

Assessing Medical Suitability for Employment and Deployment in the ADF

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Introduction

This article follows previous papers by the author, regarding occupational and environmental medicine in the ADF.¹ They asserted that high rates of workplace illness and injury indicate the need to improve the management of hazards associated with ADF workplaces, with better emphasis on prevention. They also advocated that the ADF's health services should be premised on an occupational and environmental health paradigm, which would require reassessing the fundamental inputs to capability for both Joint Health Command, and Defence's Work Health and Safety Branch.

The papers argued that such a reassessment could lead to a holistic and sustainable workforce-based health service delivery model by 2030. This timeframe is based on the current state of the ADF's occupational and environmental health services, and the small number of civilian specialist practitioners within the Australasian Faculty of Occupational and Environmental Medicine. These considerations suggest that a mature health delivery model would take 10-15 years' sustained effort with respect to occupational and environmental physicians alone.

This article expands on those papers, by addressing medical suitability assessment for the employment and deployment of ADF members.

ADF health assessments – recruiting

The need for high recruiting medical standards was first demonstrated in Australia during World War 1. Of the 589,947 men who were medically examined for the First Australian Imperial Force (AIF), 30.3 per cent were rejected on medical grounds. Thereafter, 33,800 of 421,809 AIF entrants (8.0%) were medically discharged before leaving Australia, while another 16,000 of the 331,781 personnel who served overseas (28.1% of all AIF non-battle casualties) were invalided home before seeing active service.² These militarily ineffective personnel not only wasted

resources and hampered operational capability, but also constituted a considerable post-war burden with respect to their rehabilitation and compensation entitlements.³

Substantial clinical advances since have driven major changes to recruiting medical standards. Conditions such as asthma, which were previously incompatible with military service, can often now be adequately managed without reducing operational capability. Furthermore, Navy recruiting in particular has significantly benefited from advances in shipboard habitability since the 1950s—for example relating to the prevention of certain skin conditions and the treatment of obstructive sleep apnoea.⁴

Even so, recruiting health assessments still fulfil several aims. Firstly, they facilitate operational capability by ensuring that entrants are medically suitable for the tasks they will undertake: all else being equal, infantry soldiers who are recruited to a higher medical standard have a capability edge against opponents who are not. This consideration also applies to occupations that require specific medical standards: for example, the importance of visual tasks for aircrew means that, compared with other occupational groups, they require a higher visual standard.

Secondly, recruiting health assessments ensure that operational capability is not degraded by pre-existing medical conditions that may be exacerbated by the tasks that entrants undertake during their service: for instance, entrants with pre-existing back conditions pose a capability risk for duties that entail carrying heavy packs for extended periods. Finally, recruiting health assessments 'baseline' each entrant's health status for compensation purposes, with respect to future medical conditions they may develop during their service. For example, when ascertaining compensation eligibility for a knee condition, it is essential to have adequately documented the medical status of that knee before entry.

Virtually all ADF recruiting health assessments are conducted by contracted civilian medical practitioners.⁵ A key differentiation from their Defence counterparts is that they do not provide treatment: where necessary, such cases are referred back to the candidate's civilian GP.

A key limitation of all health assessments, however, is that they cannot positively confirm that personnel are medically suitable for a particular purpose—they can only document the apparent absence, at that time, of conditions which may limit or prevent examinees from undertaking that purpose. Consequently, health assessments for recruits must always be considered only one of many ways of managing health-related employment and deployment risk.

ADF health assessments – current members

Misconceptions

A key misconception among many Defence health staff and the general ADF population, is that health assessments are primarily used to identify new medical conditions in order to facilitate treatment. In fact, the number of medically or operationally significant clinical conditions identified via this means is very small. Moreover, finding such a condition at a routine health assessment usually implies a failure in patient presentation/reporting, and/or the standard of primary health care they receive.⁶

It is therefore essential that the diagnosis and treatment of every new medical condition includes considering its impact on the affected member's ability to perform their normal duties and vice-versa, that is, considering the impact of their normal duties on their newly diagnosed medical condition. This means that Defence primary health care providers not only need to be good clinicians but also need a thorough understanding of the duties that their patients undertake.

Personnel requirements

Documenting a member's health status via a health assessment fulfils several aims, many of which relate to personnel employment requirements, such as promotions, courses, re-enlistments and career transfers. The overall intent is to limit the expenditure of resources on personnel who are not medically suitable.

Another key requirement is to ascertain health status prior to deployment. When done correctly, pre-deployment health assessments also 're-baseline' the member's medical status for subsequent

compensation purposes. This entails repeating the same health assessment on their return, to identify changes to their health status that may be ascribable to their deployment.

Post-deployment health assessments should also document the actual and potential workplace hazards encountered by each member during their deployment. As maritime workplace hazards, for example, are obviously not the same as those ashore and vice-versa, pre-and post-deployment health assessments both need to be environment-specific.

The 're-baselining' requirement also applies to non-deployed personnel, particularly regarding the current status of previously identified medical conditions they have developed since their previous health assessment. Besides validating their current medical suitability to deploy, this also facilitates compensation for non-deployed workplace-related conditions.

The health assessment workload must not be underestimated. For example, of the 144,000 US Army personnel considered 'non-deployable' for medical and dental reasons as at December 2016, 55,000 (38%) were so classified because they were out of date for their annual periodic health assessments and/or dental examinations.⁷ Even the financial and personnel cost of civilian employment assessments (where they exist) should not be underestimated.⁸

Furthermore, the author has previously noted that, anecdotally, only 20-40 per cent of ADF primary care presentations are for non-work-related conditions typically seen in an equivalent Australian civilian population—the remainder are predominantly workplace-related musculoskeletal and mental health disorders, for which 're-baselining' is required for compensation purposes. Despite these facts, the ADF's health services currently do not apply 'baselining' to their health assessments.

Occupational health requirements

ADF health assessments should also align with the legislative requirements of the *Work Health and Safety Act 2011* and its implementing regulations, and Safework Australia's supporting Guides, National Standards, and Model Codes of Practice.⁹ It is essential to understand that these occupational health assessments can only ascertain the effectiveness of the examinee's workplace hazard controls: they are not themselves control measures.¹⁰ Identifying a preventable work-related condition at an occupational health assessment usually not only occurs far too late for the affected member but may

also have a range of adverse reputational management and other organisational consequences.¹¹

At present, the responsibility for the ADF's occupational and environmental health services is divided between Joint Health Command and Defence's Work Health and Safety Branch. As a result, the ADF's overall legislative compliance with occupational and environmental health assessments is minimalist, reactive, and ad hoc.¹² The aforementioned link between workforce treatment services and workplace health assessments indicates that Joint Health Command should be responsible for both.

Health assessment content

Current ADF health assessments do not assess medical suitability for employment and deployment: they are primarily 'healthy lifestyle' checks per the Royal Australian College of General Practitioners' 'Red Book'.¹³ As previously noted by the author, the usefulness of the College's otherwise extensive preventive health guidance to the ADF is limited by its focus on the general Australian population, rather than being targeted for a young, medically fit, geographically mobile and predominantly male workforce. Furthermore, lifestyle factors such as tobacco use are irrelevant if they do not actually preclude employment or deployment.

Health assessment periodicity

ADF periodic health assessments are presently conducted every five years until members reach 40, with progressively shorter intervals thereafter. These timeframes do not reflect personnel or legislative considerations but resourcing issues based on the 'Red Book'. From an occupational and environmental health perspective, using this guidance for a young and generally fit ADF population is unduly conservative—evidence suggests their periodic health assessments can be safely performed five-yearly until individuals reach 60.¹⁴

Even so, because they can only confirm the absence of medical conditions at that time, five-year intervals are too long to accommodate additional personnel and/or legislative requirements. Health assessments for these purposes should therefore be 'triggered' when required. Balancing their demands against resourcing issues suggests that 'triggered' personnel health assessments should remain valid for all subsequent personnel management requirements for a maximum of 12 months, while 'triggered' occupational health assessments should comply with Safework Australia's guidance.

Temporarily medically unfit personnel

Defence medical practitioners who deem ADF personnel temporarily medically unfit for normal duties for less than 28 days may either recommend a period of restricted or alternative duties, or a period of excused duties, or have them admitted to a military or civilian hospital.

Except for aircrew, and apart from the need for command approval, Joint Health Command direction for managing temporarily medical unfit personnel is generally similar to that used for civilian sickness certification.¹⁵ At present, however, ADF 'medical absences' are not managed as a workforce capability management issue premised on early rehabilitation and timely return to work but as a health administrative issue that is almost solely premised on conditions-of-service considerations.

Furthermore, Joint Health Command currently does not collect or report work-related illness/injury data, or record lost time or restricted duties, or identify the ensuing health care costs (albeit some of this information is collected via a separate non-health reporting process managed by Defence's Work Health and Safety Branch). Yet this health information is essential for monitoring the effectiveness of the ADF's occupational and environmental health services, accounting for the health care costs incurred by Joint Health Command and the compensation and health care costs incurred by the Department of Veterans' Affairs.

Whether deployed or non-deployed, the inappropriate employment of medically unsuitable personnel poses threats to the health of those affected and to the mission of their units. Furthermore, evacuating deployed personnel with known pre-existing conditions wastes assets and poses operational hazards for other members.

Conversely, however, inappropriately limiting or preventing personnel from undertaking their normal duties also has significant adverse consequences. For the affected member, it delays or blocks their career progression, deployments, promotions or attendance at courses. For their units, it increases the workload for other personnel (who themselves may already be under strain) and may also limit or even prevent normal operations if the affected member is essential to their unit's functions.

These consequences may also have unintended second- and third-order effects regarding future patient compliance and willingness to report injuries,

illnesses and symptoms, or receive treatment. It may also lead to perception management issues not only regarding individual health staff members who needlessly block their career aspirations but in relation to the ADF's health services in general.

These considerations mean that in addition to diagnosis and treatment, every Defence primary health care provider must make a decision regarding the anticipated medical suitability for duty of every ADF member at every patient presentation. This not only prevents or limits further workplace injuries by limiting or stopping personnel from working when necessary but also facilitates effective personnel utilisation by ADF commanders by keeping affected personnel at work where and when it is clinically appropriate to do so.

Hence, Defence primary health care providers who cannot assess medical suitability for ADF employment and deployment on these terms are both a threat to the work-related health and safety of the patients they treat (if they keep them at work inappropriately) and a liability to ADF operational capability (if they stop them from work inappropriately). Making these decisions necessitate a risk-management approach to patient care that balances the anticipated risks and benefits of the member's duties to their health, and vice versa. This further supports the contention that Defence primary health care providers need to be not only good clinicians but also need a comparable understanding of the duties their patients undertake.

However, the author has previously referred to studies indicating that even civilian medical fitness-for-work certification can be challenging for GPs and other providers, which is one reason why understanding how to assess medical suitability for ADF employment and deployment typically takes full-time novice military and civilian GPs up to 12 months. The author has also previously described how civilian GP training does not provide the full range of primary health care skills and expertise required for the ADF workforce.

In summary, ascertaining health suitability for employment and deployment of temporarily medically unfit personnel is an occupational and environmental health function that is intrinsic to providing appropriate health care for every ADF member. However, it is not recognised as such by the current health care model used by Joint Health Command for its garrison health services, or in the fundamental inputs to health capability for either Joint Health Command or Defence's Work Health and Safety Branch.

The ADF Medical Employment Classification System

Defence medical practitioners who consider an ADF member to be temporarily medically unfit for their normal duties for more than 28 days should conduct a Unit Medical Employment Classification Review in accordance with the relevant joint and single-Service references.¹⁶ Depending on the outcome, personnel who remain medically unfit for more than a specified period (typically 12 months) should undergo a Central Medical Employment Classification Review. These reviews refer members to the relevant single-Service Medical Employment Classification Review Board for a determination regarding their long-term employability and deployability, which may (but by no means always) include medically-based separation from the ADF.

All review outcomes have two components. The first is a Medical Employment Classification code, which describes the member's employability and deployability, for use by their career management agency for posting and other longer-term career-related purposes. The second lists the member's employment restrictions that specify their duty limitations and approvals, for use by the member's Command for day-to-day personnel management purposes.

Unlike the current medical absence process, this system is unique to the ADF, with no civilian equivalent. Yet for the same reasons as for temporarily medically unfit personnel, recognising when to conduct a Medical Employment Classification Review is an occupational and environmental health function that is intrinsic to providing health care for ADF members. This further supports the assertion that Defence primary health care providers need to have a good understanding of the duties their patients undertake.

It is also essential that Defence primary health care providers appreciate that this system is not a patient management tool but a process to inform personnel management decision-making while maintaining patient confidentiality. Abuse of the system for patient management purposes leads to unnecessary personnel management decision-making delays, which may adversely affect the member's command and other unit personnel and their future employability in or out of the ADF.

Anecdotal evidence suggests that the average Defence medical practitioner conducting these reviews should consume about 30-40 per cent of their level of effort, or about the same as their clinical workload. This

is because the frequently substantial career (and at times operational capability) implications and future compensation entitlements mean that every review requires careful consideration and detailed documentation, in particular regarding:

- The circumstances as to how the member first presented (particularly for conditions that are or may be work-related, for subsequent compensation purposes);
- The clinical findings at that presentation ('baselining');
- Initial and current treatment after presentation;
- For personnel with multiple conditions or injuries, repeating these steps for each condition or injury;
- Describing the member's current clinical status, and any limitations regarding their ability to undertake normal duties ('re-baselining' for subsequent Reviews); and
- Recommended Medical Employment Classification code and employment restrictions, and justification.¹⁷

However, of the 13,816 Central Medical Employment Classification Reviews conducted by garrison health staff between 1 February 2011 and 30 September 2016, at least 35 per cent were inadequate with respect to documenting these findings.¹⁸ While comparable figures with respect to Unit Medical Employment Classification Reviews do not exist, the relative lack of supervision suggests they would probably be higher.

Poor-quality reviews have important career and other implications with respect to the affected member's employability and deployability, as well as the time and effort wasted on representations, appeals and ministerial inquiries. It also makes it more difficult to assess the eligibility of members for treatment and compensation services provided by the Department of Veterans' Affairs and, in particular, ascertaining the extent to which their medical conditions may relate to their ADF service.

Conclusion

With ADF personnel arguably exposed to the most diverse range of occupational and environmental hazards of any Australian workforce, high rates of preventable workplace illness and injury indicate the need to improve the management of occupational and environmental health hazards, with better emphasis on prevention.

Among its other attributes, the proposed occupational and environmental health paradigm would entail basing the timing and content of health assessments on personnel management and/or legislative requirements, with a maximum interval of five years. Rather than generally irrelevant lifestyle-related health promotion considerations, it would also entail Defence medical officers who accept the need to assess medical suitability for employment and deployment at every ADF patient presentation as intrinsic to providing health care for the ADF workforce, while adequately informing the relevant personnel managers.

Author

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His seagoing service includes HMA Ships *Swan*, *Stalwart*, *Success*, *Sydney*, *Perth* and *Choules*. Deployments include DAMASK VII, RIMPAC 96, TANAGER, RELEX II, GEMSBOK, TALISMAN SABRE 07, RENDERSAFE 14, SEA RAIDER 15, KAKADU 16 and SEA HORIZON 17. His service ashore includes clinical roles at *Cerberus*, *Penguin*, *Kuttabul*, *Albatross* and *Stirling*, and staff positions as J07 (Director Health) at the then HQAST, Director Navy Occupational and Environmental Health, Director of Navy Health, Joint Health Command SO1 MEC Advisory and Review Services, and Fleet Medical Officer (January 2013 to January 2016).

Disclaimer

The views expressed in this reprinted article are the author's, and do not necessarily reflect those of the RAN or any of the other organisations mentioned.

Notes

1. N. Westphalen, 'Occupational and environmental medicine in the Australian Defence Force', *Australian Defence Force Journal*, Issue 200, November–December 2016, pp. 49–58, available at <http://www.defence.gov.au/ADC/ADFJ/Documents/issue_200/Westphalen_Nov_2016.pdf> accessed 13 October 2017; and N. Westphalen, 'Primary health care in the Australian Defence Force', *Australian Defence Force Journal*, Issue 202, July/August 2017, pp. 91–7, available at <http://www.defence.gov.au/adc/adfj/Documents/issue_202/Westphalen_July_2017.pdf> accessed 13 October 2017.
2. A.G. Butler, *Official History of the Australian Army Medical Services, 1914–1918*, Vol. 3, Australian War Memorial: Canberra, 1943, Chapters 14, 15 and 17. 103,897 AIF personnel were returned to Australia as invalids. These included 71,048 sick or injured, and 31,375 wounded.
3. As each voyage from England to Australia took around three months, returning AIF invalids required a high level of en-route care. However, only two dedicated 'white' hospital ships were available, which moved 17,760 AIF invalids between September 1915 and November 1919, while the remaining 86,137 invalids were moved in non-dedicated 'black' transports: see Butler, *Official History of the Australian Army Medical Services, 1914–1918*, Chapter 14; and C. Lloyd, and J. Rees, *The Last Shilling: a history of repatriation in Australia*, Melbourne University Press: Melbourne, 1994. The repatriation of ex-AIF injured and ill members after World War I was one of the first and by far the largest nation-wide health scheme in Australia.
4. For example, Navy personnel with obstructive sleep apnoea were considered medically unsuitable for sea until the development of compact, quiet and generally unobtrusive Continuous Positive Airway Pressure machines. Using these machines at sea, however, would still not have been possible prior to the widespread availability of mess-deck bunks with suitable access to mains power. As another example, ships' air conditioning systems have facilitated the entry and retention of Navy personnel with skin conditions such as acne, which are more susceptible to exacerbation in tropical climates.
5. Exceptions include all ADF aircrew and Navy clearance diver entrants, who require confirmation by the relevant ADF Senior Medical Adviser.
6. Anecdotal and an illustrative case in point is that the author can recall only one routine medical in 15 years where he identified a significant new medical condition in an ADF member. Even then, the patient did not see a doctor for (what turned out to be) lymphoma for two months, because he had decided to wait for his medical. While preventive health assessments can and should be used to detect conditions such as high blood pressure, the majority of such conditions do not prevent the affected member from deploying or being employed.
7. The US Army Medical Command therefore instituted a 'reset' program to resolve this issue by 31 March 2017: see A.G. Tolson, 'Health center sees success in medical readiness reset', *The Redstone Rocket* [website], 15 March 2017, available at <http://www.theredstonerocket.com/military_scene/article_0707fb3e-0989-11e7-836e-e7c56c19bfc.html> accessed 13 October 2017.
8. For instance, in 2013–14, the author undertook confirming civilian pre-employment medicals (not too dissimilar to ADF pre-deployment health assessments) for a major mining project in northwest Australia. Completing all the clinical and administration requirements for each medical would have taken examining doctors and supporting nursing staff at least two hours, at an estimated total cost of over \$700. For another example, civilian pilot medicals can take over 90 minutes to complete, and cost the applicant up to \$300.
9. Safework Australia, 'Model Work Health and Safety Regulations' Safework Australia [website], available at <<http://www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/model-whs-regulations>> accessed 13 October 2017; and Safework Australia, 'Publications and resources', Safework Australia [website], available at <<http://www.safeworkaustralia.gov.au/sites/swa/about/publications/pages/publication>> accessed 13 October 2017.
10. Normal occupational and environmental health practice groups workplace hazard controls (in descending order of effectiveness) as elimination, substitution, isolation, engineering controls, administrative controls, and personal protective equipment. Workplace health assessments are one of several means of biological monitoring the effectiveness of each of these controls for individual workplaces. This means that they are not a hazard control.

11. For a recent civilian example, see ABC News, 'Queensland coal mining industry slammed in black lung review', ABC News [website], 12 July 2016, available at <<http://www.abc.net.au/news/2016-07-12/queensland-coal-mining-industry-slammed-in-black-lung-review/7589918>> accessed 13 October 2017; see also F111 Deseal/Reseal Board of Inquiry, 'Homepage: the BOI Report, Vol. 1', Air Force [website], available at <<http://www.airforce.gov.au/docs/Volume1.htm>> accessed 13 October 2017; F111 Deseal/Reseal Board of Inquiry, 'Homepage: the BOI Report, Vol. 2', Air Force [website], available at <<http://www.airforce.gov.au/docs/vol2/VOLUME2%20Part1.htm>> accessed 13 October 2017; and Michael McKenna, 'Poisoned and dumped', *The Weekend Australian* [website], 19 November 2008, available at <<http://www.theaustralian.com.au/national-affairs/defence/poisoned-and-dumped/news-story/ee89481a11c81726527648b7e32a39e7>> accessed 13 October 2017
12. The only ADF workplace hazards for which Joint Health Command has provided occupational health assessment guidance to date are audiometry (hearing tests), cadmium, 'range fuel', isocyanates, aircraft cockpit fumes, depleted uranium, inorganic lead, diesel exhaust and asbestos. As this list only constitutes ad hoc responses to specific incidents rather than proactive interventions, it is neither systematic nor comprehensive. For a full list of chemicals alone, see Safework Australia, 'Hazardous chemicals requiring health monitoring', Safework Australia [website], available at <<https://www.safeworkaustralia.gov.au/system/files/documents/1702/hazardous-chemicals-requiring-health-monitoring.pdf>> accessed 13 October 2017.
13. *Royal Australian College of General Practitioners*, 'Guidelines for preventive activities in general practice', *Royal Australian College of General Practitioners* [website], available at <<http://www.racgp.org.au/your-practice/guidelines/redbook>> accessed 13 October 2017.
14. B. Hocking, 'How frequently should safety critical workers be examined?', *Journal of Health, Safety and Environment*, Vol. 29, No. 2, 2013, pp. 113-9.
15. Royal Australian Air Force, Australian Air Publication (AAP) 8000.010: *Defence Operational Airworthiness Manual*, Section 5, Chapter 5 (only available on Defence intranet); and Department of Defence, Defence Health Manual, Vol. 2, Part 2, Chapter 3 'Medical absence' (only available on Defence intranet). Although an 'Occupational Aetiology' box has been added to ADF health records per the Defence eHealth System (DeHS) since the original article was published, there has so far not been any guidance for Defence health staff to ensure consistency as to what should and should not be considered work-related; workplace- and sports-related injuries are not recorded separately, it is not known whether ticking this box will facilitate identifying work/sports-related treatment costs or Lost Time Injury Frequency Rate, and it does not initiate the compensation claims process (which still has to be done separately). While the new 'Occupational Aetiology' box is a start, most of the remaining shortfalls identified in this article therefore remain extant.
16. *Department of Defence*, *ADF Military Personnel Manual (MILPERSMAN)*, Part 3, Chapter 2 'Australian Defence Force Medical Employment Classification (MEC) System' (only available on Defence intranet); Joint Health Command, *Health Manual (HLTHMAN)*, Vol. 3 'Retention standards', Chapter 1 'Medical Employment Classification System' (only available on Defence intranet); Australian Book of Reference, *RAN Health Services Manual*, Chapter 8 'The Australian Defence Force Medical Employment Classification System and the Maritime Environment' (only on Defence intranet); and Australian Army, 'Army Standing Instruction (Personnel)', Part 8, Chapter 3 'The Application of the Medical Employment Classification System and PULHEEMS Employment Standards in the Australian Army' (only available on Defence intranet).
17. The author placed this guidance on the MECARS (Medical Employment Classification Advisory and Review Service) website (only available on Defence intranet) sometime between July 2011 and December 2012. It was removed prior to 18 January 2017, apparently without replacement.
18. Joint Health Command, 'Medical Employment Classification Advisory and Review Service (MECARS): Medical Administration System (MAS) database' (only available on Defence intranet).