and obligations; and
8. Clear roles and responsibilities reflected in organisational performance agreements combined with accountability as measured against the performance indicators of the Services and Groups.

The key components of the ADFRP are:

- Early intervention – through early identification and referral;
- The Rehabilitation Assessment – involving the engagement of relevant stakeholders to facilitate a whole-of-person assessment; and

⁹⁰Directorate of ADF Rehabilitation Services (<http://www.Defence.gov.au/health/DRS/i-drs.htm> accessed Jan 1 2009)

- The development and implementation of a Rehabilitation Program (where appropriate) based on an end goal. A Rehabilitation Program is a strategy designed specifically to meet the member's rehabilitation needs. It outlines what should be done during the member's rehabilitation.

A Rehabilitation Assessment is triggered in a number of circumstances but most importantly when the treating medical officer places the member on absence or restrictions due to illness for more than 28 days.⁹¹ The Rehabilitation Assessment may lead to the development of a Rehabilitation Program if a need for this is identified. The ADF Rehabilitation Program proceeds concurrently with the MECR process.

Medical Officers have primary responsibility for delivering the clinical aspects of the rehabilitation program. MOs work closely with the Rehabilitation Coordinator (RC) and the Program Case Manager (PCM).⁹²

The RC facilitates the referral for a Rehabilitation Assessment and the Rehabilitation Program (if required) through an appointed Program Case Manager. Rehabilitation Coordinators may be authorised to exercise the powers and functions of the Rehabilitation Authority (Repatriation Commission or Military Rehabilitation and Compensation Commission) as delegated by the Service Chiefs.

The PCM is a person or company accredited to provide return to work case management services and tasked by the Rehabilitation Coordinator under contract to Defence. The Unit Rehabilitation Liaison Officer (URLO) is a designated point of contact for each ship/establishment/unit/organisation will act as the URLO. Nominated by the CO/OC, the URLO will advise the PCM on the appropriate Workplace Rehabilitation Representative (WRR) for each referral. The URLO is to seek progress reports from the WRR for those members on a rehabilitation program. Workplace Rehabilitation Representative (WRR) – A WRR is the most appropriate person in the member's workplace to discuss the workplace duties and advise alternate duties available. The WRR is usually the person in a supervisory role and will actively participate in the workplace interview and assist with any issues/concerns. It is the WRR's responsibility to keep the URLO and CO (where required) briefed on the Member's ongoing progress.

These roles and their names are somewhat different to those existing more generally in the community. In the community, PCIMS are known as Approved Rehabilitation Providers (ARPs). They have less discretion to act in their roles in the ADF than in the community. They may be directly or indirectly involved in MECRB processes or Personnel Review Boards through the provision of information on a members Rehabilitation Program.

⁹¹Directorate of ADF Rehabilitation Services - Frequently Asked Questions
(http://www.Defence.gov.au/health/DRS/i-drs_faqs.htm - accessed January 1 2009)

⁹² Directorate of ADF Rehabilitation Services - responsibilities
(http://www.Defence.gov.au/health/DRS/i-drs_Respons.htm - accessed January 1 2009)

Case managers in community occupational rehabilitation programs have roles somewhat similar to Rehabilitation Coordinators but are not generally health professionals and provide less program input. The GP in a community setting generally would have less significant clinical and coordination role than the Medical Officer.

Community-based occupational rehabilitation programs generally involve employers and work supervisors as well as clinicians and case manager.⁹³ Early return to work policies achieve higher rates of long-term return to work with all the psychological, social and economic advantages associated with this. For early return to work to occur, adjustments to the employment arrangements and/or job conditions for that worker may need to occur to accommodate the restrictions on work imposed by their disability both in the short- and long-term. This ranges from the use of aids and modified office or factory furniture to change to another job within the company or elsewhere. Job retraining may be necessary.

Where it is possible to return to work within the company at which the worker was previously employed, the employer (or representative) and more immediate work supervisors should be involved. In the context of the ADF, this will usually mean the member's Commanding Officer or the CO's representative. The involvement of employer representatives and work supervisors desirably involve knowledge of the nature of the worker's disability. This though presents privacy issues associated with medical-in-confidence information known to the worker's doctor and other members of the rehabilitation team. Desirably the worker will consent (through a properly informed consent process) for this release of information to the employer and supervisor so they can most meaningfully contribute to early return to work decisions. If not, it should still be possible for the rehabilitation team and employer and supervisor to discuss early return to work for the worker. This though will need to be based around the present and future restrictions imposed by the disability and the likelihood of future return to work.

This practice is desirable in the ADF as elsewhere. The CO however is more likely to have had more experience of interaction with individual doctors in health and medical matters than with a rehabilitation team and may not understand the different roles and responsibilities of team members.

The Rehabilitation Program contributes to the information provided to the MECR process on an individual's prognosis and progress towards the agreed goal under the Rehabilitation Program. Personnel Review Boards exist in the Army whereby the physical, mental or social welfare of the soldier can be considered. Members of these boards include eg CO, Adjutant, RSM, MO, chaplain and other health practitioners invited by the Board's Chair. A Program Case Manager's involvement in the Personnel Review Boards enhances communication between health providers and Command. These Boards meet as required but it is possible to convene these 6-weekly or at 3-monthly. This could occur, for example, for a member with a chronic mental illness on the ADF rehabilitation program.

⁹³ Comcare – Rehabilitation Case Management
(<http://www.rehabmanagement.com.au/default.asp?page=/services/injury+management/rehabilitation+case+management> accessed Jan 8 2009)

9.2 Common chronic mental illnesses and rehabilitation program in the ADF

The two most common chronic mental illnesses that set in train rehabilitation programs are Posttraumatic stress disorder (PTSD) and Adjustment disorders. An outline of *Best-practice treatment for PTSD* is set out in Appendix 9. An outline of *Best-practice treatment for Adjustment disorders* is set out in Appendix 10.

As described on the ACPMH's website, PTSD is a set of reactions that can develop in people who have experienced or witnessed an event which threatened their life or safety or that of others around them and led to feelings of intense fear, helplessness or horror.⁹⁴ The principal signs and symptoms are reliving the traumatic event, being overly alert or wound up, avoiding reminders of the event and feeling emotionally numb. Up to 80 per cent of people who have long-standing PTSD develop additional problems, most commonly depression and anxiety. Many also start misusing alcohol or drugs as a way of coping.

According to the Australian Guidelines for the Treatment of Adults with Acute Stress Disorder and Posttraumatic Stress Disorder, the principal aim of treatment for PTSD is for the individual affected to confront the traumatic memory and work through thoughts and beliefs associated with the experience.⁹⁵ Trauma-focussed treatments - Cognitive Behavioural Therapy (CBT) and Eye Movement Desensitisation and Reprocessing (EMDR) - can reduce PTSD symptoms, lessen anxiety and depression and improve a person's quality of life. Drug treatments should not be initially considered unless the trauma-focussed treatments are insufficient to substantially reduce the person's distress. Where medication is considered for the treatment of PTSD in adults, Selective Serotonin Reuptake Inhibitor (SSRI) antidepressants should be the first choice for both general practitioners and psychiatrists.

Adjustment disorder (AD) is a psychological response to an identifiable stressor or group of stressors that causes significant emotional or behavioral symptoms that does not meet criteria for more specific disorders. Adjustment Disorders may be acute or chronic.⁹⁶ These symptoms or behaviours are clinically significant if distress is in excess of what would be expected from exposure to the stressor, significant impairment in social, occupational or educational functioning occurs, the symptoms are not caused by bereavement and the stress-related disturbance does not meet the criteria for another disorder. Once the stressor (or its consequences) has terminated, the symptoms do not persist for more than an additional six months.

⁹⁴ Australian Centre for Posttraumatic Mental Health Posttraumatic stress disorder (PTSD) (<http://www.acpmh.unimelb.edu.au/trauma/ptsd.html> (accessed Jan 1 2009))

⁹⁵ Australian Centre for Posttraumatic Mental Health (2007). Australian Guidelines for the Treatment of Adults with Acute Stress Disorder and Posttraumatic Stress Disorder. ACPMH, Melbourne, Victoria.

⁹⁶ Bisson JI, Sakhuja D (2006) Adjustment disorders. *Psychiatry* 5: 240-242.

Stressors causing Adjustment Disorders may be major but may also be apparently minor, like a relationship breakdown, a poor school results or moving to a new neighborhood. The objective nature of the stressor is less important than their perception by the individual affected as being stressful.

As Bisson and Sakhuja (2006) state, given the limited evidence base for the treatment of AD, watchful expectancy should be considered initially. If symptoms are not improving or are very distressing then treatment should be directed at the predominating symptoms. This will usually involve following evidence-based treatment guidelines for depressive disorders, anxiety disorders and PTSD, with the use of cognitive behavioural therapy and medication for some individuals.

9.3 The challenge of mental illness for ADF rehabilitation program

Around two third of members with chronic mental illnesses in contact with the ADF Rehabilitation Program return to work. That said, chronic mental illness presents a challenge to Rehabilitation Service Providers. Individuals with PTSD and Adjustment disorder can be difficult to engage and treat as a result of their condition. Rehabilitation as a discipline has been more focused on chronic physical than chronic mental illnesses and disabilities. In Victoria for example, Psychiatric Disability Rehabilitation and Support Services operate quite separately from other rehabilitation services. The evidence is also limited what part movement and exercise - core activities in the rehabilitation programs for physical disabilities - have for the rehabilitation of mental disabilities.

A scenario that is common in forward bases operating at high pace and operational tempo is for a member to return from deployment with either posttraumatic stress symptoms or adjustment difficulties. The former occur as a result of exposure to traumatic stress, the latter to other aspects of the deployment experience. These include interpersonal problems with officers or other ADF members, separation from family and friends outside the ADF, as well as reappraisal of their ADF experience and future commitment including further deployments. These members are hard to engage and to comply with their treatment or later rehabilitation program.

There may be difficulties finding such care. Psychologists on base may be few in number with long waiting lists and unable or with insufficient skills to provide a course of evidence-based care. Psychiatrists may have long waiting lists. Psychologists at VVCS or other private agencies may or may not be available. They may also lack the skills or availability of session times (90 minutes) to engage in a course of trauma-focussed cognitive behavioural therapy for PTSD. PTSD inpatient programs offered by a number of facilities around Australia were designed more for older Vietnam veterans with late-onset and late-stage PTSD and are not very suitable for young members with early-onset and early-stage disease.

It appears there are some difficulties finding alternative employment (light duties) for members in the ADF. These are greater if the member is say, from the infantry than a trade area.

Member with these conditions may be disruptive in their unit and in turn they may experience stigma and negative behaviour towards them from their NCOs and other members of their units. They may 'become allergic to the green uniform' and be given extended periods of sick leave during which time they will live off-base with possible restrictions on coming onto base. They may be living with members with whom they do not necessarily have long-term friendships or relationships. They may engage in risky behaviour involving alcohol, drugs and fighting and exhibit self-harm.

The chain of command may become concerned for their welfare and request them to make contact with their unit. They may not agree to this, setting in a train exchanges that escalate to a direct order and refusal, and then military discipline proceedings. Alternatively, the RC or PCM from the rehabilitation team may also become concerned about their welfare and put forcefully to them that they return to their program of care. The member may refuse or become agitated and threaten self-harm.

Another scenario involves a recruit who is not coping with recruit training. They may be placed in 'rehabilitant platoons' which have little clinical rehabilitation purpose and form no part of the ADF Rehabilitation Program. They operate at different grades and members may engage in menial work outside their unit on base. While often named after military heroes, the platoons are strongly stigmatised by others on base. Whether they hasten or hinder early return to work is unknown.

9.4 Assessment

This overall assessment is based on a review of all technical and research documents, stakeholder input and public submissions. A summary of themes arising out of both individuals and organisation submissions relevant to the *ADF Rehabilitation Program and Mental Health* are included in Appendix 5. Rapid reviews of the research literature are set out in the following Appendices:

Best-practice treatment for PTSD	Appendix 9
Best-practice treatment for Adjustment disorders	Appendix 10
Combat exposure and Post Traumatic Stress Disorder	Appendix 11.

As noted around two third of members with chronic mental illnesses return to work. Nevertheless there is much concern about the welfare of these members with chronic mental illnesses. Clearly current programs are not working well. New approaches are needed that will be more successful and reengage these members and accelerate their return to work in the ADF. Alternatively, if they are not interested or able to reengage, these new approaches will expedite their transition-out of the ADF, during which time however they may acquire new skills as part of ADF transition services.

To reengage more of these members with chronic mental illnesses, new approaches for their occupational rehabilitation will need to be considered. If this was done, it should be more possible to find alternative employment either within their unit or beyond. While there are difficulties, there is also worthwhile benefit, a functioning member with a better quality of life who may otherwise passage into resentment, loss of employment and chronic invalidism. In human capital terms, it protects the ADF's investment in the member's training and a large, possible pay-out for military compensation.

A new rehabilitation model is also needed. One is available derived from the experience of the British Army and shows early signs of success.⁹⁷ It involves a new Military Training And Rehabilitation Unit (MTRU) that emphasises military skills training. Since 1995 this has been part of the triservice psychiatric unit of the recently closed Duchess of Kent's Psychiatric Hospital in Catterick Garrison. Because of its significance, the program is set out in some detail below, in the words of the authors.

The MTRU contains 27 beds in single-room, barrack-style next to the psychiatric in-patient unit. Patients from the inpatient psychiatric unit are screened for the capacity to live independently. The aim of phase 1 training is for patients to be re-motivated to remain in the army. The program is managed by a military psychiatrist and multi-disciplinary team. It consists of day centre care with occupational therapy and individual ward-based psychological therapy.

Phase 2 training is managed by military nursing staff with access to medical staff. It consists of 5-week course of army exercises and training, up to 4 hours per week of individual psychological therapy. Uniform and military training are compulsory and normal military disciplinary rules apply. Patients are trained to army standards in fitness and military skills. The aim is for is refamiliarisation with army culture. Soldiers' ability to fit back into their individual units can be more accurately appraised. The safe use of weapons is monitored.

A case-matched cohort study with 12-months follow-up was conducted that compared MTRU patients with hospital in-patients. The odds of a soldier in the MTRU cohort (n=35) returning to active duty were 14 times greater than for the hospital cohort. The odds of remaining in the army while unfit for active duty were 20 times less for the MTRU than for the overall hospital cohort. 67 (22%) of the hospital in-patients, n=309) at 2-year follow-up were fully fit for active duty. Since the members of the MTRU were screened, they were not completely equivalent with the other psychiatric patients despite the case-matching. Nevertheless the overall success rate (22%) for the whole inpatient psychiatry group - fully fit for active duty - is above expectations for this group.

The scale of this program exceeds what is possible in the ADF with the possible exception of the proposed national tertiary-level inpatient facility. Nevertheless, the concept of a graduated return to military life which combines both treatment for mental illness and military training as a form of vocational rehabilitation is interesting and worth studying for adaptation to ADF circumstances.

Graduated methods to reengage recruits with some, less intensive features of the MTRU processes are needed for recruits who are currently members of 'rehabilitation platoons'. Alternatively they need vocational and other assistance in the process of transitioning-out of the ADF.

⁹⁷ Neal LA, Kiernan M, Hill D et al (2003) Management of mental illness by the British Army. *Brit J Psychiat* 182: 337-341.

9.5 Conclusions and recommendations

There are some problems, alongside many successes with the new ADF Rehabilitation Program. This is to be expected in a program so recently introduced. These are first, the availability of alternative employment options for members with chronic mental illness and second, more effective rehabilitation programs. The establishment of the Regional Mental Health Units and national inpatient mental health facility should support rehabilitation programs for members with chronic mental health problems.

Recommendation 9.1: The current occupational health model in relation to members with chronic mental conditions needs further development. This will further involve not only the member and the care team, but also their commanding officer.

Recommendation 9.2: Support for alternative employment in the member's unit, or elsewhere in their base depends on the mental health literacy of officers as well as other ranks. Rehabilitation for members with chronic mental illnesses including the desirability of alternative employment should therefore be a component of the mental health literacy training in training, promotional and officer training courses, as set out in Section 6.

Recommendation 9.3: Participation in on- or off-base rehabilitation programs aimed at returning the member to work is also important. These programs realistically may need to prepare the member for return to work outside the ADF. The principles of rehabilitation (a graduated return to military life which combines both treatment for mental illness and military training) at the former Military Training and Rehabilitation Unit (MTRU) in the UK is worthy of further study.

Recommendation 9.4: On-base 'rehabilitation platoons' stigmatise their members and, as a practice should be discontinued.

Section 10 Transition from the ADF

10.1 Introduction

It is very important that transition occurs seamlessly as otherwise a rupture can occur and members may only present many years later when their mental health problems and their consequences are more severe and intractable.

Around 5,000-7,000 members discharge from the ADF each year. About 10% of these do so for health reasons (500-700), with 10-15% (60-90) of these in turn being related to mental health.

The principal transition services provided to members are:

- Transition Support Services;
- ADF Transition Centre;
- Transition Management Service;
- Integrated People Support Strategy;
- Stepping Out Program;
- Lifecycle Transition Mental Health Family Collaborative.

10.2 ADF Transition Support Services

There are 19 Regional ADF Transition Centres around Australia. These Transition Centres are part of National operations Division with the Technical Authority sitting in Personnel Support Services, which is run in turn by the Defence Support Group (DSG). This nationally-based program was introduced in 2001 and was superimposed on earlier arrangements on base where the Adjutant or Chief Clerk constituted a Discharge cell and had full responsibility for transition activities. They would also determine the content of transition materials provided to members.

As stated on the Transition Support Services' website, the aim of the Transition Centres is to assist members to complete their requirements with the ADF.⁹⁸ They also aim to assist members and their families to become separation ready. They provide information relevant to the members' needs and link them to bodies such as the ADF Rehabilitation Program, DCO, Defence Families, Defence Housing, DVA, ComSuper and Centrelink.

The Regional Transition Coordinator organises an initial and final one-on-one interview with the separating member.

They conduct 2-day Transition Seminars ADF members (and their families if they are available).⁹⁹ As stated on their website, they cover the following topics:

⁹⁸ My nearest ADF Transition Centre
(http://www.Defence.gov.au/transitions/my_nearest_adf_transition_centre.htm accessed 8 Jan 2009)

⁹⁹ Transition Support services. Seminar content
(http://www.Defence.gov.au/transitions/when_is_the_next_transition_seminar_on.htm#SeminarContent accessed Jan 6 2009)

- Your Career and You (Day 1) The tools of Good Career Decision and Management; Job Search Strategies; Networking; Job Application; Resume; Winning the Interview; Managing Referees; Resources; Making a Decision and Action Planning.
- Your Money and You (Day 2) Personal Wealth Creation and Financial Planning; Financial Advisers – the Facts and the Fiction; Starting, Operating and Selling a Business; Protecting your Assets; Private Health Insurance; ComSuper presentations on MSBS and DFRDB; Transition Support Benefits; Transition Support and Administration; Department of Veterans' Affairs and VVCS; Reserve Service.

Educational institutions and ESOs mount information stands at the Seminars for member interest

As further stated on the Transition Support Services website, the Career Transition Assistance Scheme (CTAS) provides a wide range of career transition support to separating ADF members.¹⁰⁰ As well as being involved in the Transition Seminars, CTAS provides on-line information. It also provides career transition training, career transition management coaching, curriculum vitae coaching and financial counseling. This is available for members with 12 or more years of service as well as members transitioning-out for medical reasons, irrespective of their number of years of service. Training that is supported is set at an equivalent (rather than upgraded) level to the member's previous educational level.

The Transition Centres provide information and access to ComSuper and service pensions so that members are aware of their full entitlement and are able to make effective applications. Members may be entitled to compensation for the effects of an injury, disease or illness which they believe is related to their service in the ADF. In this event, they are encouraged to lodge a claim for compensation with the Department of Veterans' Affairs (DVA), even if their medical condition is not currently causing any problems. If liability is accepted by the DVA, eligibility for various forms of compensation, rehabilitation and, in some cases, repatriation benefits can be assessed.

Welfare and Pensions Officers who are volunteers working within Ex-service organisations (ESOs) can provide further assistance with claims for compensation to veterans and former serving members. The Training and Information Program (TIP) provides training and information for these Officers.

Some stakeholders stated that the amount of information provided to members at these seminars is excessive and it is difficult for members to absorb all of it.

10.3 Transition Management Service

The Transition Management Service (TMS) was introduced in 2002 (after earlier trials in 2000-1) particularly to ensure and expedite the lodgement of DVA

¹⁰⁰ Career Transition Assistance Scheme (<http://www.Defence.gov.au/transitions/support/ctas/ctas.htm> accessed at Jan 9 2009)

compensation claims. There are nine TMS coordinators and offices around Australia currently.

As stated in the fact sheet on the DVA website, the purpose of the TMS more generally is to assist full-time serving members of the ADF who are being transitioned-out on medical grounds.¹⁰¹ DVA provides the TMS on behalf of the ADF, particularly in regard to rehabilitation and compensation services. However, assistance is provided to members whether or not they have lodged a compensation claim.

The aim of the TMS is that eligible members should make a successful transition to civilian life by ensuring that they have access to the full range of available information and services. TMS is a voluntary service and free of charge to members – although in fact 95-97% of them make contact with the TMS, initially at least with more variable subsequent level of use. The ADFTCs and ADFRP also advise TMS of members who are separating medically.

The intention is that there is a ‘seamless’ transition from military service to civilian life. This can only happen if the ADF and DVA cooperate fully to ensure this. Thus TMS Coordinators work in collaboration with ADF Transition Coordinators, CTAS staff and ADF Rehabilitation Program Case Managers.

ADF members can use the TMS if they are presently or soon likely to become MEC4. In other words, they are likely to be, or actually will be transitioning-out on medical grounds eg if they are referred to a MECRB or if it confirms they are to be transitioned-out They also develop for the member a 'Personal Transition Action Plan' on maximising entitlements, possible future employment options, post-discharge medical matters, superannuation, housing, financial planning, insurance, compensation, and other general assistance.

TMS staff may assist members who are relocating to new towns and cities, perhaps in country areas on separation on accessing the best treatment and rehabilitation services in their new locations.

An important benefit for separating member for mental health reasons is their eligibility for a White Card that pays for treatment of PTSD, anxiety and depression.

10.4 The Integrated People Support Strategy

The Integrated People Support Strategy (IPSS) was established in 2007 by then Minister Bilson. It was established as a 12-month pilot program at the Edinburgh RAAF base in South Australia and Fleet Base West, HMAS Leeuwin and RAAF Pearce base in Western Australia. It has now rolled-out through Townsville and now exists nationally. An evaluation report on the pilot stage has been accepted and has resulted in the IPSS being implemented nationally..

¹⁰¹ Transition Management Service (<http://www.dva.gov.au/factsheets/default.htm> accessed 7 Jan 2009)

It is also delivered by Personnel Support Services, in turn part of the Defence Support Group (DSG) (albeit a different section of PSS). It is endorsed by the CDF and aims to reinforce ADF Transition Support Services.

It has four main aims:

- Through Life Support - members are fully informed about all available health, illness and related support services such as financial advice;
- Separation Ready - members receive all relevant services so that they are fully prepared to return to civilian life;
- Separation Reconciliation - members have resolved all outstanding Defence-related matters before separation;
- Separation Review – conduct of a review at three to six months post-discharge to monitor progress towards achievement of the three other goals.

The IPSS team, which is based in Campbell Park, Canberra has developed transition-related materials for member use for delivery by all Transition Centres. This will ensure that members, wherever they are based in Australia will receive the same set of materials.

The IPSS also organise Regional Stakeholder Forums that aim to assemble all relevant service providers (DVA, ComSuper, DCO, Defence Families, the Regional ADF Rehabilitation Coordinator, Senior Medical Officer, Chaplain and Defence Housing and ADF Financial Services.

IPSS make no special arrangements for members transitioning-out for medical reasons. It believes that ADF Rehabilitation Program's Program Case Managers are well placed to undertake this role. This does not currently happen and they would need to extend their role to do this. VVCS report that very few members who indicate on their IPSS questionnaire that they wish to talk to DVA or VVCS wish to take up the offer when approached by VVCS.

Since the TMS was established in 2003 both the IPSS and the ADF Rehabilitation Program have been rolled-out. In addition members may need to make contact with others organisations for income support other than DVA such as Military Superannuation and Centrelink.

As a result, there is now a lively debate in the ADF whether TMS and IPSS provide the same service and whether TMS can interact with the ADF Rehabilitation Program as well as the ADF-based IPSS – see Section 10.4 below and Section 9. DVA is of the view that the two programs are complementary. IPSS can initiate earlier contact with members and TMS can interact more frequently with members transitioning-out on medical grounds because of its particular focus on them.

Some stakeholders commented that IPSS and transition services generally require greater promotion and support by commanding officers to be most effective. This may be an unanticipated negative consequence of responsibility for transition services being transferred from bases to DSG.

One consideration is that a service aimed entirely at members transitioning-out for medical reasons, such as TMS will not capture all members with medical problems.

This is because a number of these will only declare themselves at a future distant time eg late-onset PTSD.

10.5 Stepping Out Program

As stated on the Stepping Out website, the Veterans and Veterans Families Counselling Service (VVCS) offer the Stepping Out Program to assist members in their transition to civilian life.¹⁰² It is a 2-day program available nationally through the 15 VVCS centres. It is voluntary and free of charge to all ADF members and their partners, who are separating or recently separated from the ADF. It is delivered by VVCS psychologists and social workers.

The program provides information and skills to manage the transition to civilian life. Topics include the experience of change as part of life, the transmission from ADF to civilian life, skills for planning ahead, expectations, plans and troubleshooting and maintaining relationships and seeking support.

Stepping Out originated in Townsville where there are very good relations between the ADF and the VVCS.

It has offered a number of courses but some have had to be cancelled due to insufficient numbers. Stepping Out is still not well known in the ADF and only has limited time to present at the Transition Seminars and needs to be better promoted. A concern was expressed that its marketing with a focus on psycho-social issues could be offputting for some members.

10.6 The Lifecycle Transition Mental Health & Family Collaborative

The full name of this program is the Transition Mental Health and Family Collaborative (Townsville) which comprises two of the Australian Government's Mental Health Lifecycle Initiatives for Veterans and Former Serving Members – see Section 12.2.1.

This program is being piloted in Townsville (Lavarack Barracks and RAAF Townsville) and Cairns (HMAS Cairns) starting November 2008.¹⁰³ It aims to improve the level of engagement, assistance and treatment for ADF members (as well as their families) who are transitioning-out and experience, or are at risk of experiencing mental health problems.

There are five priority areas:

- Collaboration improved inter-agency collaboration;
- Engagement effective engagement and communication practices;
- Recognition better recognise mental health problems and related issues;
- Families improved family sensitive and inclusive practices;

¹⁰² Stepping Out Program (http://www.dva.gov.au/health/vvcs/group_programmes_doco/P01433.pdf accessed 7 Jan 2009)

¹⁰³ A/Prof John Pead – pers comm

- Interventions more effective advice, support and treatment.

The Lifecycle initiative does not aim to be a new pilot working alongside other programs.

Rather it aims to support both the IPSS and TMS by working with agencies that are providing the most important transition services to members with, or at risk of mental health problems. ACPMH will meet with individual agencies monthly and convene three joint meetings of agencies.

10.7 Defence Links - The Interdepartmental Working Group (IWG)

This whole of Government Initiative involves the ADF and DVA.¹⁰⁴ More recently, these two Departments have been joined by:

- ComSuper (which operates the Military Superannuation and Benefits Scheme (Military Super) and the Defence Force Retirement and Death Benefits Scheme (DFRDB);
- Centrelink;
- Department of Families, Housing, Community Services and Indigenous Affairs (FaCHSIA); and
- Department of Human Services

A new Separation Health Examination is being trialled in the Wagga and Canberra regions between Nov 2008 and April 2009. It will include medical information needed by DVA and ComSuper as well as an application form for compensation or superannuation benefits. The intention is to reduce the number of medical examinations that members need to attend in submitting claims for disability to DVA and ComSuper. During the trial, the time/effort spent on claims in Canberra to DVA and ComSuper will be compared with other regions.

While other progress has been made (eg DVA, ComSuper, Centrelink and FaCHSIA agreeing in principle to adopt a common policy definition for what constitutes a member of a couple), some ESOs expressed impatience at the pace of decision making by the IWG.

There are other forms of government provision of income maintenance relevant to members transitioning-out eg service pensions administered by DVA as well as disability support pensions and Family Tax Benefit supplements by Centrelink. These are within the remit of the IWG.

10.8 Role of the ESOs in the transition process

ESOs have a relatively small role during the transition process. The TIP Chairman for the Region has a role at the IPSS Regional Stakeholders Forum. ESOs have a limited time to speak to members attending Day 2 of the Transition Seminars and are also

¹⁰⁴ Defence Links Section Whole of Government Initiative
(http://www.dva.gov.au/adf/docs/IWG_Update.rtf accessed at Jan 7 2009)

able to mount information stands at these seminars. Some ESOs wish to establish a more permanent presence on base with advocates to assist members in submitting compensation claims to DVA. The central role that the RSL had anticipated in the IPSS has not eventuated.

10.9 Programs and schemes impacting at both ends of the transition process

If the member has a chronic (mental) condition problem, they are likely to be in contact with rehabilitation services both before and after discharge. Before discharge, this will involve the ADF Rehabilitation Program with

- the Rehabilitation Coordinator having delegated powers from the Service Chiefs under the Military Rehabilitation and Commission (MRCC); and
- the Program Case Manager (nominated by the contract agency providing services) who has a more direct service role – see Section 9 for an outline of the scheme.

After discharge, the MRCC (if relevant) uses ComCare guidelines to provide rehabilitation services through an Approved Rehabilitation Provider appointed by the contract agency providing services.^{105 106} The handover desirably should be as seamless as possible. If the member is not relocating on discharge, it is good practice if the same rehabilitation practitioners provide services both pre- and post-discharge. If the member is relocating on discharge, TMS is able to assist to provide the most appropriate agencies and practitioners – see Section 10.3 above.

It should be noted that the ADF Rehabilitation Program offers clinical but not vocational rehabilitation. The latter usually only occurs after the acceptance of liability under DVA administered compensation schemes. This usually occurs post-rather than pre-discharge. Some financial assistance is available to members separating with medical reasons for vocational retraining purposes is available through CTAS as noted in Section 10.2 above.

As also noted, the separating member can make claims to one or more of the veterans compensation schemes administered under the Military Rehabilitation and Compensation Act (MRCA), the Veterans Entitlement Act (VEA) and the Safety Rehabilitation and Compensation Act. These will be discussed in further detail in Section 3 of the *Independent study of Suicide in the Ex-Service Community*. The other income maintenance schemes (military superannuation scheme as well as non-military pensions and benefits) are discussed in Section 10.7 above. This complex array of compensation and other schemes is particularly confusing to the separating member with mental health problems. Both ISS, TMS and ESO advocates all offer services to assist the member to make an effective application. The Separate Health Examination trial of the IWG – see Section 10.7 - if successful, will also simplify the processes and steps involved.

¹⁰⁵ The nomenclature is confusing here as what ComCare describes as an Approved Rehabilitation Provider is what the ADF describes as a Program Case Manager.

¹⁰⁶ The applicable rehabilitation scheme under the Veterans Entitlement Act (VEA) is the Veterans Vocational Rehabilitation Scheme (VVRS).

10.10 Transition culture and context

Many stakeholders commented on the difference in cultures between the ADF and DVA and the impact of this on separating members. In the ADF, a comprehensive range of services and benefits free of charge to members are available to them and to which they are directed by the chain of command. These end, however at discharge including Transition Services (though see the Separation review goal of IPSS in Section 10.4 above). For medically separating members CTAS entitlements can be extended for up to 12 months post-separation, and in some cases, particularly for those members with PTSD or extensive injuries, longer periods of time have been approved to support the member.

Post-discharge circumstances are different - DVA no longer provides direct services, with the exception of VVCS, since responsibility for Repatriation Hospitals has been transferred to state public hospital systems. DVA is rather the funder of a comprehensive range of services, benefits, aids and appliances. DVA does not therefore initiate contact with former members but waits for them to do this. It may be an unfamiliar experience for the former member to be proactive in this way as they were more used to being reactive in the ADF.

Some also commented on the fact that these differences were exaggerated by there being two rather than one Departments involved and since the election of the incoming government, two rather than one Ministers.

The member will also bring to their transition period, their personal circumstances frequently arising from difficulties in adjusting to service life post-deployment. There may be family problems or mental conditions such as Post Traumatic Stress symptoms or an adjustment disorder – see Sections 6.1.3 and 9.2. If they have been downgraded to MEC4, they know their career with the ADF is at an end. The member may in any of these circumstances wish to blame the ADF. Some may feel that their sense of vocation has not been recognized or even exploited by the ADF. This makes them susceptible to contact with other separating members or some ESO advocates who may encourage them to seek a large compensation payout. Focus groups conducted at Enogerra indicated that members had very little knowledge of services offered by DVA and were mainly aware of the Gold Card and TPI.

The transition period can be quite extended. First, there is the period before the MECRB when transition seems likely but not certain. A significant proportion of TMS clients in fact do not transition-out but have their MEC status upgraded or are issued with a Medical or Skills Waiver at the MECRB. At this stage, members who are likely, but not certain to transition-out are reluctant to lodge a DVA compensation claim since it may affect their ability to deploy. This affects their interaction with the TMS.

After the MECRB confirms the MEC4 status of the member, there is a 3-4 month period, varying slightly across the three single forces before separation. This may be delayed however if the necessary transition processes have not been completed. Delays to locate and assemble medical files both across bases and from the locations

of their deployments will be important here.¹⁰⁷ During this time, the member may be on convalescent leave but in any event are unlikely to be with their unit. At this time they may suffer low morale and feel disengaged and resentful. This may be compounded by the fact that some members are young, poorly educated and lack life skills.

One final problem is that not all former members are veterans yet some have been exposed to traumatic stress events such as the cleanup of the post-tsunami in Aceh and exchange of fire with illegal Indonesian fishing boats.¹⁰⁸

10.11 The Keeping In touch program

There is a proposal within DVA to establish a Keeping in touch program. This program would have some of the features of an alumni association of an institution such as a university or school. The aims of alumni associations generally are to keep members acquainted with events occurring at the institution both for the benefit of the individual and the institution. Individuals are informed of matters of interest and advantage to them, such as forming social networks. The institution gains a network of supporters who can be a source of funds and influence.

To establish an alumni association requires recording contact details (email, mobile telephone number, forwarding address and next of kin address) of individuals when they leave the institution. A database can then be established and the association can then communicate with members on a regular basis about events such as reunions and other occasions.

A Keeping in touch program would have some but not all features of an alumni association. It would have two important advantages for DVA and the ADF. It would communicate to the individual that their ongoing involvement with Defence was important to the ADF. It could promote reunions but also health promotion and mental health promotion seminars and groups both new and well-established within the veteran community.

There may be other ways that the ADF can recognise the contribution of members who are transitioning-out for medical reasons, including mental health.

10.12 Assessment

This overall assessment is based on a review of technical documents, stakeholder input and public submissions. A summary of themes arising out of both individuals and organisation submissions relevant to *Transition from the ADF* are included in Appendix 5.

In principle, a seamless discharge is important for all ADF members, transitioning-out for medical reasons. Services should start as soon as possible after first notification of intention to discharge and could continue for a period beyond discharge (to, say 12 months) so to ensure that any compensation and superannuation matters that had not

¹⁰⁷ This timelag reflects the absence of a robust electronic health information system in the ADF.

¹⁰⁸ Such members or civilians can still be covered by appropriate compensation schemes such as MRCA or SRCA.

been fully processed at discharge had been so. A number of services with either the ADF or DVA responsible have now been established to support this. There does seem to be however duplication in the services offered by the IPSS and TMS which needs to be resolved. Both services focus on comprehensive information dissemination though IPSS has the additional aim of promoting communication and coordination between agencies. Neither, as presently organised have the skills to engage with members with established mental health problems or to detect members with as yet unrecognised problems.

The Lifecycle Transition Mental Health and Family Collaborative can make a real contribution in this regard by supporting and training IPSS/TMS staff members.

It is likely that some additional expertise may be needed to engage with members with mental health problems who are currently unengaged and not progressing well through the stages of their transition. This could be their Rehabilitation Program Case Manager or the mental health practitioner most involved in their treatment either on base or in the VVCS.

Joint responsibility of these services by ADF and DVA is highly desirable. ADF is better able to engage early including with the ADF Rehabilitation Program. DVA is better able to engage early with lodging of compensation claims. Other agencies could be involved with a relevant interest such as ComSuper (representing Military Super and DFRDB) and Centrelink.

As will be argued in Section 11.5, families should be welcomed into the broad 'Defence family'. They should more specifically be invited to participate in transition activities. They bring an important perspective, interest and insights to bear that should be beneficial to the transition process. A redesigned Stepping Out program could be a suitable vehicle for this. To do this it would need to be better connected with the Transition Seminars.

The ESOs currently have a small role in the transition process. As noted some ESOs wish to establish a more permanent presence on base as advocates to assist members in submitting compensation claims to DVA. Some ESOs have put policies in place to cooperate with other ESOs and avoid such practices as competing for members. The future role for advocates has been however the basis for comment both in the Doogan Inquiry¹⁰⁹ and the companion study to this report *Independent study of Suicide in the Ex-Service Community* – see Section 5 of that report. Both argue for the need for further training and accreditation of advocates to ensure that they are able to provide professional advice across all three veterans compensation acts including MRCA with its focus on rehabilitation as well as compensation. It would be counterproductive therefore to move to an expanded role for advocates on base at this stage.

10.13 Conclusions and recommendations

Recommendation 10.1: The ADF and DVA should have joint responsibility for a comprehensive transition service that works closely with the ADF Transition Centres

¹⁰⁹ Doogan CM (2007) Investigation/Inquiry report for the Department of Veterans Affairs and ComSuper relating to their dealings with the later Mr Geoffrey Gregg:40.

and extends to at least 12 months post-discharge. It should resolve the duplication in services now being offered by the IPSS and TMS. ADF should fund pre-discharge activities and DVA post-discharge activities within this joint responsibility.

Recommendation 10.2: The Lifecycle pilot adds value to existing programs (IPSS/TMS) in improving staff training and support. If successfully evaluated it should be rolled out nationally.

Recommendation 10.3: In principle families should have an involvement in Transition programs. This could be at the Transition Seminars involving the Stepping Out program that may need some redesign.

It is important that members of the ADF who transition out for reasons for mental illness believe that their contribution to the ADF is fully acknowledged. Joining the ADF requires the new member to undertake a necessary major, somewhat forcible psychic reorientation. Failure then to succeed in the ADF for whatever reason sets in train a sequence of possible negative reactions – anger and resentment against the ADF, failure to find new employment, illness and invalidism. This may occur for a variety of reasons - health, aptitude, unsuitability, guilt, shame, bullying, post-deployment reinterpretation of the ADF experience. This is most undesirable in both personal and economic terms for the individual, ADF and community.

Recommendation 10.4: It is important that members leaving the ADF with mental health (or other problems) are fulsomely acknowledged for their contribution to the ADF, particularly so as their health had deteriorated while they were in the ADF. This could take the form of a letter of thanks from CDF or Passing out Parade.

Recommendation 10.5: A Keeping in Touch program post-discharge with responsibility jointly by the ADF and DVA extends this healing process. In doing so, it is likely to make an important contribution to the proactive management of any emerging mental health problems.

Section 11 Mental health and families in the ADF

11.1 Families of ADF members

There are around 22,000-25,000 traditional families in the ADF and more, if all forms of families are included (de facto, separated families with children, same sex, singles and their parents).¹¹⁰ This is close to half of all ADF members. An increasingly frequent arrangement is for Member with Dependents – Unaccompanied (MWDU) where the family does not accompany the member to a new posting location with five family reunion visits per year.

Military life imposes stresses not only on members but on their families. Members are posted to different bases at intervals and this means that families must relocate. This means a change of home, change of job for the partner (increasingly frequently) and a change of school for the children. Friendship networks and possibly family connections will be disturbed.

Increasingly frequently, members are also deploying producing separation of members and their families for several months. Deployments are becoming longer (six to eight months) and more frequent. Some members have deployed on several occasions.

The lengths of separation is longer than the actual length of the deployment if times for force preparation and Relief Out Of Country Leave (ROCL) are included Post-deployment exercises and training programs which may be conducted away from the member's base and place of residence, add to this. The deployment cycle is sufficiently frequent now, that after returning from one deployment, plans are being made for the next deployment and families, as a result may remain unsettled.

Partners and families may also be subject to the adverse psychological effects of the deployment experience. Members make a rapid transition from deployment to family life. They are unlikely to be able to share the intensity of their deployment experiences with their partner. They may have been exposed to traumatic and other stresses. They may be hypervigilant and consume alcohol excessively after several months of prohibition.

The family dynamics may have changed in their absence and they may want to assert their influence. Sometimes this may tip over into violence to partners and children and risky driving. They may be unaware of these changes in their behaviour.

Partners are frequently aware of these changes and able to inform responsible officers on base through the Military Support Officers of the Defence Community Organisation. They may feel constrained though in doing this without the member's consent as there may be fears of the effects of this on the member's career.

¹¹⁰ Processes exist for the recognition of non-traditional family by the CDF.

Family dysfunction and upset self-evidently will have an adverse effect on members both while they are on base and even more so, on deployment. With modern electronic communications (GPS mobile phones, email and Internet phones) members and their families can usually be in very frequent contact. While this has obvious advantages, it does mean that the members can feel embroiled in family problems as well as frustrated and distressed that they are not at home to deal with these - see Section 6.1.2. Sometimes compassionate leave is granted to the member in these circumstances particularly if the location of the deployment is not too distant from Australia.

Family members can obtain assistance from Defence Social Workers and others at the Defence Community Organisation – see Section 11.2 below. They may not however be able to obtain mental health counselling from DCO in future. They can not currently do so from VVCS (unless their partner has veteran status). While the ADF currently pays VVCS for services to non-veteran members, it does not do so for partners.

Separations of members from their families can have more permanent effects. Members may decide to leave the ADF which they are able to do for family reasons after the first four years of service. Sometimes there is a family separation. This happened very frequently when deployments at a previous time were of 12 months duration and was a reason for the reduction in their length. Nevertheless the separation rate remains high.

11.2 Defence Community Organisation (DCO)

An outline of the Defence Community Organisation (DCO) and the work of Defence Social Workers and other DCO staff has already been outlined at Sections 3.1.1, 3.1.2, 3.3.2 and 3.8.1. DCO's role in mental health and bereavement counselling following a major incident on deployment were outlined there and will not be further discussed. Their services to families will rather be discussed in this Section based on information set out on the DCO website.

As also noted in Section 3.8.1, DCO has been the subject of a Strategic Review and it is currently unclear to what extent their service orientation will change as a result. It was reported by some stakeholders that DCO social workers no longer participate to the same degree in Regional Mental Health Teams or deliver services directly to members as distinct from their families. This has not however been able to be confirmed.

As well as providing counselling and undertaking casework in relation to personal, family and service-related problems and issues, Defence Social Workers (DSWs) also assist families through community development programs, group work and educative programs and referrals to appropriate community services.¹¹¹ In other words, they balance individual treatment services with other more preventive approaches that are not individually-based.

¹¹¹ Department of Defence. Defence Community Organisation Services Having difficulties (http://www.Defence.gov.au/DCO/having_difficulties.htm - accessed Jan 10 2009)

Military Support Officers (MSOs) support and advise families in relation to a variety of service matters and can be contacted by partners of members if they have concerns about the member – see Section 3.3.2. DCO services to partners include the Defence Service Workforce Access Program for Partners (SWAPP SELECT).¹¹² This program provides services and initiatives to assist partners of ADF members to become job ready and access the workforce in their new posting localities. Regional Education Liaison Officers (REDLOs) advise families in relation to educational issues particularly when a member relocates from one jurisdiction to another.¹¹³ Family Liaison officers (FLOs) provide community-based information and assistance to families particularly when they are settling in a new area following a new posting as well as during the deployment of the ADF member within the family.

DCO gives attention to family impact on postings, deployments, exercises and training activities. As part of its community capacity building initiative, it will also engage in activities designed to increase health literacy (including mental health literacy), primarily through the development of informational literature and group work programs where appropriate (in partnership with other community agencies).

HQJOC operates the National Welfare Coordination Centre (NWCC), a 24 hour telephone helpline for family emergencies for the families of members deployed on operations.. DCO uses the NWCC to provide 24 hour coverage by providing a telephone helpline outside of normal business hours.

Third Brigade has established its own family support service, the Gecko Family Centre at Lavarack Barracks in Townsville independently of the DCO.

11.3 Defence Families of Australia

As set out on their website, Defence Families of Australia (DFA) is a group formed to represent the views of Defence families.¹¹⁴ Its aim is to improve the quality of life for Defence families by providing a recognised forum for their views and by reporting, making recommendations and influencing policy that directly affects families. ADF families can contact DFA to represent them regarding an individual situation or to advocate an issue concerning many families. It operates a telephone helpline that is increasingly receiving mental health-related calls.

11.4 Assessment

This overall assessment is based on a review of technical documents, stakeholder input and public submissions. A summary of themes arising out of both individuals and organisation submissions relevant to Mental health and families in the ADF are included in Appendix 5.

¹¹² Department of Defence. Defence Community Organisation Services Workforce Access Program for Partners (SWAPP SELECT) (http://www.Defence.gov.au/DCO/family_wellbeing.htm#7 – accessed 10 Jan 2009).

¹¹³ Department of Defence. Defence Community Organisation Education assistance (<http://www.Defence.gov.au/DCO/Education.htm> - accessed Jan 3 2009)

¹¹⁴ DFA Defence Families of Australia (<http://www.dfa.org.au/about.php> accessed Jan 3 2009)

At a broad conceptual level, it was clear that the ADF would gain many advantages in welcome the member's family as well as the member into the broad 'Defence family'. This acknowledgement should have important benefits in itself but more concrete expressions of this orientation would bring further benefit. These could include resilience building for families - participation by families in post-deployment and pre-deployment briefings (as occurs in the US) as well as families participating in transition services for members transitioning-out of the ADF. It is likely these resilience training activities would have beneficial effects on members.

The frequent change in postings was noted by some stakeholders with the observation that these occurred much less frequently in the UK where forces operate out of fewer, larger bases. While this is not possible in Australia, it might be possible to make smaller changes. One stakeholder asked if it was possible for some of the less specialised parts of the training programs, frequently conducted away from the member's base and place of residence, to be conducted locally.

The Defence Community Organisation clearly provides a range of valuable community supports to members' partners with employment and relocation assistance including with the child care and schooling of children. DCO focus is on providing services to Defence families, and provides services to ADF members at the request of Command. Some concerns were expressed about the fact that access to DCO services varied around Australia and that DCO offices were sometimes not in the nearest towns to major bases. There is clearly also uncertainty about the future direction of DCO following its strategic review, particularly its policy in regard to the direct service provision to members, as distinct from their families.

As noted previously social workers in DCO can have an important role in the delivery of primary care mental services where family issues are involved. This can occur without specialised clinical social worker training in mental health. Where family issues are involved, it would seem unfortunate if only families of members and not members themselves could receive services

11.5 Conclusions and recommendations

Families of ADF members are important to the good functioning of the member. They also bear much of the brunt of members' difficulties if they occur. They are early communicators of members' difficulties to the relevant agencies.

Recommendation 11.1: At a broad conceptual level, the ADF needs to welcome the member's family as well as the member into the broad 'Defence family'. Acknowledgement of this in itself is important.

Recommendation 11.2: More concrete expressions of this acknowledgement are necessary.

These could include participation by families in post-deployment readjustment program (SRARP (see above) and POPS) and pre-deployment briefings (as occurs in the US) as well as transition activities (see Section 10). It could also include attention to family impact on postings and post-deployment exercises and training activities that require members to spend further long periods of time away from their families.

Recommendation 11.3: (re-presented) Social workers in DCO can have an important role in the delivery of primary care mental services where family issues are involved. They should form part of the proposed multidisciplinary mental health team on base. Their services should be available not only to families of members but members themselves where family issues are involved.

Section 12 Mental Health research and surveillance in the ADF

12.1 Mental health research centres funded by the ADF and DVA

12.1.1 Australian Centre for Posttraumatic Mental Health (ACPMH)

As stated on their website, the ACPMH at The University of Melbourne undertakes trauma-related research, policy advice, service development and education.¹¹⁵ It receives funding from both the Australian Government's Departments of Veterans Affairs and Defence. Its work assists organisations and health professionals who work with people affected by traumatic events. It produces an annual literature summary of articles in the field of PTSD and related conditions.¹¹⁶ It has also overseen the development of the Australian Guidelines for the Treatment of Adults with Acute Stress Disorder and Posttraumatic Stress Disorder.¹¹⁷ As a result ADF and DVA obtain access to most up-to-date, best information.

12.1.2 The Centre for Military and Veterans' Health (CMVH)

As stated on their website, the Centre for Military and Veterans' Health (CMVH) is a multidisciplinary centre, focusing specifically on the health of ADF members during and after their service. CMVH is a consortium led by The University of Queensland, with The University of Adelaide and Charles Darwin University, and supported by the Department of Defence and the Department of Veterans' Affairs.¹¹⁸

It is conducting the Deployment Health Surveillance Program (DHSP). These are cross-sectional studies of serving and ex-serving personnel who have deployed on specific operations and which aim to develop a longitudinal health surveillance system for personnel who have served in the military. Each looks at the effect of specific deployments on the health of ADF members. Currently the program is studying deployments to the Solomon Islands, Bougainville, East Timor and the Middle East Area of Operations. Data sources include Defence health and exposure data, self-reported data (questionnaires); National Death Index; State and Territory cancer registries.^{119 120}

¹¹⁵ Australian Centre for Posttraumatic Mental Health (<http://www.acpmh.unimelb.edu.au/> accessed Jan 5 2009)

¹¹⁶ Annual Literature Summary (http://www.acpmh.unimelb.edu.au/resources/lit_summary.html accessed Jan 1 2009)

¹¹⁷ (<http://www.acpmh.unimelb.edu.au/trauma/ptsd.html> accessed Jan 1 2009)

¹¹⁸ The Centre for Military and Veterans' Health (<http://www.uq.edu.au/cmvh/http://www.uq.edu.au/cmvh/> accessed Jan 3 2009)

¹¹⁹ Deployment Health Surveillance Program (<http://www.uq.edu.au/cmvh/dhsp> accessed Jan 3 2009)

¹²⁰ Treloar S, McFarlane A, Ellis N (2007) Initiating an Australian Deployment Health Surveillance Program. *J Mil Vet Health* 16: 6-7.

CMVH has developed a research protocol concerning the Intergenerational Health Effects of Service in the Military. This work, funded by DVA will build on the work of the Deployment Health Surveillance Program.¹²¹

As a result ADF and DVA obtain access to most up-to-date, best information.

12.2 Mental health research projects funded by the ADF and DVA

There have been a number of major research and evaluation projects that have been funded or conducted either by the ADF or Department of Veterans Affairs (DVA). These include recent funding for a package of 'Lifecycle' projects that was a major election commitment of the incoming government. Several other research projects have been also funded over a number of years.

12.2.1 The ADF Lifecycle package for ADF and veterans mental health

The Australian Government has launched a Lifecycle package for ADF and veterans mental health (pilot trials with linked research and evaluation). These are conducted in conjunction with the Australian Centre for Posttraumatic Mental Health (ACPMH) and consist as set out below (lead agency(ies) in brackets):

Stage 1 Entry to the ADF

- 1 A study of psychological resilience in ADF recruits (ADF)
- 2 Pilot study of resilience-building initiatives (in conjunction with the Directorate of Mental Health – see Section 2.8.1) (ADF)

Stage 2 During ADF service

- 3 Routine annual mental health checks (ADF)

Stage 3 Transition out of the ADF

- 4 Family support trial (Townsville) (ADF/DVA)
- 5 Transition case management pilot (Townsville) (ADF/DVA)

Stage 4 Rehabilitation into civilian life

- 6 Study into the barriers to veterans' social and occupational rehabilitation (DVA)
- 7 Education campaign on social and occupational rehabilitation (ADF/DVA)
- 8 Study into improving treatment use by 'hard to engage' ex-service members (DVA)
- 9 Self-care trial for hard to reach ex-service members. (DVA)

12.2.2 Health and mortality studies of war veterans relevant to mental health

The health studies relevant to mental health include:

- Health Study 2005: Australian Veterans of the Korean War¹²²
- The Australian Vietnam Veterans Health Study¹²³

¹²¹ Intergenerational Health Effects of Service in the Military
(<http://www.uq.edu.au/cmvh/intergenerational-health-effects-of-service-in-the-military-research-protocol> accessed Jan 3 2009)

¹²² Sim M, Ikin J, McKenzie D: 2005. Health Study of Australian Veterans of the Korean War. In. Department of Epidemiology and Preventive Medicine, Monash University; Clayton.

- Morbidity of Vietnam veterans: A study of the health of Australia's Vietnam veteran community¹²⁴
- Australian Gulf War Veterans' Health Study¹²⁵

The mortality studies relevant to mental health include:

- Mortality of Korean War veterans¹²⁶
- Mortality of Vietnam veterans: the veteran cohort study. (this also includes the study of mortality of National Service Vietnam Veterans)¹²⁷
- The Third Australian Vietnam Veterans Mortality Study 2005.¹²⁸
(http://www.dva.gov.au/media/publicat/2006/vietnam_health_studies/vvms/index.htm accessed Jan 3 2009).

12.2.3 2007 National Survey of Mental Health and Wellbeing

The 2007 National Survey of Mental Health and Wellbeing reported levels for ADF members who met criteria for at least one mental condition in the past 12 months compared to the rest of the Australian population – see Section 3.6.¹²⁹

12.2.4 Australia's health 2008 - Australian Institute of Health and Welfare

Suicide rates along with other causes of mortality for fulltime ADF members were compared with other general members of the Australian population after adjusting for their different age and sex structures – see Section 3.6¹³⁰

12.3 Military mental health research conducted in other countries

A number of major research centres also exist in the US, UK and Canada. The US Millennium Cohort Study is the largest prospective health project in military history and worthy of considerable interest.

¹²³ O'Toole BI, Marshall RP, Grayson DA et al. (1996) The Australian Vietnam Veterans Health Study: II. self-reported health of veterans compared with the Australian population. *International journal of epidemiology*, 25(2):319-330.

¹²⁴ See eg Australian Institute of Health and Welfare. *Morbidity of Vietnam veterans: A study of the health of Australia's Vietnam veteran community: Volume 3 validation study*. Canberra: AIHW.

¹²⁵ Occupational and Environmental Health Unit: Monash University (2003) *Australian Gulf War Veterans' Health Study*. Department of Veterans' Affairs, Canberra.

¹²⁶ Harrex WK, Horsley KW, Jelfs P, van der Hoek R, Wilson EJ. *Mortality of Korean War veterans: the veteran cohort study. A report of the 2002 retrospective cohort study of Australian veterans of the Korean War*. Canberra: Department of Veterans' Affairs, 2003.

¹²⁷ Crane PJ, Barnard DL, Horsley KD, Adena MA. *Mortality of Vietnam veterans: the veteran cohort study. A report of the 1996 retrospective cohort study of Australian Vietnam Veterans*. Department of Veterans' Affairs, Canberra., 1997.

¹²⁸ The Third Australian Vietnam Veterans Mortality Study 2005.
(http://www.dva.gov.au/media/publicat/2006/vietnam_health_studies/vvms/index.htm accessed Jan 3 2009).

¹²⁹ Australian Bureau of Statistics (2008) 4326.0 - National Survey of Mental Health and Wellbeing: Summary of Results, 2007
(<http://www.abs.gov.au/ausstats/ABS@.nsf/Latestproducts/4326.0Main%20Features32007?opendocument&tabname=Summary&prodno=4326.0&issue=2007&num=&view=> accessed Jan 3 2009)

¹³⁰ Australian Institute of Health and Welfare (2008). *Australia's health 2008*. Cat. no. AUS 99. Canberra: AIHW:95-6.

12.3.1 Major international Centres for the study of military mental health

The most important of these major international centres are

- King's Centre for Military Health Research, UK (<http://www.kcl.ac.uk/kcmhr/>)
- Walter Reed Army Institute of Research – Division of Psychiatry and Neuroscience, US (<http://wrair-www.army.mil/Psychiatry-and-Neuroscience/>)
- National Center for Posttraumatic Stress Disorder, US (<http://www.ncptsd.va.gov/ncmain/index.jsp>)
- National Centre for Operational Stress Injuries (St Anne's), Canada (http://www.vac-acc.gc.ca/clients/sub.cfm?source=steannes/stann_ctre)

The Center of Excellence for Psychological Health and Traumatic Brain Injury has been recently established in the US.

12.3.2 The Millennium Cohort Study

The US Millennium Cohort Study is designed to evaluate the long-term health effects of military service, including deployments.¹³¹ The study is funded by the Department of Defense and supported by the military, Department of Veterans Affairs and civilian researchers. It was launched in 2001 and around 150,000 people are now participating. As force health protection continues to be a priority for the future of the US military, the Millennium Cohort Study will provide critical information towards enhancing the long-term health of future generations of military members.

12.4 Mental health research, surveillance and evaluation conducted by the ADF

The ADF undertakes extensive research, surveillance and evaluation in mental health.

The Psychology Research and Technical Group (PRTG) within the Directorate of Psychology conducts applied research including eg the analysis of RtAPS and POPS data - see Section 5.1. This non-peer published work is mainly for surveillance and trend analysis purposes. However, more analytical studies, say, investigating the relationship between traumatic stress exposure on deployment and levels of post traumatic stress on posttraumatic stress symptoms is possible. Also possible are the PRTG's studies have focused on personnel, human performance research, psychometrics and selection. It has also been involved in the development of the Electronic Psychology Records and Information System (EPRIS) – see below.

Annual Defence Attitudes Surveys have compared opinion levels in relation to a number of mental health topics in the three single forces and Defence civilians over the years 1999-2007- see Section 6.2.

There is an exchange of the military mental health research and evaluation studies conducted by the five-member countries of Technical Panel-13 – see Section 2.1. It

¹³¹ The Millennium Cohort Study (<http://www.millenniumcohort.org/about.php> accessed Jan 3 2009)

was possible for example as a result of this collaboration to compare levels of stigma concerning mental illness in the ADF, UK, US and Canada by combining national survey data from four of the five countries – see Appendix 7.

Studies of organisational climate both on base and on deployment are regularly conducted. These are respectively Human Dimensions of Operations (HDO) and Profile of Unit Leadership Satisfaction Effectiveness (PULSE). These provide important feedback on morale and other intelligence to senior staff in the ADF and Commanding Officers.

The evaluation of the CIMS Framework was conducted by the Australian Centre for Posttraumatic Mental Health – see Section 2.5.¹³² The evaluation of ATODS was conducted by Turning Point, Melbourne – see also Section 2.5.¹³³

An ADF-wide prevalence study of MH problems was planned as part of the Mental Health Strategy. However it did not proceed beyond the pilot stage – see Section 2.1. It was to consist of a self-administered CIDI, K10 and PCL(C) on laptop computer. Reasons that it did not proceed included its high cost and that it required considerable additional work for PSS staff on base to bring-in members to survey them.

The ADF, under the joint auspice of the CDF and DCO in early 2009 will launch the first national ADF Families Survey.

In the last few years a small number of suicides in ADF members have been the subject of Boards of Inquiry – see Section 6.4. A Defence Enquiry has recently been conducted involving a number of incidents involving members with mental health problems and their interaction with the military justice system in North Queensland.

12.5 Mental health electronic information systems

There is currently no health electronic information system in the ADF that provides robust information on diagnosis of mental illness, either on base or on deployment. Existing record systems do not record electronically occasions of service, diagnosis, quality of life and other psychometric measures of symptom severity on a routine basis.

PMkeyS and the Medical Information Management Index (MIMI) include some health-related information. HealthKEYS is being rolled out across the ADF but has some limitations in functionality. As noted in Section 3.5, COSC agreed to invite the Chief Information Officer (CIO) and the Chief of Capability Development (CCD) to investigate commercial off-the-shelf e-health products to provide a fast-track interim solution to the lack of a comprehensive health information system.

The PRTG, as noted have been developing the Electronic Psychology Records and Information System (EPRIS). This links assessment test information at recruiting with

¹³² Lewis V, Weiland P, Parslow R, Densley K. Critical incident mental health support in the ADF - implementation evaluation. Draft final report (June 2008): Australian Centre for Posttraumatic Mental Health, The University of Melbourne, 2008.

¹³³ Berends L, Roberts B, Pritchard E. (2005) Evaluation of the Australian Defence Force Alcohol, Tobacco and Other Drugs Services Program. Turning Point Alcohol & Drug Centre, Fitzroy: 1-90.

RtAPS, POPs and PMkeyS with counselling and assessment modules being added. In principle it is possible to extend data linkage with DCO and even DVA. It does not link to health data information systems currently.

12.6 Assessment

This overall assessment is based on a review of all technical and research documents, stakeholder input and public submissions. A summary of themes arising out of both individuals and organisation submissions relevant to *Mental Health research and surveillance in the ADF* are included in Appendix 5. Rapid reviews of a number of the relevant research literature are included in Appendices.

The ADF/DVA has done well in supporting mental health and psychological research both externally with funding of the two large research centres, ACPMH and CMVH. This has involved support for both in research eg the Deployment Health Surveillance Program and in the development and evaluation of mental health programs by the ACPMH. The mortality and health studies of veterans of different wars have been very valuable.

A prevalence survey of mental health conditions in the ADF is overdue. Levels of mental health conditions are a matter of public interest but more importantly provide a firm basis for service planning. Comparisons between prevalence levels in the ADF and the community are less useful due to their different circumstances – principally the phenomenon of the ‘healthy worker effect’ necessary to fulfill the high performance expectations of ADF members when on deployment and different levels of exposure to occupational stress.

These surveys could be organized as part of the regular National Survey of Mental Health and Wellbeing conducted by the Australian Bureau of Statistics with appropriate oversampling of ADF members funded by the ADF. This is similar to an arrangement that exists in Canada. In between these surveys, it may be feasible to survey samples of members using the self-administered version of the CIDI if the online version of CIDI3 currently being trialed by WHO is successful.

The ADF’s strong commitment to development and evaluative research should continue. The development and evaluation of new programs for members returning from deployment to forward bases with adjustment problems and traumatic stress symptoms should be a high priority. The ACPMH is well placed to do this work. Alternatively the research project could be advertised by Invitation To Apply for tender.

The Mental Health Research and Surveillance Advisory Group, that was established as part of the Mental Health Strategy was not active in 2007-8 – see Section 2.1. It has made an important contribution to the Directorate of Mental Health and should be reactivated. It could act as a subcommittee or group of the proposed oversight group to the Directorate of Mental Health, the goal of this latter group is to sustain the strategic direction and delivery of the Mental Health Strategy – see Section 3.11.

While the ADF has done well in supporting mental health research, it has done less well in supporting the development of a mental health electronic information system

which is routine in public community mental health services. Their importance is apparent as they formed the topic of one of the first publications of the Millennium Cohort Study Team. The authors conclude that ‘prevalence studies are best served by using an objective measure of medical conditions found in electronic healthcare records and that their addition to self-reported information adds greatly to the value of large, long-term prospective cohort studies’.¹³⁴ The decision by COSC to investigate commercial off-the-shelf e-health products to provide a fast-track interim solution to the lack of a comprehensive health information system is well-timed.

The PRTG has done valuable work eg the development of the Electronic Psychology Records and Information System (EPRIS) but its future development should move to include (mental) health recording systems. Its focus of activities will increasingly focus on supporting and improving the new revised Mental Health Strategy policies and health care programs.

12.7 Recommendations

Recommendation 12.1: The conduct of a prevalence survey of mental health conditions in the ADF should be a high priority. Different options exist and the aim should be to choose the one that best produces robust, useful data and at reasonable cost. If online methods prove suitable for collecting valid and reliable data, they have many obvious advantages.

Recommendation 12.2: The ADF’s strong commitment to development and evaluation of innovative programs should continue. New programs for members returning from deployment to forward bases with adjustment problems and traumatic stress symptoms should be a high priority for development and evaluation.

Recommendation 12.3: The Mental Health Research and Surveillance Advisory Committee has made an important contribution to the Directorate of Mental Health. It should be reestablished as a subcommittee or group of the oversight group proposed for the Directorate of Mental Health.

Recommendation 12.4: The PRTG has done valuable work eg the development of the Electronic Psychology Records and Information System (EPRIS). It will increasingly focus on the new directions for mental health taking place the ADF such as the further development and evaluation of the Mental Health Strategy and the delivery of services in multidisciplinary mental health teams.

Recommendation 12.5: The decision by COSC to investigate commercial off-the-shelf e-health products to provide a fast-track interim solution to the lack of a comprehensive health information system can be strongly supported. The products should possess the functionality equivalent to what exists elsewhere in the community. This should include occasions of service, diagnosis, quality of life and other psychometric measures of symptom severity at secondary levels of mental health care.

¹³⁴ Smith B, Chu LK, Smith TC, et al. (2008) Challenges of self-reported medical conditions and electronic medical records among members of a large military cohort. *BMC Med Res Methodol* 8:37.

Appendix 1 Rapid literature review of critical incident management programs

The ADF uses a Critical Incident Mental Health Support (CIMS) model that was developed in collaboration with the Australian Centre for Posttraumatic Mental Health (ACPMH) (Joint Health Command 2008).

The CIMS Framework comprises three phases: (1) Planning and Immediate Response; (2) Intervention; (3) Follow-up. These phases largely entail ‘pre-incident education and preparation, psychological first aid, mental health surveillance and case identification, appropriate treatment or referral, and support for spouses, partners and families.’ (Lewis, Weiland et al. 2008)

According to Lewis et al (2008) the CIMS Framework was developed as an alternative to the Critical Incident Stress Management model (CISM), and is consistent with current best practice in its adoption of a ‘multi-modal stepped approach’ to responding to critical incidents or potentially traumatising events. (Lewis, Weiland et al. 2008) In so far as their domains overlap, the CIMS Framework appears to be consistent with the early intervention recommendations of the *Australian Guidelines for the Treatment of Adults with Acute Stress Disorder and Posttraumatic Stress Disorder* (Australian Centre for Posttraumatic Mental Health 2007), also prepared by ACPMH.

The evidence base for best practice within CIMS and the *Australian Guidelines* is cited extensively in Lewis et al (2008), Forbes et al (2007) and the full *Australian Guidelines* document (Australian Centre for Posttraumatic Mental Health 2007), and need not be reproduced here.

The approach adopted by ADF is consistent with the *Psychological First Aid Field Operations Guide* (National Center for Posttraumatic Stress Disorder) published by the National Center for Posttraumatic Stress Disorder, which is part of the US Department of Veteran Affairs.

However, there is a minority viewpoint in the literature regarding use of the CISM model that CIMS was developed in opposition to, and more specifically regarding one of CISM’s components known as ‘psychological debriefing’ (PD) or ‘critical incident stress debriefing’ (CISD).

The CISM model and PD are widely used in emergency and police services in the UK and the US, and CISM offers a stepped response very similar to that outlined for CIMS above. (Mitchell, Sakraida et al. 2003; Malcolm, Seaton et al. 2005; Regel 2007) Controversy around CISM appears to be based on its PD component (Mitchell, Sakraida et al. 2003; Regel 2007; Lewis, Weiland et al. 2008) which to date has not fared well under evaluation: an influential Cochrane Review judged single-session psychological debriefing to be relatively ineffective and potentially harmful. (Rose, Bisson et al. 2002)

A number of authors have subsequently pointed out numerous deficiencies in controlled studies of PD contained in the Cochrane review, such as: ineffective randomization of subjects, and inappropriate or incorrect use of the method, including the use of PD as a stand-alone single-session response without other CISM responses. (Mitchell, Sakraida et al. 2003; Malcolm, Seaton et al. 2005; Regel 2007; Tuckey 2007; Adler, Litz et al. 2008)

One recent study critical of CISD (Sijbrandij, Olf et al. 2006) illustrates well their point: the authors applied a single intervention session to civilian trauma survivors, comparing 'emotional' and 'educational' debriefing with no debriefing. The two treatment modes were made up of selected stages of the CISD model, with neither mode presenting the complete CISD treatment, nor any other components of the CISM approach. The study found nil positive treatment effects, and adverse effects from emotional debriefing for participants with early hyperarousal symptoms. (Sijbrandij, Olf et al. 2006)

Another recent study, this time in a military setting, found no clear positive or negative effects from CISD. (Adler, Litz et al. 2008) The authors did however detect positive organisational outcomes due to the model's reliance on peer processes and engagement with the work culture.

Given the widespread current use (and perhaps misuse) of PD as a component of critical incident response, more balanced and methodologically sound studies are required to assess its effectiveness and suitability for military and civilian environments.

References

- Adler, A., B. Litz, et al. (2008). A group randomized trial of critical incident stress debriefing provided to U.S. peacekeepers. *Journal of Traumatic Stress* **21**(3): 253-263.
- Australian Centre for Posttraumatic Mental Health (2007). Australian guidelines for the treatment of adults with acute stress disorder and posttraumatic stress disorder, National Health and Medical Research Council, Australian Government.
- Forbes, D., M. Creamer, et al. (2007). Australian guidelines for the treatment of adults with acute stress disorder and post-traumatic stress disorder. *Australian & New Zealand Journal of Psychiatry* **41**(8): 637-648.
- Joint Health Command. (2008, 24th September 2008). ADF Framework of Critical Incident Mental Health Support (CIMS). Retrieved 6th December 2008, from <http://www.Defence.gov.au/health/DMH/i-CIMS.htm>.
- Lewis, V., P. Weiland, et al. (2008). Critical incident mental health support in the ADF - implementation evaluation. Draft final report (June 2008), Australian Centre for Posttraumatic Mental Health, The University of Melbourne.
- Malcolm, A. S., J. Seaton, et al. (2005). Critical Incident Stress Debriefing and Law Enforcement: An Evaluative Review. *Brief Treatment and Crisis Intervention* **5**(3): 261-278.
- Mitchell, A. M., T. J. Sakraida, et al. (2003). Critical incident stress debriefing: implications for best practice. *Disaster management & response: DMR : an official publication of the Emergency Nurses Association* **1**(2): 46-51.

- Mitchell, A. M., T. J. Sakraida, et al. (2003). Critical incident stress debriefing: implications for best practice. *Disaster management & response : DMR : an official publication of the Emergency Nurses Association* **1**(2): 46-51.
- National Center for Posttraumatic Stress Disorder Psychological First Aid: Field Operations Guide for Disaster Mental Health Responders.
- Regel, S. (2007). Post-trauma support in the workplace: the current status and practice of critical incident stress management (CISM) and psychological debriefing (PD) within organizations in the UK. *Occupational medicine (Oxford, England)* **57**(6): 411-6.
- Rose, S., J. Bisson, et al. (2002). Psychological debriefing for preventing post traumatic stress disorder (PTSD). *Cochrane Database of Systematic Reviews*(2).
- Sijbrandij, M., M. Olf, et al. (2006). Emotional or educational debriefing after psychological trauma. Randomised controlled trial. *The British journal of psychiatry : the journal of mental science* **189**: 150-5.
- Tuckey, M. R. (2007). Issues in the debriefing debate for the emergency services: Moving research outcomes forward. *Clinical Psychology: Science & Practice* **14**(2): 106-116.

Appendix 2 Rapid literature review of interventions to reduce alcohol misuse

Introduction

This scoping of the literature on interventions to reduce alcohol misuse has been structured, in the first instance, according to whether the target group for the interventions was the civilian population (civilian studies) or military personnel (military studies). The civilian studies include four systematic reviews of brief interventions for people misusing alcohol.(Trent 1998; Foxcroft, Ireland et al. 2002; Kaner, Dickinson et al. 2007) The military studies include two evaluations undertaken by Turning Point for the Australian Defence Force,(Berends, Roberts et al. 2005; Roberts 2007) six outcome studies of interventions undertaken with military populations in the U.S.(Westhuis, Levine et al. 1994; Stagliano, Richards et al. 1995; Trent 1998; Westhuis, Hayashi et al. 1998; Hurtado, Shaffer et al. 2003; Storer 2003) and two U.S. implementation studies (Fernandez, Hartman et al. 2006; Simon-Arndt, Hurtado et al. 2006).

Civilian Studies

All Ages

The civilian studies included three systematic reviews and meta-analyses of trials of brief alcohol interventions (BAI) for adults aged 15 years. They span a decade; the first was published in 1997 and the third in 2007. The settings for the trials included in the reviews are mainly primary care (outpatients and clinics). The target groups are people with alcohol misuse problems who are not alcohol dependent and who do not have a major psychiatric disorder. They generally involved people attending the health care settings for non-alcohol related problems. The main outcome measure for the three meta-analyses was changes in level of alcohol consumption.

Wilk et al (1997) concluded that heavy drinkers receiving the BAI were twice as likely to have reduced their alcohol intake six to twelve months later than those who did not.(Wilk, Jensen et al. 1997) However, methodological difficulties with the studies mean that the benefit from the intervention may be lower than stated. The authors of the 2005 meta-analysis concluded that BAI aimed at reducing alcohol consumption is effective in primary care setting and the effect can last for two years. They noted that the successful BAI typically involved 15 minutes consultations, patients were also given written material and were offered an opportunity for a follow-up consultation.(Bertholet, Daepfen et al. 2005) However, only half the RCT with an alcohol consumption outcome measure reported a positive effect. It seems, therefore that the authors' conclusion may be optimistic. In 2007, Kaner et al concluded BAI was successful in reducing male primary care patients but not female patients. (Kaner, Dickinson et al. 2007) In the studies included in this meta-analysis there were differential dropout rates between the control and intervention arms which may mean the benefits are not quite as high as stated.

In all three reviews participants in the control arms also reduced their alcohol consumption. According to Kaner et al (2007) the reasons for this are unclear but it may be that screening alone may be an impetus for change for some people.(Kaner, Dickinson et al. 2007)

Young People

The final civilian study was a review of BAI designed to reduce alcohol misuse in young people (<25 years of age) and a re-analysis on an intention-to-treat basis of three apparently effective long-term studies. The authors concluded that the short-term studies (<1 year follow-up) provided no clear evidence of effectiveness and the three medium-term studies (1-3 years follow-up) were 'potentially' effective. However, two had severe methodological shortcomings and one had very small effect sizes. The conclusions for the long-term studies (>3 years follow-up) indicated that one was most 'valuable' and the culturally focussed intervention 'showed promise'.(Foxcroft, Ireland et al. 2002) However, the results of the intention-to-treat analysis for the long-term interventions do not support the conclusions.

Military Studies

Australian Defence Force Evaluations

The most recent Australian Defence Force (ADF) evaluation was of the Alcohol, Tobacco and Other Drugs Services (ATODS) Program. This is a tri-service, centrally based model of service delivery which came into existence in 2002. This new model of service delivery has met with some resistance but over time communication has improved and positive working relationships have been established. Information collected in interviews with key informants and a survey of military personnel and civilians receiving training from ATODS staff (response rate 31%) indicated that the principles under-pinning the model are supported but that they may require some modification to allow for the military environment. ATODS was regarded as 'effective' in terms of meeting its objectives there was no information about the program's impact on people with alcohol, tobacco and other drug problems. A particular strength of the model is the education and training component that has increased military personnel's capacity to respond to ATOD concerns. However, there is some concern that the train the trainer model may not be appropriate to the ADF because of time constraints for the trainers to conduct training. Challenges to the sustainability of the ATODS are the paucity of staff resources, funding uncertainty and lack of command support. One of the changes introduced by ATODS was the introduction of the Alcohol Use Disorders Identification Test (AUDIT) - a brief screening instrument for excessive alcohol use, but it is not clear how often or when this is used.

The second evaluation was of the group counselling component of the Alcohol and Rehabilitation and Education Program (AREP). Group counselling is provided as part of a four week 'closed' residential treatment program for people with alcohol problems. Other elements in this residential program include life skills workshops, physical and team building activities, individual counselling, relapse prevention and alcohol and other drug (AOD) education, and an introduction to self-help groups. The evaluation of the group counselling component was unable to comment on the

effectiveness of group counselling because the follow-up data had not been analysed. The author's key finding was that the AREP group counselling was consistent with 'best practice' and recommended that AREP's progress towards meeting or exceeding the standards for evidence based practice in group counselling be acknowledged.(Roberts 2007)

U.S. Outcome Studies

Four of the outcome studies were for substance abuse (Westhuis, Levine et al. 1994; Stagliano, Richards et al. 1995; Westhuis, Hayashi et al. 1998; Storer 2003) and two were alcohol specific.(Trent 1998; Hurtado, Shaffer et al. 2003)

Substance Abuse

Three of the substance abuse citations related to the U.S. Army's Alcohol and Drug Abuse Prevention and Control Program (ADAPCP) in the 1990s. These studies indicated that outpatient enrollees were significantly different from inpatient enrollees in terms of age, rank, severity, substance being abused and referral pathway. In mixed gender interventions women had better outcomes than men. The education and awareness component when combined with individual and group therapy resulted in better outcomes than education and awareness alone. Soldiers with substance abuse issues who are deployed to a war zone have special needs and the program was viewed as not doing enough for this group.(Westhuis, Levine et al. 1994; Stagliano, Richards et al. 1995; Westhuis, Hayashi et al. 1998)

The fourth substance abuse study involved a retrospective analysis of outcome data for a brief intervention with inpatients at the Naval Medical Center in Portsmouth in the U.S in 2000-2001. The simple descriptive data analyses indicated that the brief intervention was not effective and the author proposes a number of reasons for this.(Storer 2003) The conclusions would have had more weight if regression analysis has been used to control for the confounding variables. The study raises more questions than it answers with regard to the effectiveness of the intervention.

Alcohol Specific

Both the alcohol abuse studies were with Naval personnel. One citation examined the effect of shortening the length of residential treatment from six to four weeks. This program has also had an extended community care component that enrollees could access once they left residential care. The data analyses indicated that the length of participation in the community care was the most important predictor of treatment and shortening the length of residential component would not adversely affect outcomes.(Trent 1998) However, loss to follow up was high (60%) and it is far from clear how this was handled in the analysis. Therefore the results need to be treated with some caution.

The second study evaluated the effect of a brief intervention before participants were deployed to Japan. The data indicated that the brief intervention had a positive impact on only a small number of the outcome measures. The authors concluded that the program may have resulted in some short-term reduction in alcohol consumption but it did not have any effect in the longer term on drinking behaviour. Loss to follow-up

in the intervention group was also high (76%) and the presence of a number of important confounders mean that even a tentative conclusion of effectiveness needs to be treated with caution.

U.S. Implementation Studies

One of the implementation studies involved an assessment of the usefulness of a web-based brief alcohol intervention (BAI). It consisted of assessing users' satisfaction with the web-based BAI. The authors concluded that, despite the limitations of the study, a web-based assessment and feedback program is a 'promising mechanism' for providing a BAI. (Simon-Arndt, Hurtado et al. 2006) However, the methodological shortcomings and the failure to use the training as intended do not support the authors' optimistic conclusions.

The second implementation study was a description of a BAI adapted from a civilian trial that could be used in a military treatment facility. The author indicates that a number of recent systematic reviews have shown brief interventions to be successful in reducing harmful levels of alcohol use in medical care settings.

Conclusions

The literature relating to brief alcohol interventions (BAI) in primary care setting for people who misuse alcohol, but who are not alcohol dependent, indicate that brief interventions, and even screening without a BAI, have the potential to reduce alcohol misuse. Methodological shortcomings with the studies mean that the effects of the interventions produced in the reviews are optimistic and it is clear that not all BAI are effective. Research into what distinguishes and effective BAI from an ineffective one is not well developed.

It cannot be assumed that the impact of civilian interventions will automatically generalize to military populations or to those suffering from alcohol dependence. Methodological shortcomings in the American military outcome studies mean that authors' conclusions as to effectiveness and the reasons advanced for the apparent lack of effectiveness need to be treated with extreme caution. There is nothing to suggest that a web-based intervention would be successful in reducing alcohol consumption military populations.

Bearing these caveats in mind, this scoping review leads to the following hypotheses: (i) regular screening without any other intervention has the potential to reduce the level of alcohol misuse; (ii) BAI has the potential to increase the impact of screening but it is important to understand the elements contributing to an effective BAI; (iii) alcohol dependence is best treated by an integrated residential and community care program; (iv) military personnel on deployment and on return from deployment have special needs which need to be addressed. It cannot be stressed too strongly, however, that these are hypotheses are based on a scoping review of the literature and need to be rigorously tested using methodologically sound research strategies before any firmer conclusions can be reached.

References

- Berends, L., B. Roberts, et al. (2005). Evaluation of the Australian Defence Force Alcohol, Tobacco and Other Drugs Services Program. Turning Point Alcohol & Drug Centre, Fitzroy, VIC. from, Access 2005.
- Bertholet, N., J. B. Daepfen, et al. (2005). Reduction of alcohol consumption by brief alcohol intervention in primary care - Systematic review and meta-analysis. *Archives of Internal Medicine* **165**(9): 986-995.
- Fernandez, W. G., R. Hartman, et al. (2006). Brief Interventions to Reduce Harmful Alcohol Use among Military Personnel: Lessons Learned from the Civilian Experience. *Military Medicine* **171**(6): 538-543.
- Foxcroft, D., D. Ireland, et al. (2002). Primary prevention for alcohol misuse in young people
<http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD003024/frame.html>, Access 2002.
- Hurtado, S. L., R. A. Shaffer, et al. (2003). Evaluation of an Alcohol Misuse Prevention Program in a Military Population. Naval Health Research Center, Operational Readiness Research Program, San Diego, CA. from
<http://www.ntis.gov/search/index.aspx>, Access 2003.
- Kaner, E. F., H. O. Dickinson, et al. (2007). Effectiveness of brief alcohol interventions in primary care populations
<http://www.mrw.interscience.wiley.com/cochrane/clsysrev/articles/CD004148/frame.html>, Access 2007.
- Roberts, B. (2007). Evaluation of Group Counselling at AREP (Australian Defence Force Alcohol Rehabilitation and Education Program). Turning Point Alcohol & Drug Centre, Fitzroy, VIC. from, Access 2007.
- Simon-Arndt, C. M., S. L. Hurtado, et al. (2006). Acceptance of Web-based personalized feedback: user ratings of an alcohol misuse prevention program targeting U.S. Marines. *Health Commun* **20**(1): 13-22.
- Stagliano, R. F., J. D. Richards, et al. (1995). Operation Desert Shield/Storm performance of soldiers enrolled in the alcohol and drug abuse prevention and control program. *Mil Med* **160**(12): 631-5.
- Storer, R. M. (2003). A Simple Cost-Benefit Analysis of Brief Interventions on Substance Abuse at Naval Medical Center Portsmouth. *Military Medicine* **168**(9): 765-768.
- Trent, L. K. (1998). Evaluation of a four- versus six-week length of stay in the Navy's alcohol treatment program. *J Stud Alcohol* **59**(3): 270-9.
- Westhuis, D. J., R. Hayashi, et al. (1998). Evaluating treatment issues in a military drug and alcohol treatment program. *Research on Social Work Practice* **8**(5): 501-519.
- Westhuis, D. J., M. Levine, et al. (1994). Evaluation of the U.S. Army Alcohol and Drug Abuse Prevention and Control Program. Phase 2. Defense Technical Information Centre, Army Health Care Studies and Clinical Investigation Activity, Fort Sam Houston, TX. from
<http://www.stormingmedia.us/25/2521/A252182.html>, Access 1994.
- Wilk, A. I., N. M. Jensen, et al. (1997). Meta-analysis of randomized control trials addressing brief interventions in heavy alcohol drinkers. *J Gen Intern Med* **12**(5): 274-83.

Appendix 3 Rapid literature review of suicide prevention programs

There are limited opportunities for researchers to assess the impact of suicide reduction programs on rates of suicidal behaviour, due to factors such as: the relative rarity of completed suicide; incomplete reporting of suicide attempts; the likelihood of confounding variables; and the indirect relationship between broad-based strategies and suicide rates at the population level.(Mackenzie, Blamey et al. 2007; Rodgers, Sudak et al. 2007; Lifeline Australia ND)

The majority of studies therefore evaluate suicide prevention approaches in terms of their ability to strengthen organisational and practitioner skills in risk detection and follow-up action, without assessing program impact on suicidal behaviours. Samples of these studies are presented here.

However, a small number of studies report with some confidence on suicidal outcomes. These form the core of this review.

Military studies

Impacts on suicidal outcomes

The most compelling military study to date comes from the US, where Knox et al (Knox, Litts et al. 2003) conducted a quasi-experimental cohort study to assess the impact of a suicide prevention program within the US Air Force.(Knox, Litts et al. 2003) The program was initiated in 1996 in response to a severe increase in suicide rates within the Air Force over the years 1990-1994.

The intervention followed a risk reduction and early detection approach, using community- and institution-wide education and training to raise awareness of suicide risk factors, strengthen social support, encourage help-seeking behaviours and reduce any associated stigma. The study population comprised 5,260,292 US Air Force personnel on active duty between the years 1990-2002, with personnel serving between 1997-2002 forming the treatment group.

The study showed a significant drop of 33% in the relative risk of suicide for personnel serving after the introduction of the program, and significant reductions in other behaviours that were likely to be addressed by the intervention. Hence, relative risk for homicide decreased by 51%, accidental death by 18%, severe family violence by 54%, and moderate family violence by 30%. Risk of mild family violence increased significantly by 18%, attributable perhaps to better early detection systems. The authors concluded that the Air Force's thorough and willing institutionalisation of the program led to a fundamental shift of social norms around mental health issues. This systemic change made the intervention's considerable impact possible.

A similar intervention adopted by the conscription-based Norwegian Armed Forces was found to be equally successful in reducing suicide rates.(Mehlum and Schwebbs 2001)

Another European study reports decreased incidences of suicide in the Army of Serbia and Montenegro in the two years following the implementation in 2003 of a suicide prevention program.(Gordana and Milivoje 2007) The perspective of the authors and the military is that suicide is a “problem of maladjustment to the military environment.” The intervention had three key strategies: (1) improved soldier selection processes; (2) education on suicide risk detection; (3) “social concern and mental health work with all employees”. While the intervention appears to have been successful, it is difficult for the reader to determine its success due to: a selective reporting of yearly suicide rates; a lack of clarity about differential rates of suicidal behaviours between soldiers and professional staff; and the unaccounted influence of external factors on suicide rates, namely the social and political upheavals in Serbia and Montenegro over the preceding decade.

Other evidence from the US concerns ‘unit watch’, a strategy used widely in the US Army to minimise the risk of suicide or homicide in individuals, when that risk is not great enough to warrant hospitalisation. The watch may involve the constant companionship of a ‘buddy’ during daylight hours or extend to a more formal 24-hour watch regime. The watch procedures involve limiting a soldier’s access to lethal means, drugs and alcohol; reducing exposure to situations and individuals that induce stress or suicidal / homicidal ideation; and ensuring the maintenance and follow-up of clinical treatment.(Payne, Hill et al. 2008) Payne et al (2008) state that the unit watch system is on the whole less stigmatising than hospitalisation, and offers a better recovery environment through the maintenance of normal operational duties as far as possible. While the unit watch system has not been formally evaluated, data for the years 2004 and 2005 suggest that the procedures when implemented reduce the incidence of completed and attempted suicide to close to zero.(Payne, Hill et al. 2008)

Training effectiveness

In the study by Matthieu et al (2008), the impact of suicide prevention training was assessed in a sample of 602 clinical and non-clinical staff of Vet Centers across the United States.(Matthieu, Cross et al. 2008) The training comprised a one-hour multimedia presentation followed by peer group practice of three gatekeeper skills - “question, persuade and refer.” Pre- and post- measures of perceived knowledge, self-efficacy and declarative knowledge showed significant improvements in scores for both clinical (n=428) and non-clinical (n=174) staff, with the effects being higher in the non-clinical (i.e. administrative and community outreach) cohort, who may have not received this type of training before.

Civilian studies

Impacts on suicidal outcomes

The *Signs of Suicide* (SOS) program, which operates in many hundreds of schools in the US, is one of the few interventions to be evaluated with a randomised controlled trial (RCT). This type of study design provides the highest level of evidence for program effects due to the random assignment of large numbers of participants to treatment and control groups, thereby minimising the probability of important pre-trial differences between the two groups.

SOS teaches “high school students to respond to signs of suicide in themselves and others as an emergency, much as one would react to signs of a heart attack.”(Aseltine, James et al. 2007) Presentation of the program consists of an educational video and a screening instrument for depression and suicidality.

Aseltine et al (2007) randomly assigned a total of 4133 high school students at nine high schools to treatment and control groups.(Aseltine, James et al. 2007) Three months after program delivery, the students were surveyed anonymously on their knowledge, attitudes and behaviours towards depression and suicide, including suicidal ideation and attempts within the past three months. The intervention group were 40% less likely than controls to report suicide attempts (intervention group attempted suicide rate for three months = 3.0%; control group = 4.6%). More modest gains were found for attitude and knowledge, and there were no statistical differences for suicidal ideation and help-seeking behaviours. This study provided greater statistical power than previous randomised trials of the same program, enabling confirmation that the SOS program works effectively for adolescents of different ages, race, ethnicity and gender.

Another US study evaluated the impacts and benefit-cost ratio of a suicide prevention program targeting members aged 15-19 years of a Native American tribe in New Mexico.(Zaloshnja, Miller et al. 2003) As part of the program: a new social worker position was added to the existing small mental health team; a school-based project trained 10 to 25 youths per year to act as peer helpers; and broad-based community education, outreach and screening processes were implemented. Pre-intervention data on suicidal acts in the years 1988-1989 were compared with post-intervention data from 1990 to 1997. The rate of suicidal acts in persons aged 15-19 years declined from 59.8 per 1000 in 1988-1989 to 8.9 per 1000 in 1990-1991, 9.2 in 1992-1993, 17.6 in 1994-1995, and 10.9 in 1996-1997. The quality of life savings from the reduction of fatal and non-fatal suicidal acts were estimated to be US\$1.7 million annually, with a benefit-cost ratio of 43 and a cost per QALY saved of US\$419. The authors stress that the pre-intervention data may have contained anomalously high rates of suicidal acts – appropriate data was not available to establish longer trends – and that the success of the program would have been contingent on the existence of a comprehensive community mental health care and education system composed of the program and existing resources.

A retrospective study by Gibbons et al (2005) examined the association between rates of suicide and prescription for antidepressants, using county level data for the whole of the US in the years 1996 to 1998.(Gibbons, Hur et al. 2005) The authors found no overall statistical significance between all prescribed antidepressants and suicide rates. However, the prescription of selective serotonin reuptake inhibitors (SSRIs) and/or new-generation non-SSRI antidepressants had a significant negative association with suicide rate (maximum marginal likelihood estimate [MMLE] = - 0.15, $P < .001$); and the prescription of tri-cyclic antidepressants (TCAs) had a significant positive association with suicide rate (MMLE = 0.20, $P < .001$). Modelling suggested that phasing out the use of TCAs could reduce the national suicide rate by 33%. The authors noted that TCAs were prescribed more often in rural and poorer counties; and that the use of TCAs may contribute directly to completed suicides due

to the greater likelihood of non-compliance stemming from their adverse effects, and the greater toxicity of TCAs in overdose.

Training effectiveness

Applied Suicide Intervention Skills Training (ASIST) is a two-day training program developed at the University of Calgary and marketed internationally by LivingWorks Education. ASIST is targeted at professional and lay caregivers, training them to recognise suicide risk and apply appropriate risk reduction methods. Numerous evaluations of the program's effectiveness in terms of learning outcomes have been undertaken (LivingWorks Education 2007): just one is included here for illustrative purposes.

The study of ASIST in Scotland by Griesbach et al (2008) used data from: the national ASIST database; a survey of 534 former course participants from the years 2003-2007; and interviews or focus groups with a sub-sample of 22 former participants, 28 ASIST trainers, and 19 key stakeholders.(Griesbach, Dolev et al. 2008)

Course participants reported considerable increases in their knowledge, skills and confidence as a result of their ASIST training, as would be expected from an internationally recognised program. Follow-up data suggested that participants were more likely to intervene with persons at risk of suicide after their training than prior to training. Some respondents credited the ASIST program with reducing the stigma associated with suicide, and raising awareness in communities. The evaluation did not assess the impact of ASIST on rates for attempted or completed suicides, citing barriers including: the unreliable reporting of suicidal acts; the likely time lag between intervention and effect; and the critical mass of program trainees required to achieve measurable effects.

Systematic reviews

Mann et al (2005) conducted a systematic review of the global evidence published between 1996 and June 2005 for the effectiveness of suicide prevention strategies.(Mann, Apter et al. 2005) Suicide experts from 15 countries assessed a shortlist of 93 out of 5020 publications, comprising: 10 systematic reviews and meta-analyses; 18 randomised controlled trials; 24 cohort studies; and 41 ecological or population based studies.

The authors identified five major approaches in suicide prevention:

1. Awareness and education campaigns targeted at the general public, primary care physicians, or community and organisational gatekeepers.
2. Screening to identify at-risk individuals.
3. Treatment interventions, comprising pharmacotherapy, psychotherapy, and/or case management following attempted suicide.
4. Restriction of access to lethal means.
5. Media guidelines on reporting suicide.

The authors presented a narrative synthesis of evidence for each approach, and estimated their relative impacts on suicide rates. In order of estimated impact, the most effective approaches were:

- physician education (22-73% reduction)
- gatekeeper education (33-40% reduction)
- the restriction of lethal means, specifically domestic gas, barbiturates and guns (1.5-23% reduction)

The assessment of gatekeeper education was based on the studies conducted in the Norwegian Army (Mehlum and Schwebs 2001) and US Air Force (Knox, Litts et al. 2003) mentioned earlier. Evidence suggested that the remainder of the approaches have the capacity to reduce suicide rates, pharmacotherapy in particular (3.2% reduction), but further studies were required.

The recommendations of the Mann et al review underpin the evidence base for the Australian Government's *Living is for Everyone* policy framework.(Department of Health and Ageing 2008) The review's conclusions were also echoed by Beautrais et al (2007), who however advised against the adoption of school-based suicide awareness programs, in the belief that there was little evidence for their effectiveness and legitimate concerns regarding their safety.(Beautrais, Fergusson et al. 2007)

Rodgers et al (2007) reviewed 55 evaluations of suicide prevention programs with the purpose of developing a best-practice registry. The authors identified 24 evaluations that met minimum methodological standards and short-listed twelve programs to be placed on the registry: four of the programs were deemed to be effective, with the remaining eight programs described as 'promising'.(Rodgers, Sudak et al. 2007)

There is little evidence that the establishment of a suicide prevention centre is a sufficient strategy in itself. Lester (1997) found just 7 out of 14 studies that compared suicide prevention centres with suicide rates in surrounding areas to provide slender correlational evidence of preventive effects. The author concluded that finer measures such as the numbers of staff and clients should be used to measure strategy effectiveness, rather than the mere existence of centres.(Lester 1997)

Summary comments

While the evidence-base for the relative effectiveness of suicide prevention approaches is not extensive, there are sufficient recurrent themes to envisage the key features of a successful intervention. Tentatively, these would be:

- Embedding of the suicide prevention program within a broad-based community education, treatment and support service that minimises stigmatisation.
- Delivery of the following core program components:
 - gatekeeper and clinician training
 - early detection and screening protocols
 - immediate risk reduction (access to lethal means, exposure to stressors, use of alcohol and drugs)
 - peer or buddy watch systems
 - appropriate medication regimes.

- Existence of a strong institutional context for program delivery that enables systemic change, as suggested by the success of the US Air Force and school-based SOS programs.

The existing Australian Defence Force Suicide Prevention Program (Joint Health Command 2008) contains some of the key elements of the above.

References

- Aseltine, R. H., A. James, et al. (2007). Evaluating the SOS suicide prevention program: a replication and extension. *BMC PUBLIC HEALTH* **7**.
- Beautrais, A., D. Fergusson, et al. (2007). Effective strategies for suicide prevention in New Zealand: a review of the evidence. *The New Zealand medical journal* **120**(1251): U2459.
- Department of Health and Ageing (2008). Research and evidence in suicide prevention.
- Gibbons, R. D., K. Hur, et al. (2005). The relationship between antidepressant medication use and rate of suicide. *Archives of General Psychiatry* **62**(2).
- Gordana, D. J. and P. Milivoje (2007). Suicide Prevention Program in the Army of Serbia and Montenegro. *Military Medicine* **172**(5): 551-555.
- Griesbach, D., R. Dolev, et al. (2008). The use and impact of applied suicide intervention skills training (ASIST) in Scotland: an evaluation. Edinburgh, The Scottish Government.
- Joint Health Command, D. o. D., Australian Government. (2008, 24th September 2008). Australian Defence Force Suicide Prevention Program (ADF SPP). Retrieved 25th November 2008, from <http://www.Defence.gov.au/health/DMH/i-spp.htm>.
- Knox, K. L., D. A. Litts, et al. (2003). Risk of suicide and related adverse outcomes after exposure to a suicide prevention programme in the US Air Force: cohort study. *BMJ: British Medical Journal* **327**(7428): 1376-1378.
- Lester, D. (1997). The effectiveness of suicide prevention centers: a review. *Suicide Life Threat Behav* **27**(3): 304.
- Lifeline Australia. (ND). ASIST evaluation overview. Retrieved 25th November 2008, from http://www.lifeline.org.au/learn_more/livingworks/research_and_development/Evaluation_Overview.pdf.
- LivingWorks Education. (2007, October 2007). New research on the effectiveness of LivingWorks Programs. Retrieved 25th November 2008, from http://www.lifeline.org.au/data/assets/pdf_file/0006/24756/Handout_R_and_D.pdf.
- Mackenzie, M., A. Blamey, et al. (2007). Measuring the tail of the dog that doesn't bark in the night: the case of the national evaluation of Choose Life (the national strategy and action plan to prevent suicide in Scotland). *BMC PUBLIC HEALTH* **7**.
- Mann, J. J., A. Apter, et al. (2005). Suicide prevention strategies: a systematic review. *JAMA : the journal of the American Medical Association* **294**(16): 2064-74.
- Matthieu, M. M., W. Cross, et al. (2008). Evaluation of gatekeeper training for suicide prevention in veterans. *Archives of suicide research : official journal of the International Academy for Suicide Research* **12**(2): 148-54.

- Mehlum, L. and R. Schwebs (2001). Suicide prevention in the military: recent experiences from the Norwegian Armed Forces. *International journal of health services of the armed forces* **74**(2): 71-74.
- Payne, S. E., J. V. Hill, et al. (2008). The Use of Unit Watch or Command Interest Profile in the Management of Suicide and Homicide Risk: Rationale and Guidelines for the Military Mental Health Professional. *Military Medicine* **173**(1): 25-35.
- Rodgers, P. L., H. S. Sudak, et al. (2007). Evidence-Based practices project for suicide prevention. *Suicide & Life-Threatening Behavior* **37**(2): 154-164.
- Zaloshnja, E., T. R. Miller, et al. (2003). Reducing injuries among Native Americans: five cost-outcome analyses. *Accident Analysis & Prevention* **35**(5): 631.

Appendix 4 Resilience and Decompression

The articles included in this summary address two main topics, resilience and psychological decompression. A brief description and material relating to the concepts *Battlemind* and Operational Stress Injury (OSI) is also included.

Resilience

A Psychological Resiliency Report (Wald and Taylor et al, (2006) provided a literature review on conceptualisations of resiliency and their application in the military. The authors identify an absence of a uniform and accepted definition of resiliency. This includes literature exploring the role of resiliency in protecting individuals from exposure to stressors, notably in groups where exposure is frequent such as the emergency services and military.

Despite the lack of consistency across definitions, the authors highlight a description of resiliency developed by Bonanno (2007), which refers to a trajectory, distinct from recovery, in which an individual may develop PTSD following a traumatic event but recovers over time. In such cases the individual will only exhibit mild disruptions in functioning, nevertheless his or her mental health remains relatively stable over time enabling interactions with others continue. Wald and Taylor et al point out, however, that Bonanno's definition lacks clarity around the distinction between resilience and recovery and it relies on study of isolated occasions of trauma rather than any persistent or chronic stress which could undermine resilience in an individual.

The authors comment on other research which combines resiliency and recovery into a broader construct, yet again there are differences whether it should be considered an attribute of the individual or as a set of circumstances which combine to form a social context. This latter conceptualisation underlines the notion of pathways to resilience. Wald and Taylor et al also advocate broader research on the constructs for resiliency for much of the existing knowledge is anchored in developmental psychology and psychiatric empirical survey which has identified factors such as emotional control, locus of control, calmness under pressure and social support as related to resiliency, but research on the interaction between multiple factors (i.e. protective, risk and exposure) remains unclear and in need of validation.

Furthermore, despite attempts at identifying interrelationships, underlying mechanisms, processes and outcomes, there is still no comprehensive theory on resiliency which is based on methodologically rigorous, generalisable and validated research. Finally, the authors contend research on resiliency is mostly limited to children and adolescents and therefore need to be expanded to the broader adult population with a focus on the factors contributing to resiliency in adults, specifically resiliency in military personnel. Through studies on military populations which have a unique set of circumstances and attendant training, the validation of resiliency measures can be achieved and this would allow for analysis and comparisons across military and non-military settings.

Rona et al (2007) examined the relationship between duration and frequency of deployment and mental health in UK military personnel. A survey of previously

deployed soldiers measuring psychological distress, PTSD and alcohol use revealed that duration of deployment, rather than frequency, had an affect on the mental health of soldiers. Members deployed for 13 months or more were more likely to meet the criteria for PTSD. Duration of deployment was also found to be significantly associated with alcohol problems. An additional complication was that PTSD was influenced by a mismatch between expectations concerning deployment length and the reality of its duration. With regard to this the authors recommended policies concerning duration of deployment should be strictly adhered to and that there be clarity around deployment length. However, they concluded longer than expected deployments could have a greater impact on mental health than combat exposure.

Van Wijk and Waters (2008) applied a particular construct of resilience, a health-focussed approach, in understanding and enhancing wellbeing in naval submariners exposed to stressors. As a challenge to pathogenic approaches dominating health assessment interviews Van Wijk and Waters argued that rather than stress being due to psychological disorders as captured by these pathogenic methodologies, it resulted from an individual's ability to cope or not. They conducted a small study using this health-focussed approach, which focuses on strength and positive attributes, during the interview process for psychological screening. Their results showed that the kinds of questions embedded in a health-focussed approach primed the individual towards more effective coping skills for life challenges. The positive effects of this were supported by a lower rate of self-referrals after post screening, which they argued is promising for regular psychological screening of naval specialists.

A review of psychological and biological factors contributing to resilience in the development of PTSD and its assessment and measurement was conducted by Hoge et al (2007). The authors hypothesised that resiliency provides protection from PTSD. In addition to the psychological variables of positive or action coping styles, locus of control, cognitive abilities and social support as factors which conferred protection from PTSD, they identified a set of biological factors in the form of cortisol levels and other adrenal gland hormones have been shown to be potential resiliency factors. However, the authors noted that there was a lack of consistency in the measurement of resilience and resilience in the context of PTSD warrants further clarification. They acknowledged a limitation with their own research which resides in the difficulties in measuring resilience in individuals after a traumatic event in absence of data comparing Pre and Post as well as distinguishing resilience from treatment effect.

Sinclair and Wallston (2004) evaluated the validity and reliability of the Brief Resilient Coping Scale (BRCS) by applying it to a case study on rheumatoid arthritis. BRCS measured the construct of adaptive coping as part of resilience. The authors used the scale to examine mechanisms for coping with pain, fatigue and functional limitations in two female samples with rheumatoid arthritis. Resilient coping resided in its ability to promote positive adaptation despite higher levels of stress. The authors argued that there were few scales relating to resilience and even fewer focusing on adult coping and they found the BRCS measured a coping resource which influenced psychological and physical outcomes. This provided validity for the BRCS as a measure of adaptive coping resource. The authors concluded that the BRCS could be a useful tool for understanding the operation of resilient (adaptive) coping processes in protecting individuals from stress.

Adler et al (2005) investigated the effects of deployment length (stressor duration) and no previous deployment history (stressor novelty) on U.S. male and female military personnel returning from a peacekeeping mission. Participants were surveyed for both depression and posttraumatic stress and the findings confirmed that longer and first time deployments were associated with increased distress scores. However, this effect was only found in males. Their study also revealed that previous deployment, compared to first time deployment was significantly related to lower depression and posttraumatic stress scores for both males and female soldiers. The authors noted that they did not assess the impact of length of deployment beyond 10 months which may have a greater impact and recommend follow-up research to confirm these differences.

Bonanno et al (2007) investigated predictors of resilience six months after the September 11 terrorists attacks. In contrast to studying adult resilience through person-centred variables (i.e., hardiness or self-enhancement), the authors were interested in examining other factors which could inform resilience. These included demographics, social and material resources and additional life stressors. Through a telephone survey of randomly selected respondents where resilience was defined as having a 1 or 0 PTSD symptom score, they found gender, age, race/ethnicity, education, level of trauma, income change, social support, frequency of chronic disease and recent past life stressors were all predictive of resilience. The absence of additional life stressors was found to be the most robust variable associated with resilience. Bonanno et al concluded that resilience among adults was informed by a cumulative mix of factors and the variables they identified exerted an additive or cumulative influence on resilience.

Psychological Decompression

In a follow up to a pilot project on decompression in a separate location for CF members, Marin (2007), the Canadian Defence Ombudsman undertook an investigation to determine whether the program should be rolled out across all Canadian military deployments. At the time of the study, there were no guidelines for this and the decision to send personnel to decompression was the responsibility of the CO. Marin designed a set of principles which would make the decision by COs to send soldiers for decompression easier. Interviews with a cross-section of stakeholders identified four key benefits of decompression these were: recognition, comfortable environment, ability to unwind mentally, and access to education and training. Marin also reviewed other decompression models in the Netherlands and Australia (in policy/development only) in the development of a list of principles or factors which should be included when determining whether decompression is warranted:

- the level of threat or danger experienced on the mission
- casualties and major incidents during the mission
- mission mandate, its extent and clarity
- public awareness and support for the mission
- tour length and whether tour length was predictable
- number of tours and operational tempo
- tempo of mission
- living and working conditions during the tour

- ability to communicate with loved ones whilst on deployment
- opportunities to leave during the tour
- training and education to assist in reintegration
- input from professional community
- input and feedback from members
- recognition for member's participation in the mission.

Overall, Marin argued that decompression provides an opportunity for education and training to sensitise members coming back to home life. It also prepared families for what they could expect from a returning soldier. Marin found that the existence of the program, with the implied care and expense, resulted in members feeling their efforts were valued and commitment recognised. On the basis of this, Marin concluded that this type of program was good for morale.

However, the benefits of decompression remain to be fully explored and accepted as evidence in other literature. Hughes et al (2008) reviewed the history and policy and existing research on the efficacy of decompression in the military. They argued there was a lack of evidence to support claims that decompression works and until further knowledge was gained its use should be discretionary. They reviewed the British approach called 'normalization', which involves three to four days in the barracks with military activities, recreation and family contact structured into each day. Internal feedback and unpublished evaluations conducted on this program was positive. The authors however contrasted these with findings from a UK regular army study on perceptions of normalization which found that the majority of members did not consider themselves in need of decompression, nor did they think they would benefit from it. They concluded these perceptions coupled with the lack of positive evidence for decompression and mental health suggests that if there was a link it would be weak. The authors recommended that decompression be kept brief to avoid long periods on base following a deployment and decisions needed to be made about where decompression took place, for how long and for whom. They argued if decompression fitted in seamlessly with the unit rather than being imposed, it could work, but overall more needed to be understood about its potential positive and/or negative effects.

Battlemind

In a leading study on the effects of *Battlemind*, Castro et al (2006), stated that *Battlemind* referred to the soldier's inner strength to face fear and adversity. There were two central components to *Battlemind*; self-confidence and mental toughness, both of which were keys to the successful performance in combat. *Battlemind* was also designed to provide soldiers with the necessary skills to transition home. The authors undertook a study of soldiers returning home from a year long deployment and found that soldiers who had received *Battlemind* training post-deployment reported fewer mental health problems and less stigma than soldiers who received standard stress education training. Furthermore, soldiers who received *Battlemind* training reported fewer PTSD and depression symptoms, and lower anger and psychological stigma scores.

Operational Stress Injury

Rossignol (2007) investigated measures to mitigate operational stress injury in Canadian Forces (CF) members on return from deployment. Described as 'reintegration' the process was made up of three key phases. The first was third location decompression where Operational Stress Injury Social Support (OSISS) provided support for CF across Canada. Rossignol commented that third location did not prevent mental health issues arising and there was little empirical evidence to measure its effectiveness thus far.

The second phase of reintegration commences when the soldiers moved to their home base where they worked 3.5 days before going on leave. This allowed for the slow separation from their fellow soldiers with whom they may have developed close relationships and further reintegration with their families who must also adjust to the return of the soldier. Reservists who might have been on the same deployment also stayed with the group at this time but Rossignol commented that there was still a gap in support provided to reservists post-deployment. He argued the involvement of the family was critical as they were in the best position to detect any symptoms of operational stress injury but also they too were exposed to the effects and might be in need of support.

The final stage was post-deployment monitoring and treatment which chiefly referred to the mental health provisions during the transition process. This process of measuring and monitoring the mental health status of soldiers lasted for up to six months.

Thompson and McCreary (2003) reported on a project by the OSISS which developed a Speaker's Bureau to educate and increase awareness in the CF about operational stress injury. Designed to reduce stigma around mental health problems and increase acceptance and understanding of operational stress injuries, the report reviewed the literature on attitudes and attitudinal change to OSIs to assist the Speakers Bureau in the effective delivery of information through understanding how attitudes were formed and how they might be altered.

A qualitative analysis of attitudes and behaviours relating to stigma and discrimination towards those experiencing OSIs in the CF was provided by L'Heureux and Rochon (2004). Through telephone interviews with CF members and document analysis they found the CF were not dealing effectively with OSI and the issues raised by OSI were system-wide requiring a broader, more strategic and better-coordinated response. They recommended a centralised OSI committee with sub-committees set up to deliver localised initiatives. This would not only avoid duplication but the committee would also be responsible for data collection and ongoing evaluation dissemination of information regarding successful and unsuccessful practices.

The Centre for Posttraumatic Mental Health (ACPMH 2008) provides an annual comprehensive summary of the literature on mental health and traumatic stress. The most recent report found that although varying widely across countries, mental health problems were common amongst deployed personnel and symptoms were likely to increase over the months following return. In addition to PTSD, these problems

included depression and substance abuse. Among predictors of the later development of PTSD were younger age, female gender (even more so if they have a history of interpersonal trauma), history of childhood adversity, lower IQ and poor pre-trauma cognitive ability.

Bliese and Stetz (ND) explored job satisfaction and wellbeing in reservists. Specifically, they attempted to build a theoretical (occupational stress) framework to understand the interrelationship between perceptions of procedural justice, intragroup conflict, and job related self-efficacy as variables. They hypothesised that perceptions of procedural justice and self-efficacy early on mobilisation could impact on subsequent reactions to intragroup conflict and wellbeing and job satisfaction. Through a survey of reservists activated after the Sept 11 terrorist attacks in the U.S in the first three months following their activation and then again three months later, they found that stressors such as intragroup conflict were consistent predictors of job satisfaction and wellbeing and self-efficacy was a significant predictor of job satisfaction. Perceptions of procedural justice were less significantly related to job satisfaction. Importantly, they found a strong correlation between self-efficacy and job satisfaction three months later, which suggested job related self-efficacy in training could have important long-term implications.

Their results also indicated a positive link (albeit weak) between procedural justice and wellbeing three months later which suggested procedural justice should be included in occupational stress research. The interaction of these variables was found to support their hypothesised and ultimately, high self-efficacy served as a buffering role against stressors in reservists. The authors concluded that their findings had implications for developing resilience through work related self-efficacy, assisted reservists in being able to better withstand stressors. However, Bliese and Stetz included a caveat that any organisational efforts towards training in self-efficacy must also occur within a just and fair work environment as perceptions around this had a mediating effect.

The final document included in this summary was a military leader's guide, compiled by NATO. Based on interviews with 172 military leaders, the guide responded to the consistent calls for more information regarding the management of psychological stress of unit members. The guide was also designed to address the gap between leader training and the reality of operational stress on deployment. There were six chapters which made up the guide; these addressed: assumptions personnel bring to the service, assessment and support for individual fitness, assessment and support for unit morale, the provision of family support, the management of the psychological impact of traumatic events and the effective utilisation of support professionals. These six themes applied to all stages of deployment and act as a user's manual for military leaders.

Summary

The role of resilient coping processes in protecting individuals from stress was a focal point of the literature summarised here. While research on resilience has expanded over the years there are still gaps in empirical and theoretical definitions and measurement. Research on resiliency is mostly limited to children and adolescents and needs to be expanded to the broader adult population, particularly resiliency in military personnel.

This summary has also revealed that length of deployment rather than frequency has an affect on the mental health of soldiers. The research has suggested that longer than expected deployments could have a greater impact on mental health than combat exposure.

Psychological decompression, specifically in an alternate or 'third' location, was considered good for the morale of military members as well as providing education and training to sensitise them and their families to returning back to home life. However, the benefits of decompression remain to be fully explored as there is a lack of evidence to support claims that decompression works and further knowledge needed about its potential positive and/or negative effects.

References

- ACPMH (2008). Summary of the Military Mental Health and Traumatic Stress Literature: 2007. Melbourne, Australian Centre for Posttraumatic Mental Health, University of Melbourne. 2007.
- Adler, A. B., A. H. Huffman, et al. (2005). "The Impact of Deployment Length and Experience on the Well-Being of Male and Female Soldiers." Journal of Occupational Health Psychology **10**(2): 121-137.
- Bliese, P. D. and M. C. Stetz (ND). Modeling the Effects of Efficacy, Justice and Conflict among Reservists activated for Homeland Defense. Enhancing the Well-Being and Readiness of Soldiers and Families Defending the Homeland. Maryland.
- Bonanno, G. A., S. Galea, et al. (2007). "What Predicts Psychological Resilience After Disaster? The role of demographics, resources, and life stress." Journal of Consulting and Clinical Psychology **75**(5): 671-682.
- Castro, C. A., C. H. Hoge, et al. (2006). Battlemind Training: Transitioning home from combat. W. R. A. I. o. Research. Maryland.
- Hoge, C. H., E. D. Austin, et al. (2007). "Resilience: Research evidence and conceptual considerations for posttraumatic stress disorder." Depression and Anxiety(24): 139-152.
- Hughes, J. G. H. H., M. Earnshaw, et al. (2008). "The Use of Psychological Decompression in Military Operational Environments." Military Medicine **173**(6): 534.
- L'Heureux, L. N. L. and C. Rochon (2004). Canadian Forces and OSI: Efforts and Progress in addressing the issues. Discussion Paper. Ontario, Barrington Research Group, Inc. for Director Human Resources Research and Evaluation. National Defence Headquarters.
- Marin, A. (2007). From Tents to Sheets: An analysis of the CF experience with third location decompression after deployment. D. C. O.-T. L. Decompression. Canada.
- Rona, R., N. T. Fear, et al. (2007) "Mental Health Consequences of Overstretch in the UK Armed Forces: First phase of a cohort study." BMJ **Volume**, DOI: 10.1136/bmj.329274.585752.BE
- Rossignol, M. (2007). Afghanistan: Military personnel and operational stress injuries. P. I. a. R. S. P. P. 07-20E.
- Sinclair, V. G. and K. A. Wallston (2004). "The Development of Psychometric Evaluation of the Brief Resilient Coping Scale." Assessment(11): 94.

- Thompson, M. and D. R. McCreary (2003). Attitudes and Attitude Change: Implications for the OSSIS Speakers Bureau Programme. Technical Memorandum. Toronto, Defence R & D Canada.
- van Wijk, C. H. and A. H. Waters (2008). "Positive Psychology Made Practical: A case study with naval specialists." Military Medicine **173**(5): 488.
- Wald, J., S. Taylor, et al. (2006). Literature Review of Concepts: Psychological Resiliency, Final Report, Defence R & D Canada - Toronto.

Appendix 5 Emergent themes from public submissions

DISCLAIMER: The views expressed in this Appendix are those expressed by the individuals and groups making a submission. They do not represent the views of the author. They represent a range of perceptions and insights relevant to the study and are an important input.

Introduction

The following themes are derived from submissions collected as part of the public submission process. Submissions were collated and analysed according to two key sources; individuals and organisations. Individual submissions came from current serving and ex-members, partners and/or family members. Organisational submissions included independent psychologists, members from key agencies and government service providers. The submissions are presented according to individual and organisation key points, however, the proposals reflect the combined recommendations of these two sources.

The submissions highlight important shortcomings in the delivery of mental health services, transition management and post separation support from the ADF. Many offer useful insights for improving current practice, or propose alternative models, which are presented here.

1 Model for delivery of mental health services in the ADF

Key Points – Individual

Submissions concerning the model for delivery of ADF mental health services, chiefly concerned issues of access to, and quality of, mental health services and support provided by the ADF. There was a perceived lack of continuity of clinical care for serving members. This included the use of civilian and ‘uninformed’ psychologists. The workloads of the psychological staff also meant that there were often long waiting periods, and coupled with a shortage of remote services to suit the mobility characterising ADF personnel, led members to seek ‘external’ help.

There were also questions raised about the care of more ‘vulnerable’ members. This mainly referred to a perceived lack of follow-up for these individuals and that their treatment occurred on military facilities, which in some instances was considered particularly problematic. It was suggested that by not separating the individual from Defence bases ignored the role the military may have played in contributing to the problem in the first place. Treating members in civilian residential facilities was recommended as a means to overcome this problem.

Individual submissions also commented on support services such as Veterans’ Line, which were limited to veterans or members from peacekeeping operations. This excluded members who did not fit these two categories but may nonetheless have

been affected by stress or mental health problems. This issue of 'terminology' weaves through many of the themes.

Key Points – Organisational

Similar to individual submissions, the submissions from organisations had a particular focus on service provision for mental health care. Process concerns regarding the need to consider a member's 'illness course' rather than simply a 'transition course', which reflected a different set of circumstance and timeframes, were raised. Inadequacies were also reported by the use of non-health staff in units to provide 'quasi medical' functions, particularly in relation to 'suicide watch'. This also includes delays in receiving and a lack of coordination of care. This was reported as being compounded by services such as VVCS which, in not offering 24hr (after hours) help, caused psychological staff who were already in short supply, to become overburdened.

Submissions from organisations reported higher call rates (telephone support) related to psychiatric problems. This reinforced claims that support services for psychological/psychiatric problems was inadequate for both members and their families. Finally, terminology was also considered to be problematic by organisations, particularly the use of encompassing terms such as PTSD which it was felt did not reflect the full spectrum of the mental disorder of a member.

Proposals

Proposals included the provision of prompt (after hours) clinical mental health assessments by clinical psychologists for members at risk. A travelling clinic was also recommended to reach remote areas where services are lacking. It was suggested a video link-up option should be considered for individuals experiencing geographical impediments to accessing treatment and support. Tele-psychiatry was offered as one option to alleviate the geographical distribution and mobility of ADF members and recently discharged.

Some recommendations referred to the roll-out of programs with proven success. These included Lifestyle programs and VVCS. It was noted here, however, that younger veterans may be dissuaded from using the latter service due to its title. Recommendations were also put forward for more coordinated action between DVA, ADF, DCO and VVCS in the delivery of programs.

Submissions recommended a review of the personnel structures at a unit level for adequacy of support in addressing the stress of service. This also extended to leadership training for unit leaders in both the identification of mental health problems and towards a reduction in bullying. On this latter point, appropriate punishment for bullying was recommended.

Each military area should have a clinical coordinator to run treatment and education programs. It was recommended intense education programs should be delivered to members who come back from deployment as well as discharge.

2. Workforce and training for mental health practitioners

Key Points – Individual

There appeared to be little in the way of individual submissions relating to workforce and training for mental health professionals in the ADF. Rather, there were mostly negative comments on the perceived ineffectiveness of the DCO. One particular observation referred to the DCO and its provision of marriage and relationship counseling as inadequate.

Key Points – Organisational

Organisations were also critical of the DCO which it was felt provided too few trained mental health personnel. Likewise, in ADF units, the provision of psychologists (in every unit) did not mirror that of chaplains. In fact, it was observed that the provision of psychological resources on military bases does not appear to be based on needs-based population ratios. A high turnover of care providers (due to the pressures of being under-resourced) exacerbated problems around availability and continuity of care.

It was also noted that the use of ‘outsiders’ with insufficient understanding of and experience in the military environment and its affects, might dissuade members seeking or committing to treatment programs.

Proposals

Proposals for this theme chiefly referred to the funding of programs which was considered to be on an ad hoc basis and leading to inadequate service provision. This included funding to service remote areas. One recommendation argued for a review of how psychological resources are allocated. It was also suggested that clinical psychological assessments be conducted by trained clinical psychologists.

3. ADF Mental Health Strategy

No relevant submissions

4 Screening for mental health problems – RTAPS and POPS

Key Points – Individual

The only reference made to this theme in the individual submissions was in relation to the method of delivery for debriefs. The practice of publicly asking members if they required a ‘psych debrief’ was considered problematic and making it less likely for a member to admit to needing help in front of peers. It was suggested individual debriefs be used instead of group debriefs.

Key Points – Organisational

Organisational submissions predominately focused on screening at recruitment and during service. There was consensus across the organisation-based submissions that at recruitment the existing procedures were not effective in detecting mental health

problems. This would have an effect on the filtering of unsuitable applicants. There were many instances reported of ‘wrongful’ enlistment which suggested a systemic failure to detect mental disorders during recruitment. This also included disorders which developed during service and mental disorders that resulted from pain or an inability to return to work as a result of a physical injury. However, it was conceded that this was difficult to predict.

Importantly, poor screening practices could have dire consequences for those who were enlisted in the ADF with mental health problems but were not able to deploy. Such individuals might be given false hope for a military career only to be ‘rejected’, and would be unable to seek help from medical and/or VVCS, or other organisations such as the RSL.

Proposals

To overcome the failures of the current screening practices, it was suggested that comprehensive mental health screening be conducted on a regular basis throughout a member’s service career, whether or not deploying. This would facilitate early detection. Further, it was recommended that there be an annual debrief and education on mental health issues for all personnel across all levels.

5. Military culture and mental health (including sharing of information in medical records)

Stigma and barriers to care

Key Points – Individual

The individual submissions around stigma and barriers to care were chiefly concerned with attitudes and behaviours. There were numerous attitudinal barriers cited in the individual submissions. These included implicit and explicit statements of intolerance of weakness which prevented members from reporting any problems. Related to this, members’ fears of having their careers restricted were exacerbated by Instructions that COs be notified first by the member when any difficulties arose. This could be a particular source of concern when the relationship between the member and his or her CO was already tense or problematic, as was often reported.

It was reported that delays in getting help were contributed to by a ‘time heals all wounds’ attitude pervading military culture. This had consequences for members seeking appropriate advice and care, especially during the critical early stages of a problem. There were also several references to pejorative and frequently used terms that presented a barrier to accessing care. The term ‘malingerer’ appeared to be still widely used to describe members identified as having a mental health problem. Also, the distinction between members who had, and had not, deployed in war/operational service and those in peacetime service led to perceptions of differential treatment. Such perceptions constituted a further barrier to care. The term ‘veteran’ was considered exclusionary in not recognising non-war/operational duties.

Stigma was identified widely as a critical issue for both individuals and organisations. It was felt that stigma, lack of understanding and unsympathetic attitudes about

mental health issues occurring across all ranks in the ADF led to prejudice. Even the act of applying for DVA benefits was considered stigmatising. Members were reluctant to instigate this process while still in service despite being entitled to do so as soon as they become injured.

Other barriers to care included geographical distance for many ex-members who moved to rural locations. In such areas, as noted earlier, mental health care provisions were under-resourced.

Overall, there was a reported lack of trust in the ADF in dealing with mental health issues, particularly around revealing problems to COs. This, it was argued, resulted in members seeking external services so as not to disclose their condition. It also led to feelings that the ADF had failed members.

These were also concerns that psychologists could include information in their reports which may not be of an explicit security/safety value, but could have implications for the member's career opportunities.

Key Points – Organisational

The organisation-based submissions for this theme were quite different from submissions from individuals. Procedures and seemingly unofficial practices around the exchange of information and attendant confidentiality issues were of key concern. Communication between different service providers either involved duplication or, alternatively, left gaps. The system for keeping COs informed (reporting between doctors and units) was also considered disjointed. It was also observed that tension existed between rehabilitation related work restrictions and the effects on COs (discriminating against members particularly regarding their promotion). It was believed that restrictions on communicating classified information should not be an impediment to a member seeking help or treatment.

Proposals

Recommendations relating to this category mainly referred to improving protocols around documentation management and observing privacy across different treating organisations. Increasing assurances of confidentiality, it was proposed would assist in early intervention, as members would be less reluctant to access support, particularly if their deployability was of some concern.

In order to overcome stigma and assist with the process of early identification of symptoms, it was proposed that education throughout all stages of service, commencing with recruit training, be introduced.

In overcoming issues around terminology, it was suggested that the Canadian term of 'Operational Stress Injury' (OSI) be introduced instead of terms such as PTSD. OSI acknowledges that problems may not arise from combat-related deployment, but could also be an effect of peacekeeping and peacemaking roles.

Resilience

Key Points – Individual

The presence of a ‘warrior culture’ in the ADF was noted in many individual submissions. COs reportedly lacked the ‘soft skills’ to deal with the ‘emotional’ dimension of their subordinates. As noted in stigma and barriers to care, above, stigma meant that access to information on a member’s psychological treatment should be restricted, unless there are concerns regarding Defence security and member safety.

Reports of bullying behaviour and a general lack of compassion and understanding from higher ranks also dominated the submissions. This contributed to the view that the ADF has an entrenched culture that lacks understanding of mental health issues.

The personal impact of stress featured in many individual submissions. The practice of ‘psychological games’ in the military - official or otherwise - could have adverse effects on a member’s self-esteem and relationship with others. A breakdown in peer relationships was noted at numerous times in the submissions. Stress could also be exacerbated by a perceived lack of sympathy by unit MOs who were able to determine whether an individual accessed his or her own medical records or not.

It was reported that existing resources did not prepare members for discharge. A drinking and, to a lesser extent drug culture in the armed services has contributed to members leaving with abuse problems. Related to this, one submission commented that resilience training was inadequate in preparing members for the realities of combat.

Key Points – Organisational

An organisation-based submission suggested that mental health problems could arise long after discharge as a result of a physical disability for which the individual was originally discharged. Problems could also commence when individuals returned from sick leave. There were reports of higher ranks treating members returning from sick leave in a ‘punishing’ manner.

Related to the ‘time heals’ attitude note in stigma, above, some members put off claims for fear of being considered weak, preferring to wait to see if their condition improved. This made it difficult to prove the injury when it came to lodging a claim.

Proposals

In a similar way to many of the previous proposals, broadening education to promote resilience was commonly recommended. Sessions on mental health information and advice should be included as part of promotion courses. In the event of discharge, it was suggested that more support be provided, for instance encouraging volunteer work by members in the community, which it was believed would provide a sense of purpose and increased self-esteem.

It was suggested that existing resilience development programs for recruits should be strengthened.

6 Medical Employment Classification (MEC) system and rehabilitation in the ADF and mental health

Key Points – Individual

Generally, individual submissions had concerns with medical employment classification, while organisations focused on rehabilitation programs. For some, the MEC system was viewed as being unfair in its deadlines and onus on members providing self-assessments. There was sometimes little advice indicating progress of a member's review. This could cause considerable anguish while the member was forced to wait and was largely left in the dark about the process.

There were also reports of the discriminatory effects of not being able to undertake certain tasks e.g., handling weaponry whilst on medication. This enhanced feelings of being marginalised.

There were perceptions of widespread difficulties in accessing compensation with PTSD, which included a lack of recognition of other 'impactors' or stressors outside the current classification of stressors that may contribute to PTSD.

A prevailing opinion was that once a problem had been identified, lack of adequate skills by officers in dealing with it led to the member being 'gotten rid of'. For this reason, there were instances where individuals did not reveal, or lied about, their mental health problems. The bad timing of medical and vocational rehabilitation programs meant that one often inappropriately preceded the other.

Key Points – Organisational

It was noted that discharge for straightforward medical reasons risked mental health problems going undiagnosed. Furthermore, one submission considered a review of the MEC system would enable individuals to be reclassified into non combat roles.

Rehabilitation programs attracted the most comment in organisational submissions. For instance, rehabilitation personnel who did not have a military background were considered by some to be unsuited to the ADF. It was commented that there was not enough time for rehabilitation before discharge and members were being discharged before being fully prepared.

Generally, the MRCA was well received by organisations. However, one submission cautioned that it was only in its infancy and that its programs were still being trialed and not fully integrated with other services nationally.

Proposals

One suggestion was to review the MEC system to enable individuals to take up non-combat roles and to remain in the military. Retraining or service transfer should be an option for members who are unable to continue in their current role/career path.

Alternatively, it was proposed that the ADF made provisions for full recovery and re-enlistments, or individuals re-entering as reservists. However, re-entry versus transitioning out was a challenge. In the case of re-entry, it was suggested more would need to be done concerning the nature of work the member returned to and the social impacts of re-entry during and post treatment.

It was proposed that rehabilitation in the form of volunteer work should be encouraged, with assurances it will not affect pensions.

Rehabilitation should also be provided for members with mental health conditions prior to discharge. It was recommended that compensation entitlements be finalised prior to discharge, and this would be facilitated by early and ongoing programs to increase members' awareness of entitlements. Training for advocates in this area would assist greatly. This would also require the concurrent processing of DVA and ADF procedures. It was suggested that DVA, not ComSuper, be responsible for assessing incapacity to simplify the process.

Compensation for disability should be consistent, rigorous and independent, with the aim of full rehabilitation.

7 Families, community

Key Points – Individual

Submissions relating to families and communities were more straightforward than submissions for some of the other themes. Family members reported experiencing discrimination or a lack of understanding from their local communities and workplaces around discharge and/or the transition processes. There were reports, similar to the personal feelings of members, of feeling 'abandoned' or 'betrayed' by the ADF, which it was felt had 'wiped their hands' of the member and his or her problem. For the member this was particularly difficult given the perceived cost to their families. It was observed that this was not acknowledged by their treatment.

Reference was made to a 'drinking culture' which spilled over into 'normal' life; marriage breakdowns both during and after service were a significant and ongoing problem for ADF members. This was supported by the after hours telephone helplines which many calls were made by partners or relatives of members with PTSD in an attempt to cope with the day to day realities of living with this condition. Children and wives bore the brunt of both diagnosed and undiagnosed PTSD and other mental disorders. The impacts were just as profound. It was felt support from DVA excludes the families of members who have not been deployed.

Key Points – Organisational

An issue often overlooked in relation to family was that the family often had to reintegrate into a civilian community. This was also true for families and dependents of members killed in service. There appeared to be a lack of support for these individuals in transitioning back to civilian life.

Proposals

Support for personnel *without* families and partners, perhaps via structures for peer support, was recommended. It was also proposed that there be a greater focus on families and carers in recognising mental health issues, particularly for the purposes of early identification. In Canada, family members are involved in post deployment programs. The 'At Ease' program was suggested as being useful for family members who could look out for early signs of mental health problems.

Additionally, services such as the VVCS should be extended to the wives and families of the recently discharged who are not veterans and there should be an increase in advertising to promote awareness of such services. It was suggested the ADF provide more relationship counseling for its members and a special demilitarisation unit should be set up so that members can 're-learn' a 'civilian way' after separation.

8 Research and surveillance

No relevant submissions

9 Transitional services, discharges

Key Points – Individual

An over-bureaucratised set of processes characterised this experience. This referred to discharge and transition processes, services and compensation claims. The documentation accompanying discharge was reported as being overwhelming in size and complexity. It was particularly difficult for individuals with a mental illness to navigate the diversity of information coming from multiple sources. Websites were also considered complicated and duplicating information.

Gaps existed between a member being discharged and able to access medical and mental health support, which relied on the individual being a recipient of veteran entitlements. DVA and ComSuper, for instance, have their own set of processes and documentation requirements. This often led to dissonances in payment in the period after discharge, but before claims from DVA or ComSuper were fully processed. The necessity to submit multiple medical forms, requiring doctors' appointments, extended the length of the process. This was found to be particularly stressful when mistakes or inaccurate information was recorded on medical assessments. Such incidences resulted in extended delays and in some cases financial hardship when it affected an individual's invalidity pension.

It was also reported that the requirement to attend meetings, interviews, assessments, and appointments connected to the transition process could cause ex-members, who found it too difficult, to give up. This had implications for receiving ongoing medical and financial support. Furthermore, it was reported that the stress and frustrations of having to deal with multiple agencies and personnel was exacerbated by the high staff turnover rates in agencies and organisations. The necessity to restate their conditions and the events which led to them, to new personnel was reported by members as being a distressing experience.

Individual submissions frequently commented on a lack of follow up by the ADF. To this end, case officers were perceived as being best suited to assist with the transition process. The client liaison unit, in particular, was often cited on as reducing the stress of this process. However, they were perceived in some submissions as being incompetent.

Many submissions came from reservists, who observed they were not included in compensation schemes.

Key Points – Organisational

Transition management and DVA arrangements are not seamless or timely. A division in responsibilities between the ADF and DVA led to discontinuities in medical and health care. Furthermore, that service providers have overlaps or are unclear about their responsibilities, creates an overburdened environment. In a similar way to the preceding themes, organisations remarked about the time it took to finalise entitlements which could result in financial hardship for veterans and their families. If the member was discharged for psychological reasons and proper medical treatment was lacking at the time, this could have disastrous consequences.

A lack of transition planning resulted in the individual being ill-prepared for separation. Important decisions need to be made at this time, which could place considerable pressure on the individual when filling out claim forms. Case officers appointed by DVA for discharge are not automatic. In such circumstances the individual might get a pension officer or advocate representing them but, it was suggested, agencies might not interact with these people because they came from 'external' organisations or systems. Organisations also commented that advocates might not be best suited to deal with issues, as they either were lacking in knowledge of or know-how regarding access to services, rights and entitlements, or were 'unwell' themselves. DCO services were also reported as being insufficient in staff training and skill levels.

Submissions also referred to the scope for administrative errors which were due to the complexity of the process. These could take a considerable time (up to six months) to rectify. This might not only cause financial hardship and stress but such errors could have deleterious consequences for the individual with mental health problems. This was particularly so with errors regarding people who were already vulnerable.

A common observation was that the discharge and transition process left members feeling discarded and used by the ADF. There was a common sentiment that 'the system' failed in its handing over of discharged members for management by the DVA and beyond. Compounding this were the effects of a mental health problem which might be exacerbated by protracted processes.

Effective case management appeared to be missing and the process was perceived as being disjointed, humiliating or degrading, and carried out by individuals who were ill-informed or ill-equipped, and lacked an understanding of the military system. For members with psychiatric conditions who required case management and follow up, this was particularly challenging.

There were numerous remarks about a lack of empathy and/or sympathy in the impersonal approach of DVA staff. There were perceptions of an overlap or ignorance between agencies about what support is provided by each organisation. This all occurred amid a backdrop of despondency and emotional and psychological vulnerability for both mentally ill members and the family members who were trying to assist them. The inefficiency of TMS in providing appropriate advocacy and/or case management, particularly around issues of liability for handover to DVA, resulted in members having to rely on other ESO organisations to assist them through the process.

The point of 'separation' from the military was a key theme to emerge from the submissions. Individual and organisation-based submissions agreed that there needed to be more recognition of the consequences of decisions made at this time. The separation process is characterised by a large amount of complex and often repetitive information which leads to an overwhelming sense of confusion increases stress and anxiety levels, particularly for an individual suffering a mental health condition. It was reported that even face-to-face meetings with transition officers did little to ameliorate the confusion.

The submissions from organisations also referred to a gap existing between the acceptance of liability and access to medical services and compensation. Moreover, a non medical discharge (those who discharge of their own request) inhibited access to counseling, medications and medical services. Discharges could occur at a date which is usually unalterable nor aligned with military compensation or superannuation processes. In such cases, the individual might be left without any entitlements for some time.

The overall process of discharge was wrought with upset, frustration and embarrassment for even physically impaired/injured members. If a mental illness was a factor, it could result in catastrophic outcomes. In addition to the stigma accompanying being discharged for a mental health condition, there were reports of an added sense of uselessness/purposelessness of being denied a military career, as well as fears of what awaits the individual in civilian life. Related to this, there does not appear to be enough time and resources for discharged members and their families to resettle.

Another noteworthy observation referred to the distinction between re-entry and transitioning, which was considered problematic. In circumstances of re-entry, it was suggested that the nature of work the members returned to, and the social implications of this, needed to be considered. This also extended to re-entry during, as well as after treatment. Conversely, it was observed that there were problems with expectations of employability for discharged members by DVA, MRCG and ComSuper.

Wrongful enlistment was also reported as having negative consequences for the individual who could have expectations for a long career in the ADF, but is then discharged for a pre-existing condition.

Differing onset times and fluctuating characteristics made mental health disabilities difficult to identify. It was observed this was compounded by less rigorous methods of diagnosis than those which apply to physical disabilities. Compensation relies on

early diagnosis, treatment and rehabilitation, which was not always possible when diagnosis and treatment was delayed. This could influence the chances of success with interventions. Individuals discharged with an undiagnosed mental health disorder, could bypass the DVA system and their conditions might remain undetected and/or untreated because the compensation system was not triggered.

Organisation submissions also commented on the location of service providers which might be a problem for many veterans who move to country locations.

Proposals

The total service environment should be taken into account when assessing entitlement for compensation. It was recommended that treatment entitlements in non-military settings be reviewed with the view of applying it to the ADF. Furthermore, members on medical discharge should also be retained until their claims have been determined.

A transition unit should be set up by the DVA to manage discharges which includes mental health professionals and volunteer veterans who 'buddy' the member and follow them through the discharge process to monitor and follow up for two years. It was also proposed that a military compensation liaison office (MCLO) on all bases be established by the ADF. This would relieve the pressure on ESOs who do not have the expertise to navigate the complex compensation systems. These positions could be occupied by reservists trained in multi-eligibility. Currently, members have to resort to legal support which was a significant impost against their compensation awards. The client liaison unit should be offered to all veterans.

Other suggestions were that education covering the support and assistance available throughout and post transition should be provided. This includes addressing the expectation that discharged persons had re-entry opportunities which sets up the individual for disappointment. It was also suggested that programs such as 'Stepping Out' should be compulsory rather than voluntary.

Regarding information dissemination, it was suggested that there should be the creation of a centralised database with details on where an individual could go to access information.

The Integrated People Support Strategy (IPSS) in principle would work well in integrating medical rehabilitation with medical review boards, medical discharge and handover to DVA. But gaps in members seeking assistance to establish liability prior to discharge needed to be addressed. The establishment of additional quality assurance measures for administration of terminations on mental health grounds was also recommended. The process of discharge should include a category 'Fit for Discharge' which encompasses rehabilitation, access to and use of the Career Transition Assistance Scheme (CTAS). All compensation entitlements should be completed, resettlement of the member and his/her family in desired location organized, and local medical services set up to enable ongoing care.

All discharges irrespective of reason should address the possibility of re-enlistment or continuous full-time reserve service. In addition to this, long term counseling should

be provided at a community level, by qualified persons. It was also proposed that employment assistance programs be embedded in mental health services which would support a member with a mental health disorder to gain employment.

It was recommended that pastoral care programs be operated from centres (on a drop-in basis) on major bases.

Summary

The issue of mental illness in the ADF is multidimensional. Across many of the themes a lack of trust in organisations, the ADF and the DVA was a key issue. This presented a significant barrier for members seeking care. Furthermore, discontinuities in compensation legislation contribute to a lack of clinical service continuity.

Appendix 6 Rapid literature review of screening for mental illness in the military

In a commentary on screening for psychological illness in military personnel Rona et al (2005) proposed six criteria for implementing a psychological screening program in the military. These were:

1. Identified conditions should be important health problems
2. Screening tests should be clinically, socially, and ethically acceptable
3. Screening tests should be simple, precise, and validated
4. High-quality research evidence should demonstrate the effectiveness of screening in reducing psychiatric morbidity
5. Adequate staffing and facilities for all aspects of psychological screening programs are critical
6. Benefits from the screening program should outweigh potential harms.

These are based in large part on the classic paper on the validity of screening by Cochrane and Holland (1971). These are, in the authors' words, as follows:

- *Simplicity*. In many screening programmes more than one test is used to detect one disease, and in a multiphasic program the individual will be subjected to a number of tests within a short space of time. It is therefore essential that the tests used should be easy to administer and should be capable of use by para-medical and other personnel.
- *Acceptability*. As screening is in most instances voluntary and a high rate of co-operation is necessary in an efficient screening programme, it is important that tests should be acceptable to the subjects.
- *Accuracy*. The test should give a true measurement of the attribute under investigation.
- *Cost*. The expense of screening should be considered in relation to the benefits resulting from the early detection of disease, i.e., the severity of the disease, the advantages of treatment at an early stage and the probability of cure.
- *Precision (sometimes called repeatability)*. The test should give consistent results in repeated trials.
- *Sensitivity*. This may be defined as the ability of the test to give a positive finding when the individual screened has the disease or abnormality under investigation.
- *Specificity*. This may be defined as the ability of the test to give a negative finding when the individual does not have the disease or abnormality under investigation.

Applying these six criteria in their commentary on screening for psychological illness in military personnel, Rona et al (2005) concluded that screening for psychological illness in the military has yet to demonstrate its value because of lack of acceptability of the intervention, barriers to confidentiality, uncertainty about the validity or low validity of the available instruments, lack of evidence on the effectiveness of such programs, and the possibility of causing harm rather than providing benefit. There was not sufficient information on the cost-effectiveness of a screening program, but it could possibly divert scarce resources from more effective health care activities. Support structures for veterans and service personnel rather should be improved

alongside improving recognition and management of health problems with good attention to confidentiality.

In this commentary, Rona et al (2005) described data from two US studies including one by Wright et al (2005) as reporting low yields for important health problems and indicating problems with developing sensitive and specific instruments. Wright et al (2005) disputed both points and argued that, given the high rates of mental health problems among service members returning from combat duty in Iraq and Afghanistan, and problems with stigma and other barriers to care, there was a public health responsibility to facilitate access to care using the best available methods.

This exchange is illustrative of a lively transatlantic debate on the value of screening for mental problems in military and veteran population involving the Kings Centre for Military Health Research, UK and the Walter Reed Army Institute of Research, US.

Screening of military populations unrelated to deployment

In drawing these conclusions in their commentary Rona et al (2005) drew on the findings from a series of three articles with which they were associated - Rona et al (2004a), French et al (2004) and Rona et al (2004b) - assessing the utility of physical and psychological health screening in a British military population.

Rona et al (2004a) reported that less than 30% of servicemen accepted the invitation for follow-up attendance at a medical centre after completing the screening questionnaire. Fewer did so pre-deployment to Iraq. Those fulfilling the criteria for PTSD, alcohol behaviour were more reluctant than controls to attend. The authors concluded that screening for psychological illness had little support among servicemen.

French et al (2004) sought to identify potential barriers associated with the beliefs of British military personnel. While most considered screening worthwhile, many stated that they would not conceal some matters in answering the questionnaire. They expressed concerns in regard to medical confidentiality and fears that the process would jeopardise career prospects. The authors concluded that the concerns expressed reduced the value of screening. It was important first to gain the confidence of those being screened.

Rona et al (2004b) estimated the positive and negative predictive values, sensitivity and specificity of a screening questionnaire of physical and psychological health. They used medical officer's assessments to judge if the servicemen needed medical help as a gold standard. The authors concluded that judged in this way, the validity of the screening questionnaires for physical and psychological health in the military was only fair.

It can be strongly contested though whether medical officer assessments should be regarded as a gold standard in deciding whether servicemen need medical help.

Screening in veterans

The King's College group also debated the value of screening in a veteran population as reported in the US by Seal et al (2008). These latter authors evaluated the outcomes of the Veterans Administration (VA) Afghan and Iraq Post-Deployment Screen for mental health symptoms. 338 of 750 Iraq and Afghanistan veterans referred to a VA medical centre and five associated community clinics underwent post-deployment screening and 233 of these (69%) screened positive for mental health problems. 73% of screen-positive veterans compared to 32% of those not screened completed a subsequent mental health appointment. They concluded that the VA screens may help overcome a 'don't ask, don't tell' climate that surrounds mental illness. Rona (2008) made the point that the efficacy and effectiveness of this screen has not been demonstrated. In addition, only a proportion received the screen and not all kept the subsequent mental health appointment.

Predeployment screening

Sharpley et al (2008) concluded that pre-deployment stress debriefing is an unproven intervention and it is a matter of judgement whether it deserves support. They studied the effect of a pre-operational stress briefing on health and occupational measures among naval and marine personnel subsequently deployed to the 2003 Iraq War. These included coping and resilience that should be protective of good psychological outcomes. A non-randomised control study indicated that there were no significant differences both during or post-deployment between the two groups in outcomes for common mental health disorders, post-traumatic stress disorder or alcohol misuse.

Rona (2006) in a longitudinal cohort study of the UK armed forces assessed whether screening for mental disorder before the start of the 2003 Iraq war would have predicted subsequent mental disorders. The positive predictive values were low because of the low prevalence of post-traumatic stress disorder in the period before the Iraq war. They concluded that screening for common mental disorders before deployment in this cohort would not have reduced subsequent morbidity or predicted PTSD. Their conclusion was contingent on there being low prevalence of this condition.

Post deployment

Bliese et al (2007) examined changes in prevalence rates of mental health problems after return from combat duty. In this study, the authors examined the association between length of time after return to report of prevalence rates of mental health problems in a sample of US Army soldiers returning from Iraq. There were significant increases in mental health problems at 120 days post-deployment relative to immediate reintegration.

Battlemind

A cluster randomised control trial (Castro, Hoge et al. 2006) compared outcomes in three groups - Battlemind training (large group and small group)¹³⁵ and Stress Education (large group). Soldiers who experienced a high number of combat experiences (greater than 20 combat experiences) and received Battlemind Training reported fewer mental health problems and less stigma compared to soldiers who received the standard stress education training. Soldiers who received Battlemind Training reported fewer Post-traumatic disorder (PTSD) symptoms ($p < .01$), fewer depression symptoms ($p < .05$), lower anger scores ($p < .10$) and lower psychological stigma scores ($p < .01$) at 3 months post-deployment, compared to soldiers who received the Standard Stress Education training. The study showed with uneven distribution of baseline variables across the four groups indicating that full randomisation of groups had not occurred.

Battlemind Training II was piloted 4 months post-reintegration along with the Post-Deployment Health ReAssessment (PDHRA) program. The major content areas of BMT-II included ways to transition Battlemind skills (cognitive restructuring); Battlemind checks of self, buddy and soldiers myths of mental health. A non-randomised control trial was conducted with follow-up at 10 months. Compared to control, Battlemind Training II appeared more favourable. However as no statistical analysis was presented, no conclusion can be made.

Validation of screening instruments

Brewin (2005) conducted a systematic review of screening instruments for adults at risk of PTSD. The review focused on 13 screening instruments for civilian PTSD with 30 items or fewer, validated against structured clinical interviews. All instruments consisted of symptoms of traumatic stress. The review concluded that a number of these instruments perform close to their maximum potential effectiveness. Instruments with fewer items, simpler response scales, and simpler scoring methods perform as well as if not better than longer and more complex measures.

Bliese et al (2008) assessed the diagnostic efficiency of the Primary Care Posttraumatic Stress Disorder Screen (PC-PTSD) and the Posttraumatic Stress Disorder Checklist (PCL) as clinical screening tools for soldiers recently returned from deployment. Both instruments had good diagnostic efficiency. For the PCL, the most efficient cutoff values were between 30 and 34, similar to recommended PCL cutoff values from some studies in primary care settings. A 4-item PCL had very similar overall diagnostic efficiency to the full PCL. Item analyses identified that the most discriminate item in both scales related to symptoms of avoidance.

¹³⁵ The objective of the post-deployment Battlemind Training I (conducted at 3 days post deployment) is 'resetting soldiers' Battlemind'. The major content areas of Battlemind Training I include emphasising Soldier safety and personal relationships; normalising combat-related mental health reactions and symptoms; teaching soldiers when they should seek mental health support for themselves or for their buddies. The aim of the study was to assess the acceptability of the four interventions and the level of mental symptoms at 4-months follow-up.

Summary

There does not appear to be a consensus in the research literature in regard to the value of screening for mental health screening in military populations. The King's College group make the point strongly that this form of screening does not fulfil the traditional criteria used to establish the value of screening programs. It is possible that the activities associated with screening have value for other reasons but this would need to be separately established. The evaluation of the post-deployment Battlemind programs at three days after return shows short-term benefits but concerns remain because of the failure of full randomisation of groups or the description of conduct of multilevel modelling.

Psychological screening instruments demonstrate good psychometric properties. Further rigorous and well-designed studies using them are necessary however to demonstrate the value of psychological screening in military population research.

References

- Bliese, P. D., K. M. Wright, et al. (2007). Timing of postcombat mental health assessments. *Psych Serv* **4**: 141-148.
- Bliese, P. D., K. M. Wright, et al. (2008). Validating the primary care posttraumatic stress disorder screen and the posttraumatic stress disorder checklist with soldiers returning from combat. *J Consult Clin Psych* **76**: 272-281.
- Brewin, C. R. (2005). Systematic review of screening instruments for adults at risk of PTSD. *J Traum Stress* **18**(53-62).
- Castro, C. A., C. H. Hoge, et al. (2006). Battlemind Training: Transitioning home from combat Maryland. <http://209.85.173.132/search?q=cache:EqBjUG72p7UJ:stinet.dtic.mil/cgi-bin/GetTRDoc%3FAD%3DA481083%26Location%3DU2%26doc%3DGetTRDoc.pdf+castro+hoge+battlemind+transitioning+home&hl=en&ct=clnk&cd=4&gl=au> Retrieved Jan 9 2009, Access 2006.
- Cochrane, A. L. and W. W. Holland (1971). Validation of screening procedures. *Br Med Bull* **27**: 3.
- French, C., R. J. Rona, et al. (2004). Screening for physical and psychological illness in the British Armed Forces: II: Barriers to screening - learning from the opinions of Service personnel. *J Med Screen* **11**(153-7).
- Rona, R., R. Hooper, et al. (2006). The meaning of self-perception of health in the U.K Armed Forces. *British Journal of Health Psychology* **11**(4): 703-521.
- Rona, R. J., R. Hooper, et al. (2004b). Screening for physical and psychological illness in the British Armed Forces: III: The value of a questionnaire to assist a Medical Officer to decide who needs help. *J Med Screen* **11**: 158-161.
- Rona, R. J., K. C. Hyams, et al. (2005). Screening for psychological illness in military personnel. *JAMA* **293**: 1257-60.
- Rona, R. J., M. Jones, et al. (2004a). Screening for physical and psychological illness in the British Armed Forces: I: The acceptability of the programme. *J Med Screen* **11**: 148-152.
- Rona, R. J. L. (2008). The case for postdeployment mental health screening was not made. *Amer J Pub Health* **98**: 1542.

- Seal, K. H., D. Bertenthal, et al. (2008). Getting beyond "Don't ask; don't tell": an evaluation of US Veterans Administration postdeployment mental health screening of veterans returning from Iraq and Afghanistan. *Am J Public Health*: 714-20.
- Sharpley, J. G., N. T. Fear, et al. (2008). Pre-deployment stress briefing: does it have an effect? *Occup Med* **58**: 30-34.
- Wright, K. M., P. D. Bliese, et al. (2005). Screening for psychological illness in the military. *JAMA* **294**: 42-3.

Appendix 7 Rapid literature review of barriers to mental health care in the military

Barriers

The following is an overview of Australian and International research on mental health and barriers to care in the military. The studies included here are from the US, Canada, UK, Australia and Israel, and predominantly focus on help-seeking attitudes and behaviours of members returning from deployment, including peacekeeping roles.

Australian Research

Researchers from Monash University (Gall 2006) conducted a study on perceived barriers to mental health care by ADF members, specifically the nature and impact of barriers. The researchers were interested in understanding the gap between mental illness prevalence and help-seeking behaviours in ADF members. The study incorporated focus groups with 45 members of the army, navy and air force, included both enlisted and civilian members, and Defence mental health care providers. A pilot questionnaire survey was also conducted on 340 members. The findings indicated that members who identified as having a mental health condition were more likely to perceive there were barriers to accessing care. Furthermore, a gap between mental health problems and help seeking was evident. One fifth of the respondents reported either having a known or suspected mental health condition and higher levels of stress, but only 16% of these individuals sought treatment.

International Research

An American study undertaken by Hoge et al (2006) investigated the use of mental health care services for members returning from deployment in Iraq and Afghanistan. The focus was on the interrelationship between screening results, use of mental health care and attrition from the military. Drawing on medical data (screening results) from 303,905 returning service members, the researchers found that individuals returning from Iraq (19.1%) were the highest in meeting the risk criteria for a mental health concern, followed by Afghanistan returnees (11.3%) and members from other locations (8.5%). Consistent with this, members from Iraq used mental health services at a higher rate (35%) than any other group. However, only 7.6% of these, were referred to the service as a result of screening.

The majority of the provision of mental health care services after deployment did not appear to be linked to the screening process. There was also a strong link between attrition and mental health problems. Two thirds of those accessing mental health services left the military within two to three months of deployment. The authors contend barriers to care such as members seeking external mental health care, underscores a likely dissonance (underestimation) between the figures of service members with mental health problems and the use of mental health services.

An unpublished review of research on attitudes to mental health and health seeking behaviours, and the existence of mental health problems in service members, was

conducted using US, Canadian, British and Australian data (Gould and Greenberg et al, (ND). The review synthesised four studies conducted between 2005 and 2007. Drawing on a total of 9248 participants, it found members from the UK armed forces who met the criteria for mental health problems were three or more times as likely as members from US, Australia and Canada to perceive negative impacts on their careers, in part arising from colleagues' attitudes. These perceptions were significantly reduced for members who did not meet the criteria for mental health problems. Across this latter group these differences were less marked.

In another U.S. study, Johnson et al (2007) discussed the establishment of a task force to identify the psychological risks and mental health service needs of military members and their families, during and after deployment. They also identified barriers to mental health care within the Department of Defence (DoD) and Veteran Affairs (VA) system in the US. Using existing empirical evidence, the researchers identified the key barriers to care as being availability, acceptability and accessibility. Availability refers to the lack of professionals cognisant with military life, and who often experienced 'burn out' due to high demands and staff shortages. Acceptability referred to cultural issues and stigma, while accessibility is associated with long waiting lists, limited clinic hours, poor referral processes and geographical limitations. Clinic hours could be a particular impediment to accessing care, because of training schedules or special duties, which often required members needing to seek permission from superiors. It was argued this could exacerbate any existing reluctance related to stigma. Additionally, the authors stressed that a lack of coordination within and across military mental health care services led to significant variability in availability, quality and utilisation of services.

Regarding transitioning out, the authors argued that, unlike physical injury the referral process from military to VA relied on member follow through. The study found many members encountered similar barriers upon discharge as they did in the military. There was a lack of formal referral process to the VA for many members transitioning out and who had not sought mental health care whilst in the military

Heymann (2007) conducted an analysis of medical records of Israeli soldiers who during their three-year service developed a range of mental health disorders. His analysis sought evidence in support for the use of electronic medical records to provide indicators for the identification of individuals who might be suffering from mental distress. The study found that back pain, out of all the somatic complaints, was strongly associated with mental disorders such as anxiety. Such evidence of soldiers presenting with somatic conditions, who might also have other less obvious mental health problems, assists with enabling early intervention, particularly in a primary care setting.

A study on peer responses to perceived stress in the British Royal Navy (Greenberg, Henderson et al. 2007) investigated how personnel would respond to a scenario in which a peer demonstrated self-harm behaviour. The researchers conducted 142 interviews which revealed that when faced with a distressed peer, the majority of the members would act positively and refer the individual to medical or management staff. However, the majority also felt that the reporting of such incidences would have negative consequences for the careers of members engaging in self-harm. Lower

ranking personnel were more likely to have these perceptions regarding the negative impact on career progress.

Rona et al (2006) investigated self-perception of health in relation to physical symptoms and psychological distress and the willingness to consult a unit medical officer (MO) in UK servicemen. The researchers developed a screening questionnaire to detect physical and psychological illness and screened 4,500 personnel. They found that those with high self-perception of health demonstrated high scores for psychological stress. Crucially, servicemen who rated their health as poor were no more likely to consult their MO. Moreover, there was a generally low rate of acceptance of visiting an MO regardless of SPH ranking.

A study involving U.S. army soldiers investigated attitudes about post-deployment mental health screening, treatment, barriers to care and strategies for overcoming barriers (Warner, Appenzeller et al. 2008). 3,294 soldiers were polled prior to deployment on their preferences regarding the timing and process of conducting post-deployment mental health screening. 65.7% reported they would be willing to address a mental health condition if the post-deployment screening identified an ongoing problem. The authors of the study found that although perceived barriers to care had decreased in the military since Hoge et al's (2004) seminal study, more needs to be done to address this problem. As also identified in Hoge's study, the two greatest barriers were fears of being treated differently by leaders and fears that co-workers would have less confidence in the member with a mental health problem. Family and friends were identified as being the most influential factors in overcoming barriers. The authors suggested that education programs such as 'Battlemind' were beneficial, but more programs encouraging friends and family to identify and encourage members to seek treatment would also be of great benefit.

The authors advocated post-deployment screening as a critical tool for early identification of deployment-related mental health conditions, but consideration needs to be directed towards the conditions in which soldiers were required to report symptoms or concerns. It was reported that most soldiers would more likely be honest in their screening responses if the physicians were from within their unit, with the highest level of confidentiality, rather than contracted civilian mental health providers.

Engel et al (2008) conducted a feasibility study on a systems-level collaborative care approach to primary care in the military. They adapted their existing model - Re-Engineering Primary Care Treatment of Depression (RESPECT-D) - which incorporated the three components of: preparing the practice, adding a care facilitator and enhancing the interface between primary and mental health care to include routine screening, a primary care diagnostic assessment and care facilitation for depression and PTSD. The authors then tested this model in a clinic at a high-deployment US Army post. The participants were members seeking primary care at the clinic and were seen by military and civilian care providers such as physicians, nurses, and physician assistants. The model involved a multi-step screening, diagnostic evaluation, engagement and management system, including follow up in the form of telephone care facilitation.

After tracking the model for a 16-month period, Engel et al found 10% of the 4,159 screens sample were positive for either depression, PTSD or both. 20% of these accepted RESPECT-Mil care, 35% refused mental health care. They argued that by adding a care facilitator, they were able to screen and identify members with depression and/or PTSD who would otherwise probably have gone undetected. Furthermore, the majority of members participating in the trial demonstrated significant improvement. The success of this feasibility study has led to the implementation of RESPECT-Mil across 15 Army sites, using a 'Centre of Excellence' for centralised coordination of and training in applying the model.

Stigma

This next section presents research on stigma in the military and its impact on mental health care. International studies which attempt to identify the links between stigma and barriers to getting treatment for mental health problems are presented here.

Green-Shortridge et al (2007) reviewed stigma in relation to disclosing and seeking help for mental health problems in the military. They argued the problem could be located in the stigma surrounding mental health more generally. In the military the public stigma attached to mental health issues was internalised by soldiers, who were chiefly concerned with how they would be viewed if it was revealed they had a mental health problem. A process of internalisation (and self-stigmatisation) of attributions held by the public meant that service members felt responsible for their mental illness. This mechanism of self-stigma led to low self-esteem.

The review found that there was a general gender bias in help-seeking behaviour which suggested men were less likely to seek help. This was a significant problem given the male preponderance in the military and implied that the number of reported psychological problems in the military was likely to be considerably under-represented.

The authors suggested community interventions might also be applicable to the military. One such included greater education/awareness particularly of the environmental determinant of PTSD (its aetiology), which could help remove the stigma around its controllability. Another suggested strategy was to promote contact with military personnel who had a mental illness. Greater exposure would reduce the stigmatising effects. This would be particularly useful in circumstances where a person who has been successfully treated for PTSD discussed their experiences, providing insights which not only increased understanding but also encouraged treatment seeking.

They also proposed more leader involvement in the identification and support around PTSD. This would enable the member to see the value in seeking treatment early and therefore restored to their unit as a fully functioning participant. Leaders demonstrating the importance of this would improve the likelihood of members seeking treatment. It would also encourage leaders to be responsible for assisting members in obtaining help. Finally, they recommended that soldiers should be able to retain their job or security clearance when seeking help and be able to access mental health care services during duty days. Visits remaining on a confidential basis would also alleviate existing problems.

In another study by Hoge et al (2004), mental health problems in armed services personnel were examined before and after deployment. Their study involved three groups made up of army and marines deployed to Iraq and Afghanistan, all of whom had undertaken ground combat operations. 38-45% of those who screened positively for a mental health problem indicated interest in receiving help, and 23-40% reported having received help in the past year. Those who screened positively were twice as likely to express concerns around stigma as those who did not screen positively for a mental disorder. The authors recommended increased efforts towards outreach, education and other changes in the model of health care delivery. The latter should include increased mental health services in primary care clinics and the provision of confidential counselling. Despite the existence of routine screening for depression in military primary care settings, the authors believed this should be expanded to include PTSD.

Kelloway et al (2004) provided a general discussion on stigma in the Canadian Forces (CF) and strategies for addressing it. In a comparison between the CF and other Canadian emergency services, the authors reviewed organisational responses to individuals with psychological disorders, particularly the stigmatising effects of mental illness on the individual. They argued that the main strategies for reducing stigma in general were education (especially addressing mental health illness stereotypes), advocacy and promoting contact. In light of this they recommended three broad approaches to mental health in the CF - surveillance and intervention, education and training, and the provision of comprehensive psychological services.

First, regarding surveillance and intervention, they recommended the implementation of an annual program of surveillance which included assessment of both operational and non-operational exposure to stressors as well as life stressors more generally. Non-operational stressors should be minimised through job redesign and unit leaders should be provided with feedback on stress and related disorders in order to fully manage it and be accountable for this occurrence under their command. This would also encourage leaders to take a more proactive role in the de-stigmatisation of individuals with stress and other mental health conditions.

Second, in order to enhance education and training in the management of stress and stigma, the authors recommended the integration of stress training with basic training for both non-commissioned and commissioned members. This would cover operational and non-operational stressors, consequences of exposure, member self-care practices and help seeking via formal interventions. Leadership courses, which assisted in identifying stress as a result of exposure to stressors, would also be of benefit. Third, the authors proposed that a broad range of psychological services, provided by 'third party' providers, be made available to all members. These would supplement rather than replace existing CF services.

In a case study on UK peacekeepers deployed to Bosnia, Thomas et al (2006) reported on the stresses in peacekeeping operations and beliefs and attitudes regarding psychological support. They identified gaps in the delivery of training for stress before, during and after peacekeeping deployments, which highlighted the tensions between traditional soldier and peacekeeper roles. Thomas et al in a survey of 3,322 serving members Thomas et al found the most common cause of stressors in

peacekeeping operations related to 'professional' issues such as powerlessness, frustration, isolation and boredom. Peacekeepers identified a need for more training in conflict resolution and negotiation skills which recognised the cultural and political exigencies of their roles. Additionally, despite supporting psychological debriefs post-deployment, there were perceptions amongst peacekeepers that there would be stigmatising consequences of such activity. There was also a common view that psychological needs were not being met by the debriefing process.

Westphal (2007), in an investigation on stigma and fears of career harm as a barrier to seeking help for mental health problems combined interviews with U.S. navy leaders with a discourse analysis of key policy documents. His focus was on the attitudes of navy leaders regarding mental illness and military readiness as this, in his view was a potential barrier. The author found that the fleet management health discourse - a series of policy documents and practices - did not meet the needs of leaders who are required to ensure combat readiness. It was limited by unclear policies, inadequate communication between mental health providers and leaders, and knowledge limitations of leaders. He also found that stigma was not related to leaders' attitudes about mental health services, but rather an effect of trying to manage the problem while adhering to policy requirements around job performance.

Westphal concluded that it was important, when evaluating stigma in the military to consider the unit context (particularly its mission), as well as the individual member. This was particularly important in the cases of removal of a member for treatment, where there should be a clear identification of return of required duty clearance. This was important so that the individual was not kept away from his/her unit too long, averting any negative impacts on ship and crew cohesion. He concluded that while there were policies around mental health, there was no coherent doctrine covering it. This creates a policy gap between fleet leaders and mental health service providers.

Langston et al (2007) provided an overview of the literature and research on stigma as a barrier to mental health care in the military. Their review focused on the specific characteristics of military culture which places importance on the reliance of a buddy system of support. They contend this functioned as a 'hidden' barrier. Camaraderie and peer support, which formed a large part of military culture, could be a hindrance when the necessary support was unable to be provided. The authors argued that the robust buddy support system in the military might prevent members seeking help from outside mental health services, for fear of being perceived as weak and should be categorised as an organisational barrier.

Britt (2000) investigated attitudes around the stigma of psychological problems among service members returning from a US peacekeeping mission in Bosnia. Specifically, he was interested in whether members held the belief that admitting to a psychological problem would result in differential treatment by their superiors and co-workers. Additionally, the study sought information on the likelihood of members following through with a psychological compared with a medical referral. 61% of participants of a survey conducted during a screening process believed their career would be affected if they disclosed a psychological problem. A further 45% believed this would have a negative impact on how their co-workers viewed them. Participants also reported a lesser likelihood of following through with a psychological referral than with a medical referral.

Summary

There is clearly interplay of many complex factors in barriers to mental health care and stigma associated with mental health problems in the armed forces. The literature indicated that there is underutilisation of military mental health services for a variety of reasons, but principally this related to fears around the impact on the individual's career prospects. This was particularly in reference to leaders' attitudes and to a lesser extent, treatment by peers. Peacekeepers were found to be equally affected by mental health problems and their stigmatising effects.

The research included in this review revealed a notable gap between mental health problems and service utilisation, including screening and referral processes and help seeking. While access and confidentiality issues around mental health services were identified as a contributing factor, it seemed the greatest impediment revolved around stigma. To this end, several of the studies recommended more education for both members and COs to offset the effects of stigma in military culture.

References

- Britt, T. W. (2000). The stigma of psychological problems in a work environment: Evidence from the screening of service members returning from Bosnia. *Journal of Applied Social Psychology* **30**(8): 1599-1618.
- Engel, C. C., T. Oxman, et al. (2008). RESPECT-Mil: Feasibility of a Systems-Level Collaborative Care Approach to Depression and Post-Traumatic Stress Disorder in Military Primary Care Settings. *Military Medicine* **173**(10): 935-940.
- Gall, K. A. (2006). Identifying Perceived Barriers to Mental Health Care in the ADF: The impact of self-recognition of mental health conditions, help-seeking inclinations and gender. Department of Psychology, School of Psychology, Psychiatry and Psychological Medicine. Melbourne, Monash University. Unpublished report towards Master of Psychology (Health).
- Gould, N. Greenberg, et al. (ND). How do Attitudes to Mental Health and Help-Seeking Differ across Armed Forces? A Comparison of USA, UK, Australian and Canadian Data (working title).
- Greenberg, N., A. Henderson, et al. (2007). Peer Responses to Perceived Stress in the Royal Navy. *Occupational Medicine* **57**(6): 424-429.
- Greene-Shorridge, T. M., T. W. Britt, et al. (2007). The Stigma of Mental Health Problems in the Military. *Military Medicine* **172**(2): 157-161.
- Heymann, A. D. (2007). Differences between soldiers, with and without emotional distress, in number of primary care medical visits and type of presenting complaints. *IMAJ* **9**: 90-93.
- Hoge, C. H., J. L. Auchterlonie, et al. (2006). Mental health problems, use of mental health services and attrition from military service after returning from deployment to Iraq and Afghanistan. *JAMA* **295**(9): 1023-1032.
- Hoge, C. H., C. A. Castro, et al. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *The New England Journal of Medicine* **351**(1): 13-22.
- Johnson, S. J., M. D. Sherman, et al. (2007). The Psychological Needs of U.S. Military Service Members and their Families: A Preliminary Report.

- American Psychological Association Presidential Task Force on Military Deployment Services for Youth, Families and Service Members, February 2007, Access 2007.
- Kelloway, E. K., L. Francis, et al. (2004). Psychological Disorders in the CF: Legal and social issues. Contractor's report for Director Human Resources Research and Evaluation National Defence Headquarters, Ontario, Access 2004.
- Langston, V., M. Gould, et al. (2007). Culture: What is its effects on stress in the military? *Military Medicine* **172**(9): 931.
- Rona, R., R. Hooper, et al. (2006). The meaning of self-perception of health in the U.K Armed Forces. *British Journal of Health Psychology* **11**(4): 703-521.
- Thomas, S., C. Dandeker, et al. (2006). Serving in Bosnia made me appreciate living in Bristol: Stressful experiences, attitudes, and pyschological needs of members of the United Kingdom armed forces. *Military Medicine* **171**(5): 376.
- Warner, C. H., G. N. Appenzeller, et al. (2008). Soldier attitudes toward mental health screening and seeking care upon return from combat. *Military Medicine* **173**(6): 563.
- Westphal, R. J. (2007). Fleet leaders' attitudes about subordinates' use of mental health services. *Military Medicine* **172**(11): 1138.

Appendix 8 Rapid literature review of mental health promotion programs

Mental health promotion programs

In a guest editorial, Jane-Llopis (2006) reported that a number of literature reviews have demonstrated that prevention of mental disorders and promotion of mental health can be effective. This could occur across the lifespan, although most related to children and adolescents. Topic-specific literature overviews have confirmed that prevention and promotion approaches have worked for areas such as violence and aggression, depression and substance use. To date, meta-analyses have been specific to particular topics and age groups. The only program relevant to this review subjected to a meta-analysis is for the prevention of depressive symptoms.

Workplace mental health promotion programs have been effective. Legislation and environmental interventions have led to increases in mental health and wellbeing as well as reductions in symptoms of anxiety, depression, and stress-related problems. They can also lead to increased productivity and reductions of sick leave.

Very few cost benefit and cost effectiveness studies have been attempted to quantify the economic impact of mental health promotion programmes.

Herrman (2005) also concluded that mental health promotion programs can contribute to better mental health and well-being of the population. Employing public health principles, they add value across the lifespan and in settings such as perinatal care, schools, workplaces and local communities. There is also growing evidence is available that mental health promotion also generates a variety of social and economic benefits. Evidence though remains rather limited and is frequently based on only one or two well-designed outcome studies, mostly in developed countries. Knowledge of the robustness of findings across sites and their sensitivity to cultural and economical circumstances is still meagre. Not all mental health promotion programs are effective or have been evaluated.

Mental health literacy programs

Jorm (2000) reported that findings from a German study where people were much more reluctant to discuss mental disorders with friends and relatives than physical health problems. In the US people were reluctant to seek treatment for depression fearing a negative impact on their employment circumstances. In the UK the majority of people would feel embarrassed discussing depression with their GP because they feared being seen as neurotic or unbalanced. In India patients often presented their mental distress in physical terms.

Bourget and Chenier (2007) reported on levels of mental health literacy in Canada. This covered perceived prevalence and recognition of mental disorders, perceived causes, attitudes about treatment and recovery, conceptions of mental illness, stigma and perceptions of dangerousness, beliefs about protecting/promoting mental health and perceived linkages between mental and physical health.

Canadians appeared to have reasonably good mental health literacy regarding prevalence of mental disorders and their recognition. They preferred psychosocial explanations for mental health problems, less so for serious mental illness where they preferred biomedical explanations. They were inclined to recommend medical help for symptoms of mental disorders though remaining somewhat ambivalent about it. This was true for common mental health problems and with regard to psychiatric medications. Stigma and discrimination toward persons with mental disorders remained a problem in Canada, more so for serious mental illness. They knew of the existence of stigma and discrimination towards mental disorders and were reluctant to disclose mental health problems especially at work for fear of stigma and discrimination. They appeared to have good knowledge of prevention strategies.

Francis et al (2002) concluded that there was evidence that mass media campaigns designed to reach the general public can achieve positive outcomes in terms of mental health literacy. Campaigns were particularly effective when they involved more than one form of media, and included community-based components and/or direct interventions. It was, however, important to note that the impact of such campaigns is limited. Mental health literacy programs that targeted the general public but did not involve mass media approaches appeared to be less common, but showed some evidence of effectiveness in terms of attitude change. Importantly, studies of such programs have found that direct contact with individuals with mental illness is associated with the development of more positive attitudes.

It was clearly important to bear in mind the theoretical basis for communication strategies. Most of the programs studied were conducted in countries other than Australia and their impact in an Australian setting remains unclear. In addition, significant methodological issues emerged in a number of studies. The cost-effectiveness of programs has not been addressed. Much of the previous research has focused only on evaluation of outcomes, and neglected evaluation of the development and implementation phases of communication and information programs.

Summary

Stigma and discrimination toward persons with mental disorders remains a problem in many countries more so for serious mental illness. There is evidence that both mental health promotion and mental health literacy programs can be effective and make a contribution to both the mental health and wellbeing of the community. This includes campaigns in occupational settings. The evidence base though is still limited. The effects of mental literacy campaigns may be limited.

References

- Bourget, B. and R. Chenier (2007). *Mental Health Literacy in Canada: Phase One Report* Mental Health Literacy Project Canadian Alliance on Mental Illness and Mental Health: 1-56,
- Francis, C., Pirkis, et al. (2002). *Improving Mental Health Literacy: A Review of the Literature*. Centre for Health Program Evaluation, Melbourne: 1-116.
- Herman, H., S. Saxena, et al., Eds. (2005). *Promoting Mental Health: Concepts, Emerging Evidence, Practice*. Geneva, World Health Organization.

- Jane-Llopis, E. (2006). From evidence to practice: Mental health promotion effectiveness *Australian e-Journal for the Advancement of Mental Health* **5**: 1-11.
- Jorm, A. F. (2000). Public knowledge and beliefs about mental disorders. *Br J Psychiatry* **177**: 396-401.

Appendix 9 Rapid literature review of PTSD and best-practice treatment

Post-Traumatic Stress Disorder (PTSD) is defined as a “long-lasting anxiety response following a traumatic or catastrophic event” that typically involves death, serious injury or threat to the personal integrity of the self or others.(Clinical Research Unit for Anxiety and Depression 2007) PTSD usually develops within 3 to 6 months of exposure: a more immediate and transient response is termed ‘acute stress reaction’(Clinical Research Unit for Anxiety and Depression 2007); and long-lasting reactions that first appear more than 6 months after exposure may be diagnosed as ‘delayed onset PTSD’.(Andrews, Brewin et al. 2007)

Symptoms of PTSD (and acute stress reaction) may include:

- *Images, dreams, or flashbacks of the traumatic event*
- *Avoidance of cues which act as reminders of the traumatic event*
- *Amnesia about important aspects of the traumatic event*
- *Intense arousal and anxiety on exposure to trauma cues*
- *Depressed or irritable mood*
- *Social withdrawal*
- *Concentration and memory difficulties*
- *Nightmares and disturbed sleep*
- *Being easily startled* (Clinical Research Unit for Anxiety and Depression 2007)

Studies suggest that 50% to 80% of people in developed countries experience PTSD-candidate events: yet only eight to ten percent of exposed persons develop PTSD, with females being twice as likely to develop PTSD as males.(Clinical Research Unit for Anxiety and Depression 2007; Stein, Seedat et al. 2007) The likelihood of onset of PTSD varies by the type of experience, with rape most likely to induce PTSD (in both male and female victims), followed by combat experience and physical abuse.(McFarlane 2004) Depression, generalised anxiety disorder, social phobia, alcohol abuse and drug addiction are common comorbidities alongside PTSD.(McFarlane 2004) (Australian Centre for Posttraumatic Mental Health 2007)

Military studies

Estimates for the incidence of combat-induced PTSD vary according to the theatre of engagement. The estimated risks for active soldiers in current conflicts are 18% for Iraq and 11% for Afghanistan.(Litz 2007) At least 15% of US soldiers serving in Vietnam met the criteria for PTSD during or after their service.(McFarlane 2004)

A family history of psychopathology and prior individual trauma increase the risk of developing PTSD, while combat injuries and post-deployment factors of low social support and high exposure to stressful situations may also increase risk and slow recovery.(Litz 2007) Apart from combat injuries, these same risk factors operate in the general population (Australian Centre for Posttraumatic Mental Health 2007).

PTSD-related behaviours such as social avoidance, anger and irritability tend to reduce the post-military employment prospects of sufferers.(Resnick 2008)

Treatment of PTSD

The *Australian Guidelines for the Treatment of Adults with Acute Stress Disorder and Posttraumatic Stress Disorder* (Australian Centre for Posttraumatic Mental Health 2007) recommend two types of first line psychological interventions: trauma-focused cognitive behavioural therapy (TFCBT), and eye movement desensitization reprocessing (EMDR). Subsequent (but not first line) drug treatment using selective serotonin reuptake inhibitors (SSRI) may be considered where psychological therapies are insufficient or refused. (Australian Centre for Posttraumatic Mental Health 2007)

Both TFCBT and EMDR treatments are recommended in a Cochrane Review of psychological treatments of PTSD.(Bisson and Andrew) Drug treatment with SSRIs is recommended in a separate Cochrane Review of pharmacotherapy for PTSD.(Stein, Ipser et al.)

TFCBT involves education about trauma, stress management skills, cognitive therapy and exposure therapy.(Litz 2007) EMDR as it is currently practiced includes most of the core elements of TFCBT plus eye movement desensitization techniques. (Australian Centre for Posttraumatic Mental Health 2007) The *Australian Guidelines for the Treatment of Adults with Acute Stress Disorder and Posttraumatic Stress Disorder* state that 8 to 12 therapy sessions are normally sufficient. (Australian Centre for Posttraumatic Mental Health 2007)

However, at least 80,000 US Vietnam veterans continue to suffer debilitating problems from war-related PTSD decades after repatriation.(Rosenheck, Stolar et al. 2000) The enduring nature of war-related PTSD, once chronic, would underline the urgency of timely and appropriate intervention responses to currently serving personnel.(Litz 2007)

References

- Andrews, B., C. R. Brewin, et al. (2007). Delayed-Onset Posttraumatic Stress Disorder: A Systematic Review of the Evidence. *American Journal of Psychiatry* **164**(9): 1319-1326.
- Australian Centre for Posttraumatic Mental Health (2007). Australian guidelines for the treatment of adults with acute stress disorder and posttraumatic stress disorder, National Health and Medical Research Council, Australian Government.
- Bisson, J. and M. Andrew Psychological treatment of post-traumatic stress disorder (PTSD). *Cochrane Database of Systematic Reviews: Reviews 2007 Issue 3*. Art No.: CD003388. DOI: 10.1002/14651858.CD003388.pub3.
- Clinical Research Unit for Anxiety and Depression. (2007). Post-Traumatic Stress Disorder. Retrieved 3rd January 2009, from <http://www.crufad.com/site2007/clinicianinfo/cliniciantrauma.html>.
- Litz, B. T. (2007). Research on the Impact of Military Trauma: Current Status and Future Directions. *Military Psychology* **19**(3): 217-238.

- McFarlane, A. (2004). The contribution of epidemiology to the study of traumatic stress. *Social Psychiatry and Psychiatric Epidemiology* **39**(11): 874-882.
- Resnick, S. G. (2008). Posttraumatic stress disorder and employment in veterans participating in Veterans Health Administration Compensated Work Therapy. *Journal of Rehabilitation Research and Development* **45**(3): 427-435.
- Rosenheck, R., M. Stolar, et al. (2000). Outcomes Monitoring and the Testing of New Psychiatric Treatments: Work Therapy in the Treatment of Chronic Post-Traumatic Stress Disorder. *Health Services Research* **35**(1).
- Stein, D., J. Ipser, et al. Pharmacotherapy for post traumatic stress disorder (PTSD). *Cochrane Database of Systematic Reviews 2006, Issue 1. Art. No.: CD002795. DOI: 10.1002/14651858.CD002795.pub2.*
- Stein, D. J., S. Seedat, et al. (2007). Post-traumatic stress disorder: Medicine and politics. *Lancet* **369**(9556): 139-144.

Appendix 10 Rapid literature review of Adjustment disorders and its treatment

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), adjustment disorders are stress-induced responses excluding bereavement that significantly impair social or occupational functioning for a period not exceeding 6 months beyond the stressful event or its aftermath.(Bruinvels, Rebergen et al.)

However, this apparently time-limited illness is strongly associated with discharge from military service. US military studies show that mental disorders are the leading cause of hospitalisation in men, and second cause after pregnancy in women. In turn, around 45-50% of service personnel hospitalised for mental disorders leave the military within 6 months, which is four times the exit rate of all other illness categories combined. Hoge et al (2005) found that the most common diagnosis within mental disorders was adjustment disorder (40%), followed by alcoholism and substance abuse (26%). Personality disorders and misconduct were frequently co-present with diagnoses of adjustment disorder, meaning that adjustment disorder per se may not have been responsible for service discharge in all cases.(Hoge, Toboni et al. 2005)

A separate study of military personnel psychiatrically evacuated from Iraq showed adjustment disorders to account for 37.6% of evacuations, with only 5% of evacuees returning to the same theatre of operations.(Rundell 2006) The rate of service discharge for psychiatric evacuees was not reported.

These high workplace attrition rates are reflected in the general population, where 20% of patients diagnosed with adjustment disorder may not return to work within 12 months.(Bruinvels, Rebergen et al.) Usual interventions for adjustment disorders include antidepressant treatment, cognitive behavioural therapy, relaxation techniques, and employee assistance programs.(Bruinvels, Rebergen et al.)

Civilian studies of adjustment disorder rehabilitation suggest that recovery is optimized by:

- Timely and frequent consultations.(Nieuwenhuijsen 2003)
- Collaborative planning between clients, physicians and workplace management.(Nieuwenhuijsen 2003) (Foreman, Murphy et al. 2006)
- The adoption of pro-active strategies wherein clients construct a personalised, graded recovery plan.(van der Klink 2003; van der Klink and van Dijk 2003)

References

- Bruinvels, D., D. Rebergen, et al. Return to work interventions for adjustment disorders. (Protocol). *Cochrane Database of Systematic Reviews 2007, Issue 1. Art. No.: CD006389. DOI: 10.1002/14651858.CD006389.*
- Foreman, P., G. Murphy, et al. (2006). Barriers and facilitators to return to work: A literature review. Australian Institute for Primary Care, La Trobe University, Melbourne,

- Hoge, C. W., H. E. Toboni, et al. (2005). The occupational burden of mental disorders in the U.S. military: Psychiatric hospitalizations, involuntary separations, and disability. *American Journal of Psychiatry* **162**(3): 585-591.
- Nieuwenhuijsen, K. (2003). Quality of rehabilitation among workers with adjustment disorders according to practice guidelines; a retrospective cohort study. *Occupational and Environmental Medicine* **60**(6).
- Rundell, J. R. (2006). Demographics of and diagnoses in Operation Enduring Freedom and Operation Iraqi Freedom personnel who were psychiatrically evacuated from the theater of operations. *GENERAL HOSPITAL PSYCHIATRY* **28**(4): 352-356.
- van der Klink, J. J. L. (2003). Reducing long term sickness absence by an activating intervention in adjustment disorders: a cluster randomised controlled design. (Original Article). *Occupational and Environmental Medicine* **60**(6).
- van der Klink, J. J. L. and F. J. H. van Dijk (2003). Dutch practice guidelines for managing adjustment disorders in occupational and primary health care. *Scandinavian journal of work, environment & health* **29**(6): 478-87.

Appendix 11 Rapid literature review of PTSD and deployment

Introduction

Posttraumatic stress disorder (PTSD) can occur following the experience, or witnessing, of life-threatening events or violent personal assaults. Most people exposed to events that have the potential to cause PTSD experience some of the symptoms in the days and weeks following the event but not all will develop PTSD. Available data suggest that about 8% of men and 20% of women go on to develop PTSD. (<http://www.athealth.com/Consumer/disorders/ptsdfacts.html>) Research suggests that among those who go on to develop PTSD, approximately 30% develop a chronic form that persists throughout the individual's lifetime. Chronic PTSD is most often characterized by periods of symptom exacerbation and remission or decrease, but for some individuals symptoms may be unremitting and severe. (Occupational and Environmental Health Unit: Monash University 2003).

PTSD is not a new disorder: a PTSD-like disorder was known as “Da Costa’s Syndrome” in the American Civil War and there are accounts of PTSD symptoms in the medical literature relating to combat veterans of World War II and Holocaust survivors. However, careful research and documentation of PTSD only began after the Vietnam War. Since then, PTSD has been observed in all veteran populations that have been studied (e.g. Korean conflict, Persian Gulf War, and United Nations peacekeeping forces deployed to other war zones). (<http://www.phobics-awareness.org/ptsd.htm> accessed 25 November 2008)

The aim of this review is to determine the PTSD rates in Australian, UK and US military personnel returning from deployment in Korea, Vietnam, the Persian Gulf, Bosnia, Iraq and Afghanistan. The first section of the review gives a brief overview of the main ways in which PTSD has been measured in the studies included in this review. It also considers the validity of the non-interview PTSD questionnaires.

Measuring PTSD

1 Face-to-Face Interviews

Diagnostic Interview Schedule (DIS)

PTSD module from the standardized clinical Diagnostic Interview Schedule of the American Psychiatric Association (November 1987 version). (O'Toole, Marshall et al. 1996) It does not require history of symptoms. In addition, it ascertains when symptoms of a disorder first appeared and were most recently experienced, and asks whether a doctor was ever consulted about the symptoms. DIS-IV is based on the DSM-IV and incorporates some of the lessons learnt from the development of the Composite International clinically trained interviewers to administer or score the schedule. It offers a lifetime Diagnostic Interview (CIDI). (<http://epi.wustl.edu/dis/dishisto.htm> athealth)

Composite International Diagnostic Interview (CIDI)

The CIDI was developed by the World Health Organization (WHO) and the former United States Alcohol, Drug Abuse and Mental Health Administration. It is a comprehensive, fully structured diagnostic interview for the assessment of mental disorders and provides (by means of computerised algorithms) lifetime and current diagnoses according to the accepted definitions of ICD-10 and DSM-III-R. The paper-and-pencil CIDI can be administered by trained lay interviewers.

(<http://www.crufad.unsw.edu.au/cidi/discuss.htm>) The complete CIDI comprises 11 modules. (Occupational and Environmental Health Unit: Monash University 2003)

AUSCID-V

A standardized psychiatric diagnostic interview for Vietnam-related PTSD derived from the PTSD module of the Standardised Clinical Interview for DSM-III-R. (O'Toole, Marshall et al. 1996)

2 Self-Complete Questionnaires

Mississippi Scale

This is a self-complete questionnaire with high face-validity, but it may be vulnerable to manipulation by the person completing the questionnaire. Lyons et al (1994) found that the scores of individuals instructed to respond 'as if' they had PTSD did not differ from the scores of veterans with PTSD. Although veterans who were diagnosed as having PTSD had significantly higher scores than those who did not meet diagnostic criteria for PTSD, the mean score for all groups (veteran and non-veteran) exceeded the originally recommended diagnostic cut-off score of 107. A cut-off score of 121 was found to best differentiate veterans with PTSD from veterans who did not meet diagnostic criteria for the diagnosis. (Lyons, Caddell et al. 1994)

Posttraumatic Stress Disorder Checklist (PCL)

This is a self-complete rating scale for assessing the 17 DSM-IV symptoms of PTSD. Diagnostic utility was determined by using the PCL scores to predict PTSD diagnosis derived from the Structured Clinical Interview for DSM-III-R (SCID). There are three versions. The PCL-M is a military version with questions that refer to "a stressful military experience". The PCL-C is a general civilian version that is not linked to a specific event. Its questions refer to 'a stressful experience from the past'. The PCL-S is a non-military version that can be referenced to any specific traumatic event. The PCL-S allows the respondent to nominate the criterion event and subsequent questions refer to the stressful experience". The same standard scoring method applies to each version.

A total score is computed by coding the five possible responses to each question as 1(not at all)-2-3-4-5(extremely) based on the extent to which the symptoms have been experienced over the last 30 days and then summing the results across 17 questions. Possible scores range from 17 to 85. (Occupational and Environmental Health Unit: Monash University 2003). Two cut-off scores (≥ 45 and ≥ 50) have been used to

indicate a diagnosis of PTSD. There is also a Symptom Cluster Method (SCM) of scoring. Experiencing, to a moderate degree, at least one Intrusion symptom, at least three Avoidance symptoms and at least two Hyperarousal symptoms is taken to indicate the presence of PTSD. (Ramchand, Karney et al. 2008)

Posttraumatic Stress Reaction (PTSR)

This was a variable created to measure PTSR in UK military populations. It was created from responses to a 50-symptom checklist. A diagnosis of PTSR was indicated by the experience during the past month of:

- One or more symptoms on each of four groups of Intrusive Thoughts, Avoidance, Arousal, Irritability); and
- Two or more of the seven symptoms of Associated Behaviours.

Primary Care PTSD (PC-PTSD)

The Post-Deployment Health Assessment (PDHA) and the Post-Deployment Health Reassessment contain the primary Care-PTSD (PC-PTSD). It contains a four-item subscale of the PCL with binary (yes/no) response options. Answering yes to two of the four items is taken to indicate the presence of PTSD.(Ramchand, Karney et al. 2008)

Screen for Posttraumatic Stress Symptoms (SPTSS)

On this checklist, participants rate the frequency that 17 events happen to them on an 11-point Likert type scale (0=never, 10=always). To be regarded as symptomatic respondents have to indicate a score of ≥ 5 on:

- one or more of the Re-experiencing items;
- three or more of the Avoidance items; and
- two or more of the Arousal items.

3 Validity of the Measures

According to Ramchand et al (2008), the measurement techniques for identifying PTSD vary in the extent to which they identify caseness (i.e. those who have PTSD and those who do not). Generally, validity is determined on two dimensions:

1. Sensitivity – the proportion of persons with PTSD who are correctly identified; and
2. Specificity – the proportion of persons who do not have PTSD who are correctly identified as not having PTSD.(Ramchand, Karney et al. 2008)

Diagnostic interviews are considered to be the ‘gold standard’ and the validity of other measures is shown in Table 1.

Table 1 Validity of self-complete questionnaires for measuring PTSD

Technique	Sensitivity	Specificity
PCL – Symptom Cluster Method	1.00	0.92
PCL ≥ 50	0.60	0.99
SPTSS	0.94	0.60
PTSD Symptom Scale (PSS) $\geq 14(a)$	0.91	0.62
PC-PTSD	0.91	0.72

Source: Ramchand, Karney, Osilla, Burns, et al (2008)

Prevalence of PTSD

1 Australia

Korea

Australian military personnel served in Korea from 1950 until 1956 (ceasefire was in 1954). Survey data were collected using a postal questionnaire from 5,564 male veterans (91% response rate) aged over 65 and above, and 1,390 comparison group made up of a sample of Australian males aged 65 and above (92% response rate). Veterans were six to seven times as likely to report symptoms of PTSD and these differences were statistically significant (Table 2). Veterans reporting experiencing heavy combat during Korea were 15 times more likely to meet criteria for PTSD.(Sim, Ikin et al. 2005)

Table 2 Australia: PTSD in Korean War veterans in 2004 (males)

Measurement (a)	Prevalence		Adjusted (b)	Multivariate Adjusted (c)	
	Veterans	Comparison (d)	OR	OR	95% CI
PCL \geq 45	32.5% 1,807/5,564	7.1% 99/1,390	6.16	5.89	4.74-7.32
PCL \geq 50	25.6% 1,426/5,564	4.6% 64/1,390	6.82	6.63	5.09-8.63

Source: Sim, Ikin and McKenzie (2005)

Notes:

(a) A cut-off score of \geq 50 is a more stringent criteria than \geq 45.

(b) Adjusted for age at the time of the study (current age)

(c) Adjusted for current age, education, marital status, and country of birth.

(d) In the original the number of respondents was shown as 1,395; it has been changed to agree with the text.

According to the report:

‘Domestic experiences were the most commonly reported stressful life event for both Korean War veterans (35%) and comparison group participants (52%). The second most nominated life event category for both groups was personal injury, illness or attack (assessed as not military related) ... 18% of Korean War veterans and 21% of comparison groups participants ... 18% of Korean War veterans nominated a Korean War event and 13% nominated another military event.’ (p. 92)(Sim, Ikin et al. 2005)

Vietnam

Australians served in Vietnam from 1964 to 1972. There are a series of citations reporting PTSD in Vietnam veterans all based on the same random sample of 1,000 Australian Army Vietnam veterans. Data were gathered in an interview and self-report questionnaire booklet between July 1990 and February 1993. The total number of respondent was 641. Of these, 0.8% were 34-39 year age group, 81.3% were aged 40-49, 12.5% 50-59 and 5.3% 60+. (O'Toole, Marshall et al. 1996)

In the initial study PTSD was included under Other Mental Illness, the prevalence of which was 5.3% - 6.0%. The relative risk of veterans developing an Other Mental Illness was five-fold compared to the he Australian population (Table 3). There were differences in prevalence depending on how it was measured but the likelihood of both chronic and current PTSD in Vietnam veterans increased with increasing exposure to combat and war zone trauma (Table 4). When the components of the Combat Index were analysed separately, being a battle casualty had a three-fold impact on the likelihood of developing Vietnam veterans suffering lifetime PTSD and current PTSD (Table 5).

Table 3 Australia: Other mental disorders (including PTSD) in Vietnam Army veterans compared with the age-sex standardized Australian population rates (males)

	Obtained		Response Adjusted	
	Prevalence	RR (99% CI)	Prevalence	RR (95% CI)
Other Mental Illness (a)	5.3%	4.15 (2.37-8.77)	6.0%	4.69 (8.80-6.58)

Source: O'Toole, Marshall, Grayson, Schureck, et al (1996)

Notes:

PTSD included in this category

Table 4 Australia: PTSD in male Vietnam Army veterans by combat and war zone trauma (males)

Measurement Tool	PTSD	21 Item Combat Index (a)			
		1st quartile	2 nd quartile	3 rd quartile	4 th quartile
	Prevalence	OR	OR	OR	OR
Lifetime PTSD					
DIS all cause	17.1%	1.00	2.64	4.43	7.17
DIS combat-related	11.7%	(b)	1.00	1.89	3.70
AUSCID-V Interview	20.9%	1.00	3.03	5.36	9.18
Current PTSD					
AUSCID-V Interview	11.6%	1.00	2.11	6.97	10.33
Mississippi Scale (Cut-off ≥107)	8.1%	1.00	5.6	11.33	25.12

Source: O'Toole, Marshall, Grayson, Schureck, et al (1996)

Notes:

(a) Derived from a self-report 21-item Likert type scale which contains items related to combat and war zone trauma. All t-tests of association between diagnosis and continuous combat score were statistically significant ($p < 0.0005$).

(b) No cases in lowest quartile

Table 5 Australia: PTSD in male Vietnam Army veterans by the components of combat exposure using logistic regression against a binary measure of met vs unmet criteria for PTSD

Combat Index Components	AUSCID-V			
	Lifetime PTSD		Current PTSD	
	OR	95% CI	OR	95% CI
Direct exposure to combat	1.87	1.52-2.29	2.23	1.71-2.90
Exposure to killing and wounding not necessarily in combat	1.77	1.44-2.17	1.51	1.17-1.95
Exposure to civilian mistreatment	1.25	1.14-1.51	1.17	0.93-1.50
Exposure to mutilation	1.21	1.02-1.44	1.29	1.07-1.56
Battle casualty	3.20	1.59-6.45	3.24	1.45-7.25
Disassociation	1.51	1.51-1.36	1.48	1.31-1.68

Source: O'Toole, Marshall, Schureck, Dobson (1999) (O'Toole, Marshall et al. 1999)

Persian Gulf

Australia deployed 1,871 Australian Defence Force personnel to the Gulf region between 2nd August 1990 and 4th September 1991. Gulf War veterans and a group randomly selected from members of the Australian Defence Force (ADF) eligible for, but not deployed to the Gulf War were recruited between August 2000 to April 2002. More than 85% of participating Gulf War veterans and more than 70% of participating comparison group subjects were from the Navy.

Gulf War veterans demonstrated a higher prevalence PTSD. The increase in the likelihood of PTSD in veterans was four-fold using the CIDI and two-fold using the PCL-S (Table 6) PTSD was most common amongst the lowest ranks in both study groups. Within the Gulf War veterans, levels of Gulf War related stressful experiences were associated with levels of post-Gulf War PTSD. (Occupational and Environmental Health Unit: Monash University 2003)

Table 6 Australia: PTSD in Gulf War veterans (males)

Instrument	Prevalence		Adjusted (a)	
	Veterans	ADF Comparison	OR	95% CI
CIDI: Symptoms present pre Gulf War	1.3% 18/1,381	1.2% 17/1,377	Not recorded	Not recorded
CIDI: Symptoms newly present after the Gulf War (b)	5.4% 73/1,381	1.4% 19/1377	3.9	2.3-6.5
CIDI: Symptoms present 12 mths prior to assessment	5.1% 71/1,381	1.7% 23/1377	4.1	2.4-7.2
PCL-S ≥ 50	7.9% 105/1339	4.6% 66/1452	2.0	1.5-2.9

Source: Occupational and Environmental Health Unit: Monash University (2003)

Notes:

(a) Adjusted for service type, rank and age, education and marital status

(b) Age of onset of first symptoms was greater than or equal to the subject's age at 1st August 1990

2 United Kingdom

Persian Gulf and Bosnia

There was a series of published studies which compared three cohorts of UK Defence force personnel:

1. Gulf Cohort: UK veterans (excluding special forces personnel) who served in the Persian Gulf region between Sept 1 1990 and June 30 1991 (N=4,248; response rate 70.4%; 92% male)
2. Bosnia Cohort: Stratified (age and rank) sample of Defence force personnel deployed to the Bosnia conflict between April 1 1992 and Feb 6 1997 (N=4,250; response rate 61.9%; 91% male).
3. Era Cohort: Stratified (age and rank) sample of Defence force personnel serving in the armed forces on Jan 1 1991 who were not deployed to the Gulf War (N=4,246; response rate 62.9%; 93% male)

The initial data was collected using a postal survey beginning in September 1997 and finishing in November 1998. Data analysis was restricted to males. Prevalence was initially measured as posttraumatic stress response (PTSR) and was based on the responses to a 50 symptom checklist. (This measure seems to be unique to this study.) The results indicated that Gulf War veterans had a higher prevalence of PTSR than the other cohorts and there was a two to four-fold likelihood of Gulf veterans experiencing PTSR symptoms in the previous month compared to the other cohorts (Table 7). In sub-samples of the original cohorts it was found that disabled Gulf veterans were nor more likely to have experienced PTSR symptoms in the previous month than non-disabled Gulf veterans or disable Bosnia and Era personnel (Table 8)

Table 7 UK: PTSR in male Gulf War, Bosnian and Era (non-deployed) service personnel

Comparisons	Prevalence	Adjusted (a)		Adjusted – Model 1(b)		Adjusted – Model 2(c)	
		OR	95% CI	OR	95% CI	OR	95% CI
Gulf vs Bosnia(a)	13.2% vs 4.7%			2.6	1.9-3.4	2.3	1.7-3.2
Gulf vs Era (a)	13.2% vs 4.1%			3.8	2.8-4.9	2.7	2.1-3.6
Bosnia vs Era (b)	4.5% vs 4.4%	1.0	0.7-1.3				
Gulf-Bosnia vs Era (b)	13.2% vs 4.5%	2.9	2.1-4.2				

Source: (a) Unwin, Blatchley, Coker, Ferry et al (1999) (b) Hotopf, David, Hull, Ismail et al (2003)

Notes:

(a) Adjusted for age, sex, rank and education

(b) Adjusted for sociodemographic and lifestyle factors

(c) Adjusted for sociodemographic and lifestyle factors plus general health questionnaire score

Table 8 UK: PTSR in sub-samples of Gulf War, Bosnian and Era service personnel (male and female)

Comparisons	Respondents (a)	Unadjusted		Adjusted (b)	
		OR	95% CI	OR	95% CI
Disabled Gulf vs Non-Disabled Gulf (c)	111 vs 96	2.7	0.1-53.9	0.84	0.3-2223.2
Disabled Gulf vs Disabled Bosnian and Era (c)	111 vs 133	0.09	0.1-6.6	1.1	0.1-9.1

Source: Ismail, Kent, Brugha, Hotopf et al (2002)

Notes:

(a) Potential respondents to be included in the sub-samples: 406 Disabled Gulf; 3,407 Non-Disabled Gulf; 416 Disabled Bosnian and Era. The sub-samples excluded those who 'after random selection' had a disease or reported a currently diagnosed serious physical illness.

(b) Adjusted for age, sex, rank and marital status using probability weights

(c) 'Disabled' defined as a score of less than 72.2 on the physical functioning subscale of the SF-36

A follow-up postal survey (conducted in 2001) of a stratified random sample of the Gulf, Bosnian and Era cohorts analysed data for military peacekeepers in the former Yugoslavia (Bosnia and Kosovo), the Arabian Gulf and Cyprus (excluding Northern Ireland and the Gulf War). The analysis indicated that 5.4% were PTSD cases using the PCL-M cut-off of ≥ 45 and, 3.6% ≥ 50 . (Greenberg, Iversen et al. 2008) As shown in Table 9, major difference appears to be that military personnel who were deployed alone with part of another unit were statistically less likely to be a PCL-M case using a cut-off score of ≥ 50 . In this sample the prevalence of PTSR was higher than the prevalence of PTSD using the PCL-M questionnaire.

Table 9 UK: PTSR and PTSD by deployment status among military peacekeepers in a stratified sub- sample of the Gulf, Bosnian and Era cohorts (male and female)

Deployment Status	Respondents (a)	PTSR		PCL-M ≥ 45		PCL-M ≥ 50	
		Count	%	Count	%	Count	%
Complete Unit	661	38	5.7%	36	5.5%	25	3.7%
Part of main unit	428	26	6.1%	21	4.9%	14	3.3%
Part of another unit with colleagues	256	16	6.1%	12	4.8%	9	3.4%
Part of another unit on own	198	10	5.1%	9	4.4%	3	1.4%

Source: Greenberg, Iversen, Hull, Bland, et al (2008)

Notes:

(a) Stratified, randomly selected sub-samples of Gulf, Bosnia and Era cohorts. Included all veterans with a fatigue score of 9, a 50% sample with mid-range fatigue scores of 4-8, and an approximately 1/8th sample with fatigue scores < 4 and all females. No analysis using the fatigue scores is presented.

Iraq

Hotopf et al (2006) compared the health of a random sample of military personnel deployed to the 2003 Iraq war (TELIC 1 N = 4,722, response rate = 62%) with a random sample of non-deployed personnel (Era N = 5,550, response rate = 56%). The focus was on Operation TELIC 1, which involved the 'build up and completion of major combat operations' from 18th January to 28th June in 2003. Data were collected on a questionnaire by either mail or personal visit between June 2004 and 2nd March 2006. Seventeen percent (17%) of respondents were under 25 years of age, 19% were

aged 25-29 years, 41% 30-39 years, 19% 40-49 years and 4% were aged 50 and over. Ninety percent (90%) of the respondents were male. As shown in Table 10 the deployment history of both groups was complex and there were differences between the two groups.(Hotopf, Hull et al. 2006).

PTSD data were collected using the PCL with a cut-off score ≥ 50 indicative of caseness. As shown in Table 11 the only statistically significant differences between the groups studied were between the veterans who had experienced combat duties (prevalence 6%) and veterans who had not (prevalence 3%).

Table 10 UK: Previous deployments of TELIC 1 and non-TELIC 1 respondents

Deployment	Period	Era		TELIC 1		P
		Number	Percent	Number	Percent	Value*
Northern Iraq/Turkey	1991–2003	196	4%	229	5%	0.0001
Falklands war	1982	238	5%	116	3%	<0.0001
Sierra Leone	2000	259	5%	250	6%	0.1
Afghanistan	2001–present	414	8%	666	15%	<0.0001
Oman (Saif Sareea)	2002	402	8%	703	16%	<0.0001
Gulf war	1990–91	684	13%	662	15%	0.02
Kosovo	1999–present	912	17%	1,018	23%	<0.0001
Bosnia Herzegovina	1992–present	1,459	28%	1,231	27%	0.6
Northern Ireland	1969–present	1,758	33%	1,245	28%	<0.0001
No previous deployment		1,098	31%	1,606	31%	0.5

Source: Hotopf, Hull, Fear, Browne, et al (2006)

Notes:

* Pearson's χ^2 test with Rao and Scott second order correction. Table shows ten comparisons. Using the Bonferroni correction, the threshold for statistical significance would be adjusted to 0.005

† Excluding TELIC 1 and Saif Sareea

Table 11 UK: PTSD in Navy/Marines, Army and Air Force personnel 1-3 years after deployment to Iraq (males and females)

		PLC \geq 50 Cases		Adjusted	
		Percentage	Number	OR	95% CI
Era		4%	135/3,698		
Iraq War		4%	191/4,825	1.00 (a)	0.79-1.28
Era		4%	193/4,546		
TELIC 1		4%	201/4,613	1.20 (b)	0.95-1.50
Reservists					
Era		3%	22/780		
TELIC 1		6%	46/766	6.95 (c)	0.89-54.2
Regulars					
Era		3%	171/4,676		
TELIC 1		4%	155/3,487	1.17 (c)	0.92-1.48
Regulars deployed to Iraq War Only: Time Since End of Last TELIC Deployment					
0-5 months		2%	13/453	1.00 (d)	
6-11 months		4%	17/422	1.53 (d)	0.67-3.46
12-17 months		3%	40/1,269	1.20 (d)	0.55-2.63
18-23 months		4%	19/490	1.73 (d)	0.74-4.04
\geq 24 months		4%	61/1,752	1.68 (d)	0.78-3.63
Combat Duties					
Non-Combat Duties		3%	97/3,125		
Combat Duties		6%	70/1,238	1.49 (e)	1.05-2.13

Source: Hotopf, Hull, Fear, Browne, et al (2006)

Notes:

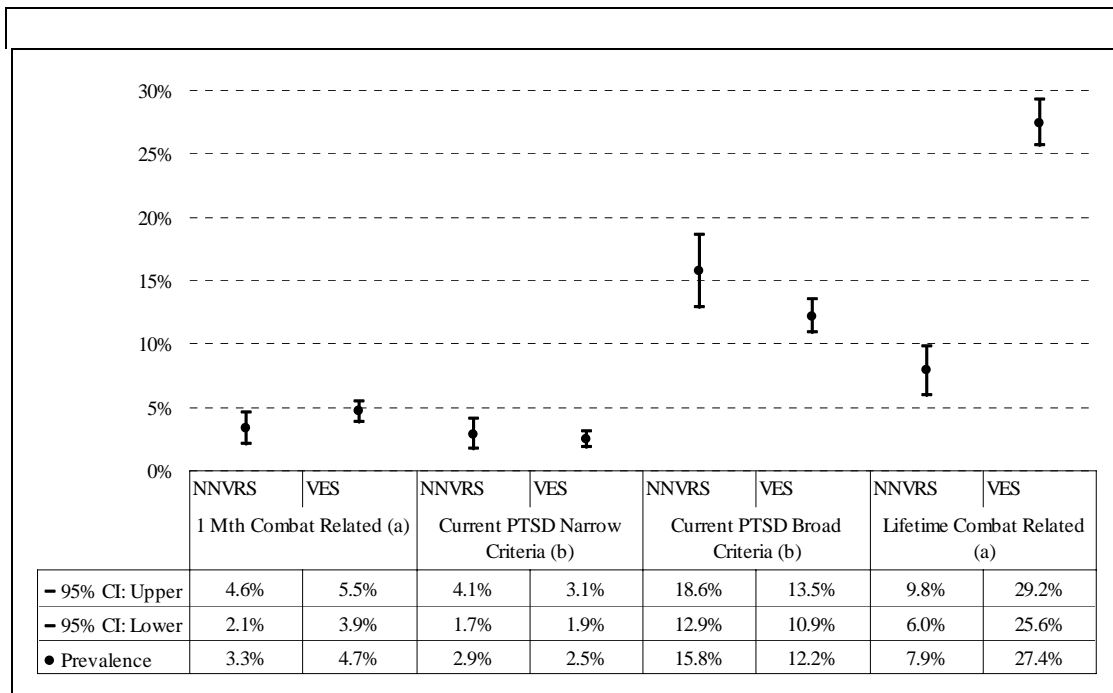
- (a) Adjusted for age, sex, rank, education and marital status, service branch, and fitness to deploy
- (b) Adjusted for age, sex, rank, educational and marital status, service branch, fitness to deploy and reservists and take account of sampling weights
- (c) Adjusted for age, sex, rank, educational and marital status, service branch, and fitness to deploy
- (d) Adjusted for age, sex, rank, educational and marital status, service branch, fitness to deploy and most recent TELIC deployment
- (e) Adjusted for age, sex, rank, educational and marital status, service branch and fitness to deploy.

United States

Vietnam

There were two large studies of US Vietnam Veterans: the National Veterans Readjustment Study (NVVRS) and the Vietnam Experience Study (VES). Thompson, Gottesman and Zalewski (2006) attempted to reconcile the results from each using comparable PTSD criteria across both studies. As can be seen from the results in Figure 1 (expressed in both graphical and tabular form), the one-month combat related and the current PTSD using the narrow criteria are similar for both studies. However, the study failed to reconcile the lifetime combat related PTSD for both groups.

Figure 1 USA: PTSD among Vietnam veterans 10 years after withdrawal of troops from Vietnam (males)



Source: Thompson, Gottesman, Zalewski (2006)

Notes

(a) Based in the DIS but modified to include 21 symptom probes

(b) Based on the DSM-III-R definition for the DIS instrument

Iraq and Afghanistan

There is a large amount of literature relating to PTSD in Defence force personnel who have returned from deployment in Iraq and Afghanistan (Table 14). It is quite difficult to discern patterns in these data. However, the most surprising results are for the Smith et al (2008) study which appears to show major differences between sub-groups based on the presence of PTSD prior to deployment. This study, which is the most recent, is examined in more detail.

This is a study of a population based US military cohort of active military and Reserve/National Guard personnel who had deployments in Iraq and Afghanistan.

Results were presented for respondents who:

1. Had not been deployed prior to, or were not on deployment when, their baseline questionnaire was being completed (July 2001-June 2003); and
2. Were not on deployment when their follow-up questionnaire was completed (June 2004 and February 2006).

The mean elapsed time between submission of the baseline and follow-up questionnaires was 2.7 years (SD 0.5; median 2.8).

The PCL-S was used with 'sensitive' and 'specific' criteria to determine the presence of symptoms or a diagnosis of PTSD. The sensitive criteria was the symptom cluster method and the specific criteria included both the symptom cluster method and a score of ≥ 50 . At baseline and follow-up participants were also asked whether or not

their doctor or other health professional had ever told them that they had post-traumatic stress disorder. The cohort was then divided into the four groups based on whether or not they had symptoms or diagnosis at baseline and/or follow-up (Table 12).

Table 12 Sub-groups for analysis of new onset and persisting PTSD

	Baseline: No PTSD	Baseline: PTSD
Follow-up: No PTSD	Group 1: No PTSD	Group 2: No Persisting PTSD
Follow-up: PTSD	Group 3: New Onset	Group 4: Persisting PTSD

For the New Onset group (Group 3 in Table 12), the prevalence of PTSD was highest in those who had combat exposure while on deployment. For the Persisting PTSD group, prevalence was lowest in those who were deployed with no combat exposure (Table 13).

Table 13 USA: PTSD in Army, Air Force, Navy/Coast guard and Marines by deployment status (males and females)

Deployment Status	New Onset Symptoms (Group 3)				Persisting Symptoms (Group 4)			
	Specific Criteria (a)		Sensitive Criteria (b)		Specific Criteria (a)		Sensitive Criteria (b)	
Not deployed	849	2.3%	1,106	3.0%	391	45.9%	614	47.6%
Deployed: no combat	89	1.4%	128	2.1%	17	26.2%	30	22.4%
Deployed: combat	409	7.6%	461	8.7%	47	43.5%	89	47.9%
Overall	1,347/48,447 (2.8%)		1,695/47,837 (3.5%)		455/995 (45.7%)		733/1,659 (44.2%)	

Source: Smith, Ryan, Wingard, Slyment, et al (2008)

Notes:

(a) Specific Criteria: Symptom Cluster Method of scoring and PCL \geq 50

(b) Sensitive Criteria: PCL \geq 50 only

Summary

Summarizing the results of these studies in a meaningful way is extremely difficult. In part this is due to the methodological differences (e.g., timing and method of measuring PTSD), and individual differences as well as differences in pre and post deployment experiences. These differences have led to differences in prevalence rates both within and between countries. However, there are some broad trends that can be observed.

There appears to be a background or base level of PTSD in all the populations studied – military and civilian. Based on the PCL-S with a cut-off score of \geq 50 these levels appear to be approximately 4% to 5% (Table 2, Table 6, Table 7 and 11).

The prevalence of PTSD in deployed veterans varies across countries and across the conflicts to which military personnel are deployed. This is best demonstrated by presenting prevalence rates in which the same measurement tool has been used (Table 15).

Table 14 USA: Summary of studies of PTSD prevalence pre and post deployment

				Outcome Measures				Medical Records
				PCL - SCM	PCL ≥ 50	PC-PTSD	SPT SS	ICD-9-CM
Sensitivity of Outcome Measures				1.00	0.60	0.91	0.94	
Specificity of Outcome Measures				0.92	0.99	0.72	0.60	
	Service and deployment status	Recruitment Period	Deployment Arena					
Assessment pre-deployment								
Hoge, Castro, Messer, McGurk, et al (2004)(Hoge, Castro et al. 2004)	Army: one week pre deployment		Iraq	9.4%	5.0%			
Assessment post-deployment								
Hoge, Auchterlonie, Milliken (2006)(Hoge, Auchterlonie et al. 2006)	Army and Marine	1 May 2003 - April 30 2004	Afghanistan	9.8%				
Hoge, Auchterlonie, Milliken (2006)(Hoge, Auchterlonie et al. 2006)	Army and Marine	1 May 2003 - April 30 2004	Iraq	4.7%				
Hoge, Auchterlonie, Milliken (2006)(Hoge, Auchterlonie et al. 2006)	Army and Marine	1 May 2003 - April 30 2004	Other Places	2.1%				
Vasterling, Proctor, Moroso, Kane, et al (2006)(Vasterling, Proctor et al. 2006)	Army		Iraq		11.6%			
Kolkow, Spira, Morse, Grieger (2007)(Kolkow, Spira et al. 2007)	Health care providers		Iraq and Afghanistan		9.0%			
Martin (2007)(Martin 2007)	Armed forces	2005	Iraq			10.5%		
Milliken, Auchterlonie, Hoge (2007)(Milliken, Auchterlonie et al. 2007)	Army Reserve	1 June 2005 - 31 Dec 2006	Iraq			12.7%		
Milliken, Auchterlonie, Hoge (2007)(Milliken, Auchterlonie et al. 2007)	Army Active	1 June 2005 - 31 Dec 2006	Iraq			11.8%		
Lapierre, Schwegler, LaBauve (2007)(Lapierre, Schwegler et al. 2007)	Army	Feb - Jul 2005	Iraq				31%	
Lapierre, Schwegler, LaBauve (2007)(Lapierre, Schwegler et al. 2007)	Army	Feb - Jul 2006	Afghanistan				30%	
Smith, Ryan, Wingard, Slyment, et al (2008)(Smith, Ryan et al. 2008)	Armed forces with combat: no baseline PTSD		Iraq and Afghanistan	8.7%	7.3%			

				Outcome Measures				Medical Records
				PCL - SCM	PCL ≥ 50	PC-PTSD	SPT SS	ICD-9-CM
Sensitivity of Outcome Measures				1.00	0.60	0.91	0.94	
Specificity of Outcome Measures				0.92	0.99	0.72	0.60	
Smith, Ryan, Wingard, Slyment, et al (2008)(Smith, Ryan et al. 2008)	Armed forces w/out combat: no baseline symptoms/diagnosis PTSD		Iraq and Afghanistan	2.1%	1.4%			
Smith, Ryan, Wingard, Slyment, et al (2008)(Smith, Ryan et al. 2008)	Armed forces not deployed: no baseline PTSD		Iraq and Afghanistan	3.0%	2.3%			
Smith, Ryan, Wingard, Slyment, et al (2008)(Smith, Ryan et al. 2008)	Armed forces with combat: baseline PTSD		Iraq and Afghanistan	47.9%	43.5%			
Smith, Ryan, Wingard, Slyment, et al (2008)(Smith, Ryan et al. 2008)	Armed forces w/out combat: baseline PTSD		Iraq and Afghanistan	22.4%	26.2%			
Smith, Ryan, Wingard, Slyment, et al (2008)(Smith, Ryan et al. 2008)	Armed forces not deployed: baseline PTSD		Iraq and Afghanistan	45.9%	47.6%			
Assessment 3-6 months post-deployment								
Hoge, Castro, Messer, McGurk, et al (2004)(Hoge, Castro et al. 2004)	Army: 3-4 months post deployment		Iraq	18.0%	12.9%			
Hoge, Castro, Messer, McGurk, et al (2004)(Hoge, Castro et al. 2004)	Marine: 3-4 months post deployment		Iraq	19.9%	12.2%			
Hoge, Castro, Messer, McGurk, et al (2004)(Hoge, Castro et al. 2004)	Army: 3-4 months post deployment		Afghanistan	11.5%	6.2%			
Milliken, Auchterlonie, Hoge (2007)(Milliken, Auchterlonie et al. 2007)	Army Reserve: 3-6 months deployment	1 June 2005 - 31 Dec 2006	Iraq			24.5%		
Milliken, Auchterlonie, Hoge (2007)(Milliken, Auchterlonie et al. 2007)	Army Active: 3-6 months post deployment	1 June 2005 - 31 Dec 2006	Iraq			16.7%		
Assessment 1 year post deployment								
Hoge, Terhakoplan, Castro, Messer, et al (2007)(Hoge, Terhakopian et al. 2007)	Army: 1 year post deployment		Iraq		16.6%			
Wounded/Receiving Care								
Grieger, Cozza, Ursano, Hoge, et al (2006)(Grieger, Cozza et al. 2006)	Soliders wounded in combat and evacuated: assessment 1	Mar 2003 - Sept 2004			4.2%			

				Outcome Measures				Medical Records
				PCL - SCM	PCL \geq 50	PC-PTSD	SPT SS	ICD-9-CM
Sensitivity of Outcome Measures				1.00	0.60	0.91	0.94	
Specificity of Outcome Measures				0.92	0.99	0.72	0.60	
	month							
Grieger, Cozza, Ursano, Hoge, et al (2006)(Grieger, Cozza et al. 2006)	Soldiers wounded in combat and evacuated: assessment 4 months	Mar 2003 - Sept 2004			12.2%			
Grieger, Cozza, Ursano, Hoge, et al (2006)(Grieger, Cozza et al. 2006)	Soldiers wounded in combat and evacuated: assessment 7 months	Mar 2003 - Sept 2004			12.0%			
Seal, Bertenthal, Miner, Sen, et al (2007)(Seal, Bertenthal et al. 2007)	Veterans receiving care	30 Sept 2001 - 30 Sept 2005	Iraq and Afghanistan					13.0%
Erbes, Westermeyer, Engdahi, Johnson (2007)(Erbes, Westermeyer et al. 2007)	Veterans receiving care: excl those receiving mental health services	February 2005 - time of publication	Iraq and Afghanistan		12.0%			

Source: Ramchand, Karney, Osilla, Burns, et al (2008: 60-81)

Table 15 Prevalence in veteran populations using PCL with cut-off score ≥ 50

	UK (a)	Australia (b)	USA (c)
Korean		25.6%	
Persian Gulf		7.9%	
Iraq	4%		12.2%-16.6%
Afghanistan			6.2%
Afghanistan & Iraq			9.0%

Sources: (a) Table 10 (b) Table 2, (c) Table 14

- Deployment does not necessarily increase the prevalence of this background level of PTSD. For example:
 - (a) In one prospective study of US military personnel, deployment decreased the prevalence of PTSD in the group assessed as having PTSD prior to deployment (Table 13).
 - (b) In a study of UK military personnel deployment to Bosnia and did not increase the prevalence of PTSD compared to the control group (Table 10).
- However, combat exposure while on deployment generally increases the likelihood of PTSD (Table 4)
- Table 5, Table 10, Table 13). Only in the US prospective study did it decrease the prevalence of PTSD (Table 13).
- Length of time since deployment may affect the results as Ramchand, Karney, Osilla, Burns, et al (2008) state but it is difficult to discern this pattern in all the data presented.

Australian Data

Data were available for Korean, Vietnam and Persian Gulf veterans. Time from deployment to measurement of PTSD varied as did the method of identifying the prevalence of PTSD. PTSD prevalence was highest for the Korean veterans and lowest for the Persian Gulf veterans which would appear to support the conclusion that time since deployment could affect the results of the studies. Diagnostic interviews were used in both the Persian Gulf and Vietnam studies and these are generally regarded as the 'gold standard'

Table 16 Australia: summary of PTSD prevalence data for veteran populations

Conflict	Recruitment	Age of Participants	Participation Rate	Prevalence	
Korea 1950-56	2004	65+	N = 5,564 91%	PCL ≥ 50	25.6%
Vietnam 1964-72	1990-91	17% <25 40% 25-34 39 % 35-49 4 % ≥ 50	N = 641 64%	Diagnostic Interviews: Lifetime PTSD (a) Current PTSD (b) Mississippi Scale ≥ 107 Current	11.7%-20.9% 11.6% 8.1%
Persian Gulf 1990-91	2000-2001	12% < 30 29% 30-34 48% $\geq 35-44$ 15% ≥ 45	N=1,381 76%	Diagnostic Interviews: Symptoms newly present after Gulf War (c) Symptoms present in previous 12 months (c) PCL-S ≥ 50	5.4% 5.1% 7.9%

Notes:(a) DIS and AUSCID-V; (b) AUSCID-V; (c) CIDI

References

- Erbes, C., J. Westermeyer, et al. (2007). Post-traumatic stress disorder and service utilization in a sample of service members from Iraq and Afghanistan. *Mil Med* **172**(4): 359-63.
- Greenberg, N., A. Iversen, et al. (2008). Getting a peace of the action: measures of post traumatic stress in UK military peacekeepers. *J R Soc Med* **101**(2): 78-84.
- Grieger, T. A., S. J. Cozza, et al. (2006). Posttraumatic stress disorder and depression in battle-injured soldiers. *Am J Psychiatry* **163**(10): 1777-83; quiz 1860.
- Hoge, C. W., J. L. Auchterlonie, et al. (2006). Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *Jama* **295**(9): 1023-32.
- Hoge, C. W., C. A. Castro, et al. (2004). Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *N Engl J Med* **351**(1): 13-22.
- Hoge, C. W., A. Terhakopian, et al. (2007). Association of posttraumatic stress disorder with somatic symptoms, health care visits, and absenteeism among Iraq war veterans. *Am J Psychiatry* **164**(1): 150-3.
- Hotopf, M., A. David, et al. (2003). The health effects of peacekeeping (Bosnia, 1992-1996): a cross-sectional study--comparison with nondeployed military personnel. *Mil Med* **168**(5): 408-13.
- Hotopf, M., L. Hull, et al. (2006). The health of UK military personnel who deployed to the 2003 Iraq war: a cohort study. *Lancet* **367**(9524): 1731-1741.
- Ismail, K., K. Kent, et al. (2002). The mental health of UK Gulf war veterans: phase 2 of a two phase cohort study. *Bmj* **325**(7364): 576.
- Kolkow, T. T., J. L. Spira, et al. (2007). Post-traumatic stress disorder and depression in health care providers returning from deployment to Iraq and Afghanistan. *Mil Med* **172**(5): 451-5.
- Lapierre, C. B., A. F. Schwegler, et al. (2007). Posttraumatic stress and depression symptoms in soldiers returning from combat operations in Iraq and Afghanistan. *J Trauma Stress* **20**(6): 933-43.
- Lyons, J. A., J. M. Caddell, et al. (1994). The potential for faking on the Mississippi Scale for Combat-Related PTSD. *J Trauma Stress* **7**(3): 441-5.
- Martin, C. B. (2007). Routine screening and referrals for PTSD after returning from operation Iraqi Freedom in 2005, U.S. Armed Forces. *MSMR: Medical Surveillance Monthly Report* **14**(6): 2-7.
- Milliken, C. S., J. L. Auchterlonie, et al. (2007). Longitudinal assessment of mental health problems among active and reserve component soldiers returning from the Iraq war. *Jama* **298**(18): 2141-8.
- O'Toole, B. I., R. P. Marshall, et al. (1996). The Australian Vietnam Veterans Health Study: I. Study Design and Response Bias. *Int. J. Epidemiol.* **25**(2): 307-318.
- O'Toole, B. I., R. P. Marshall, et al. (1996). The Australian Vietnam Veterans Health Study: II. self-reported health of veterans compared with the Australian population. *Int J Epidemiol* **25**(2): 319-30.
- O'Toole, B. I., R. P. Marshall, et al. (1996). The Australian Vietnam Veterans Health Study: III. psychological health of Australian Vietnam veterans and its relationship to combat. *Int J Epidemiol* **25**(2): 331-40.
- O'Toole, B. I., R. P. Marshall, et al. (1999). Combat, dissociation, and posttraumatic stress disorder in Australian Vietnam veterans. *J Trauma Stress* **12**(4): 625-40.

- Occupational and Environmental Health Unit: Monash University (2003). Australian Gulf War Veterans' Health Study. Department of Veterans' Affairs, Canberra.
- Ramchand, R., B. R. Karney, et al. (2008). Prevalence of PTSD, Depression, and TBI Among Returning Servicemembers. *Invisible Wounds of War*. T. Tanielian and L. H. Jaycox. Santa Monica, CA, RAND, Center for Military Health Policy Research.
- Seal, K. H., D. Bertenthal, et al. (2007). Bringing the war back home: mental health disorders among 103,788 US veterans returning from Iraq and Afghanistan seen at Department of Veterans Affairs facilities. *Arch Intern Med* **167**(5): 476-82.
- Sim, M., J. Ikin, et al. (2005). Health Study 2005. Australian Veterans of the Korean War. Department of Epidemiology and Preventive Medicine, Monash University, Clayton.
- Smith, T. C., M. A. Ryan, et al. (2008). New onset and persistent symptoms of post-traumatic stress disorder self reported after deployment and combat exposures: prospective population based US military cohort study. *Bmj* **336**(7640): 366-71.
- Thompson, W. W., Gottesman, II, et al. (2006). Reconciling disparate prevalence rates of PTSD in large samples of US male Vietnam veterans and their controls. *BMC Psychiatry* **6**: 19.
- Unwin, C., N. Blatchley, et al. (1999). Health of UK servicemen who served in Persian Gulf War. *Lancet* **353**(9148): 169-78.
- Vasterling, J. J., S. P. Proctor, et al. (2006). Neuropsychological outcomes of army personnel following deployment to the Iraq war. *Jama* **296**(5): 519-29.