

Australian Defence Force Academy Lecture Theatre Six First session: the Fifth Annual ADF Medical Officer Orientation Course 0910, Monday 7 July 2031

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Author's Note

This article is the last of a series regarding the role of occupational and environmental medicine in the ADF.^{1,2,3,4,5,6,7,8,9,10}

These articles and a recent Productivity Commission inquiry¹¹ describe why high workplace illness and injury rates confirm the need to improve the management of hazards associated with ADF workplaces, with better emphasis on prevention. To this end, a submission by the Royal Australasian College of Physicians to the aforementioned inquiry advocated that this would best be achieved by premising the ADF's health services on a systems-based occupational health strategic model.¹²

Doing so would require reassessing the fundamental inputs to capability¹³ for both Joint Health Command (JHC) and Defence's Work Health and Safety Branch. Previous papers have explained why 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 (AFOEM), indicate that a fully mature holistic and sustainable model would take 10–15 years sustained effort.

This article summarises some of the issues raised in these papers and how they can be addressed using an occupational health model. Although the figures quoted in [parentheses] are clearly notional, they are consistent with the author's previous estimates.

Wing Commander Rasheeda Indra stood at the podium, having just completed the usual course housekeeping blather. Before her, sixty-odd people were spread around the auditorium, of whom perhaps half comprised Army members, with the remainder

were more or less evenly split between Navy and Air Force. Just over half the group were women, and the older age of around a third of the group implied they were reservists.

There was a brief pause while Rasheeda gathered her thoughts. *OK. Here we go.*

'Right, let's get started. As you know, while you're here enjoying the Canberra weather over the next three weeks, my team and I will be orienting you all regarding Defence's health services and what we need from you to get to where we need to be in the next five to ten years. To do that, I'm going to kick off today by describing how and why things have changed over the last five or so years. To do *that*, we need to go back to the mid-90s.'

There was a stifled yet audible moan from the audience. Rasheeda ignored it and moved on.

'During that time, Defence was going through the latest of a series of reviews, re-organisations, re-reviews and re-re-organisations—you get the idea—that had gone on... and on... and on... since the mid-70s.¹⁴ By then, more or less everyone within Defence—including some health officers—had come to believe that the only thing military doctors did was treat patients, and the only reason to have any in uniform was that civvies couldn't deploy.¹⁵ The health services were therefore seen as ripe for unification, civilianisation and/or contracting out... even though there's no evidence that any of these assumptions had undergone much if any actual validation, amid all the non-medical big-picture stuff.

That's *not* to say there wasn't a need for change—I remember old-and-bold MOs describing how the services back in the 90s each had their own

separate health stovepipes, right down to the clinical paperwork. Quite apart from the cost, all that duplication must've been a real pain for places like Duntroon, which still deals with people from all three services every day.

So, among all the other changes within Defence at that time—most of which had less to do with doing things better than simply saving money¹⁶—the three key ones that led to where we were ten years ago, were:

1. the MO pay system was redesigned to more or less align with civilian GP training
2. the base health services were taken from the single services and given to a single Defence Health Service (DHS)—later Joint Health Command (JHC), and now the Joint Health Service (JHS)—which was then tasked with contracting them all out
3. the responsibility for ADF occupational health was moved from DHS to a separate health and safety directorate, whose remit covered Defence civilians as well as the uniforms.

Now, it could be said that these changes all made sense if all we *did* do is treat patients, and it kinda-sorta worked as long as there were enough experienced MOs around to keep everything else going that wasn't specified in the contracts. We supported deployments to the Middle East, Timor, the Southwest Pacific and elsewhere, while patients back home were getting their clinical treatment.

Yet by the mid-teens, there was a perception within the Defence senior leadership that 'JHC needs fixing'. The warriors were complaining that they weren't getting what they needed: among other things, health staff were only looking at what their patients wanted, without considering what their commanders needed to do, in particular their duty of care obligations per the 2011 *Work Health and Safety Act*. At the same time, we had lost our patients' trust because we were 'wrecking their careers by telling their commanders everything'.¹⁷ Add to that wait times up to three months at places that couldn't recruit civilian GPs, too many members were getting their healthcare outside Defence, which—among other things—meant we were losing track as to who was truly medically employable and deployable, and who wasn't.

So, what had happened?

To answer that, we need to briefly go back even further. In 1940, Colonel Arthur Graham Butler—a civilian general practitioner and gynaecologist, and distinguished Gallipoli and Western Front veteran—explained in his official medical history of World War

I that all military health services have *three* separate but inextricably linked 'allegiances'—what we would now call 'missions'—with one always assuming priority depending on the situation:

1. To patients, to alleviate their suffering—in short, providing clinical care.
2. To commanders, to conserve workforce—which extends more broadly nowadays, to refer to facilitating operational capability in general.
3. To society, to facilitate the return of ill and injured members to the civilian community—something that has since been extended to all ADF members when they leave.¹⁸

Ninety years on, there are two things about what Butler wrote that the assumptions made in the late 90s clearly didn't consider. The first is that civilian health systems and practitioners only have to perform the *first* of these missions—they have *no* remit regarding the other two. The second pertains to how *all* Defence MOs have to juggle *all three* missions with *every* patient they see, *throughout* the latter's military career. In short, the broader ADF's lack of trust in its health services referred to by its commanders and patient subordinates stemmed from a model that simply wasn't intended to deliver the other two missions.'

The audience stirred slightly.

'So, what did that mean in practice? Let's start with the MO pay structure and its relationship to GP training: by the late teens, the RACGP's Chapter of Military Medicine [CMM] had recognised that:

*"Military medicine is a complex mix of primary care, population health, occupational medicine, aviation and underwater medicine, emergency medicine and mental health. It is also characterised by exposure to unique challenges of location, resources and personnel management that can sometimes make simple clinical decisions very complicated. For serving medical officers, command, leadership, management, clinical governance, health support, aeromedical evacuation and disaster response planning also fall into our remit as GPs."*¹⁹

This statement begs two questions: the first relates to how on earth can general practice—or any other specialty—be reasonably expected to have *all* the skills *to the level of depth required*, to provide *all* the treatment services the ADF needs. The second question pertains to the noteworthy absence of *any* reference to the *other* two missions.

Even so, the CMM statement was pretty moot because, although we could always recruit prospective GPs, we couldn't retain anything like the numbers required to maintain the *military* medical expertise required for the other two missions. Fixing the pay in the early oughties so it came somewhere near civilian GP rates helped, but it still didn't stop us losing MOs immediately their ROSO²⁰ was up—not just because of the money, but also because too many of the MOs we were recruiting were *always* going into civilian general practice as soon as they could, whatever we did.'

The audience stirred again, as people started looking up.

'To understand the MO retention issue a bit further, it would've been a good start in the late 90s to have *clearly* understood the demographics of the population we expect them to provide care for. Thirty years later, it turns out that, compared to the *civilian* workforce population, the ADF population might be more highly medically selected, but it's also younger, is currently about [72] per cent male,²¹ is widely dispersed across Australia, has very high turnover rates, and has a posting cycle whereby about a third routinely have less than 12 months experience of their current job at any one time.²² Hence, it's not only a *workforce* population, but a workforce population whose combined attributes constitute a 'perfect storm' regarding their risk of workplace illness and injury. We then could've used *that* information, to ascertain the types of workplace illnesses and injuries to be expected from this population and tailored the health services the ADF needs accordingly.

However, it wasn't until [2024] that we found [36] per cent of Defence primary care presentations were for *preventable* musculoskeletal injuries, of which [53] per cent were for work-related slips, trips and falls, while the rest were sports injuries. In addition, [35] per cent of presentations were for *preventable* mental health issues, of which [54] per cent were by people who were struggling because joining Defence wasn't a good career choice—fair enough, it doesn't suit everyone—while the rest were perfectly fine working in Defence, but for various reasons weren't coping with their jobs at that time of their careers. That meant up to two-thirds of Defence primary care presentations were work-related, compared to only 2.4 per cent of those to civilian GPs.²³ It was only then that we *also* realised this meant Defence simply doesn't have the clinical variety necessary to retain the type of MO it had decided to recruit and base their pay system on 20 years previously.'

The audience stirred again.

'Recognising the sheer volume of preventable workplace conditions took some doing because the data collection was awful, essentially because the workplace injury reporting process was entirely separate from the clinical case reporting process. That meant the work health and safety reporting systems in use in the mid to late teens *wasn't* documenting 80 to 90 per cent of Army's work-related injuries and illnesses—and by extension, probably Air Force and Navy's as well.²⁴

Meanwhile, Defence had spent the previous 100 years cost-shifting its longer-term rehabilitation and compensation expenses to DVA. Although apples-and-oranges data collection between the Defence and civilian workforces likewise made meaningful comparisons difficult, evidence in the late teens suggested the DVA compo claim *incidence* rate may have been up to 12 times the *average* civilian serious claim incidence rate, and *five* times the *worst* civilian serious claim incidence rate. Furthermore, the per capita *cost* of compensation for current and ex-ADF members might've been *twice* the civilian rate.²⁵ That meant Defence had eminently *preventable* workplace injury rates—even among its people who *weren't* deploying or undertaking actual combat operations—that were far higher *and* more expensive than the *highest-risk civilian* workplaces.

These figures also laid bare one of the key fallacies in the 90s: Defence per capita healthcare costs *weren't* up to three times the civilian Medicare rate because its health services provided gold-plated over-treatment services.²⁶ It was because they were playing 'ambulances in the valley', picking up the pieces from excessive yet eminently preventable workplace illness and injuries, while *also* performing the *other* two missions referred to by Butler, which Medicare doesn't cover.

So, by the late teens, we had more-or-less run out of uniformed MOs with more than four or five years military medical experience, typically only including a year or so of deployments, while—however, good clinicians they may have been—the contract MOs and other GPs simply didn't have the remit, capacity or expertise to prevent the two-thirds of cases they were seeing from getting hurt in the first place. Furthermore, although their decision-making was pretty consistent regarding patients who *weren't* fit for work, these MOs had the same limitations *getting them back* to normal duties. This impeded not only operational capability: too often it also unnecessarily delayed people's courses, promotions, deployments and other career progression issues—hence why they didn't trust us.

One reason this was happening was that what Defence MOs needed to know was buried within a mere 2866 pages of health policy direction,²⁷ most of which only described the various *admin management* rather than *clinical assessment* processes.²⁸ It wasn't until the early-mid 20s that it was accepted that bringing in civilian GPs and expecting them to understand and apply the sheer volume of the guidance they need without any actual training was doing a disservice to them, their patients and the latter's commanders. This not only explains why you're here for the next three weeks, it also brings us back to the validity of the assumptions made in the 90s—if Defence MOs need decent training to do everything else their job entails *besides* treating patients, perhaps the ADF should have rethought its dependence on contract civilian GPs a lot sooner, not to mention how to retain enough uniformed MOs long enough to develop the *military* medical expertise necessary to provide this training?

This brings me to the relationships between the three services. In 1993, the then WGCDR (later AVM) Tony Austin wrote:

“By integrating the medical branches of the ADF (whilst maintaining a single service identity) the potential employment pool is greatly expanded. This would then allow an individual medical officer to experience, by rotational postings, attachments etc., a much broader range of military medical specialties and thus remain professionally stimulated for a longer period of time. A larger medical pool would also permit specialisation across traditional single-service lines and thus increase the opportunity for postgraduate training and external accreditation. Hopefully, this would lead to a more natural matching of inherent/interest and service needs thus creating a happier, more fulfilled medical officer population. The obvious flow-on from this would be greater retention of medical officers with enhanced corporate expertise and reduced training costs.

What then are the costs? The first casualty would have to be the traditional interservice antediluvian jingoism that has been the mainstay of military medical practice for generations. The second casualty would be selection by seniority rather than by ability. Are these costs too high? If the concept of a centralised Surgeon General is to be at all credible then the medical officers employed there need to have a realistic understanding of the needs of all three services.”²⁹

On the other hand, CMDR (later CAPT) Russ Schedlich RAN wrote:

“Within a 20 or even 30-year career, is it reasonable to expect any health professional to become expert in all the particular fields of medicine that are relevant to military activities? Can one individual become an aviation medicine specialist, an underwater medicine specialist, a combat surgeon, an intensivist and so on, and be up to world standard in any of these? Can he or she achieve professional credibility in all these fields? Clearly not.

Military credibility is also important. Would an army unit commander feel intuitively confident that the advice given him by an air force or navy health professional is based on a full understanding of the issues involved in the problem? Probably not, because he would be, with some justification, sceptical of that persons' knowledge of the army, its environment and operational constraints. In a headquarters environment this is less of a problem, provided the commander is confident that the adviser has ready access to appropriately skilled professionals from the other services.

There is no doubt that Defence, and also its health services, have gained considerably from integrating some of its functions. However, in planning for the future, sight must not be lost of the unique nature of each of the Services, and the importance of a dual outlook—Single Service and Joint—in developing the credibility that will sustain the health services in the future.”³⁰

CMDR Schedlich added:

“Military health services exist for a variety of reasons. They aim to provide a force that is fit to fight—screening out those with conditions incompatible with operational service, providing preventive medicine advice and services, and curing those who fall ill in non-operational areas so that they are fit to relieve others. Perhaps most importantly, they act as an effective force multiplier by providing timely and effective care to those who are injured or fall ill in combat. Their presence assists in the maintenance of morale, they return the ill and injured to their Units, and they minimise the numbers of personnel evacuated from the theatre of operations.

*These are functions of which military health services must not lose sight. They must always be prepared to provide health care in the field promptly and effectively. If they cease to be able to do this, they may as well not exist.*³¹

It wasn't until the early-mid 20s that it was realised the underlying premises behind *both* writers' assumptions had, in effect, undergone 20-odd years of unrecognised ad hoc testing, which confirmed the *actual* level of military understanding MOs need to perform the missions described by Butler. In short, although neither exactly hit the mark, it's turned out Schedlich was a bit closer than Austin.

So, by then having recruited MOs throughout that period who weren't particularly satisfied with the generally bland clinical material within Defence, who also lacked a comprehensive understanding as to *why* they were providing healthcare for ADF members and were *never* going to find the *where* and the *how* they did it enticing... we needed to be far better at recruiting MOs who did.³²

The first step to that end was to accept that if only a third or so of Defence primary care presentations were for conditions typically seen in the civilian GP setting, one did *not* have to be a GP Fellow to see ADF patients. That *didn't* mean we didn't need GPs at all, it simply opened the door for public health (PHP) and occupational physician (OEP) trainees to provide primary care to this population under GP supervision, on similar terms to what they were doing anyway for GP registrars.

The corollary relates to the *additional* primary healthcare ADF patients *do* need that civilians *don't*. That meant recruiting, training and retaining enough PHPs and OEPs to support GP trainees regarding the *workplace* medicine they do within Defence. Although OEPs might not be au fait with pill scripts, skin checks or lipid disorders—without downplaying how important these are—they're *specifically* trained to treat work-related illnesses and injuries *and* getting people back to work in a way that GP's aren't. It's also worth noting that—unlike GPs—it's also part of the normal *civilian* OEP and PHP career progression to make the eventual transition into policy and management roles, thereby sustaining the full range of Defence health functions necessary to conduct Butler's missions.

We also needed more uniformed MOs to fill the post-ROSO gap, not only to undertake the additional workload preventing work-related illness and injuries at the bases and on deployment but also to fill the workplace population health and other staff roles

required to conduct all three of Butler's missions. If we need to retain X number of MOs per annum, and the retention rate is only Y per cent per annum, we need to recruit X/Y MOs, which—if Y has never exceeded about 10 per cent in living memory—won't ever be compatible with a contractor-based model. That *doesn't* mean we don't need APS or contract MOs: it simply means they'll fill in the gaps left over once we have the critical mass of uniformed MOs we need to conduct all three of Butler's missions. Progress to this end has been slow; it'll take another five to 10 years to recruit and train the MOs we need... which is where you come in.

Clearly, none of this would have been possible without significant organisational changes. First off, Defence signed up to the RACP *Health Benefits of Good Work*, which provided a framework for better *workforce* personnel management in a way that recognises the importance of *maintaining* employee health as a capability enabler, rather than merely fixing them after they've been broken.³³ Defence also moved the health section of the Defence Work Health and Safety Directorate back to JHS, resulting in a *single* organisation responsible for its occupational health services—including rehab and compensation—that we can now provide as an *intrinsic* component to our primary healthcare services, as per Butler's missions.

Defence also revamped the injury reporting system so that *all* work-related illness and injuries were reported *and* initiated the compensation process at the *first* medical point of contact. Although it took too long to be accepted, this eventually facilitated a 2019 Productivity Commission recommendation, such that JHS is now funded via a premium paid by the service chiefs: this rather altered their motivation to reduce preventable workplace illness and injuries, as well as JHS's motivation to record them.^{34,35} This didn't just reduce healthcare and compensation costs; it also enhanced operational capability because people weren't getting injured as badly or as often.

By the early 20s, it had also become apparent that the old MEC System was being abused as a patient management tool rather than the personnel advisory system it was intended for. Another problem was—and still is—that it was not well appreciated why the medical standard for an Army infantry soldier to deploy, doesn't have to be the same as an Air Force avionics maintainer or a Navy steward. Neither was it understood that these assessments are easy, simple and quick if the member either has *no* medical problems at all or if their problem *clearly* stops them from deploying; it's the *continuum between* that's hard to manage.

To that end, it seems reasonable to assume that MOs *with* deployment experience are better able to assess the people within this continuum than those without—in particular, *not* just so patients who *shouldn't* deploy *don't*, but also that the ones who *can* deploy, *can*. That meant deploying more MOs for longer and more often: not just to provide healthcare as an end unto itself, or to provide deployed workplace health advice, or to facilitate operational capability by allowing more personnel with medical conditions to deploy who otherwise can't, but *to gain experience of the deployed environment, as a means of understanding their role in facilitating operational capability on their return to the base setting.*

Besides improving the odds of getting it right on the first place, better medical employability and deployability decision-making is enabling far better fact-based patient advocacy and expectation management, by helping MOs to actively *own* their decisions, rather than providing false hope to patients while abrogating bad news to the ubiquitous “someone else”. Furthermore—and far more importantly—it's providing far better face validity for ADF members, regarding the MOs who are making career-altering medical decisions about them.

Defence also moved the central MECRB confirming authorities from JHC to the single-service health directorates. This facilitated better liaison with the personnel management agencies and improved accountability from the treating MOs regarding their employability and deployability decision-making and the service chiefs that reflects their raise/train/sustain function. In addition, the ADF MEC System was replaced by the current Medical Suitability Personnel Advisory System (MSPAS), which is pretty similar *except* the current Medical Suitability Categories are explicitly focused on each member's medical suitability to *do their job*, rather than the *treatment services* they need while deployed.

Finally, it was eventually recognised that—taking Air Force for example—because the majority of its personnel are generally posted to mostly Air Force bases, it was far more important to ensure consistency of their health services between Williamtown, Amberley and Tindal, than between Richmond (mostly Air Force), Holsworthy (mostly Army) and *Kuttabul* (mostly Navy) in Sydney. The regionally-organised base (previously ‘garrison’) health services introduced in the late 90s were therefore reorganised to reflect the clientele's operational environment while remaining under a revamped JHS.

So, having focused more or less exclusively on treatment services in the 20 years since the late 90s, the ADF's health services have spent the last decade learning how to be *truly* joint regarding their *other* two missions—to commanders and the Australian community—that were first described as “allegiances” by Butler nearly a century ago. A decade later we still have some way to go—but as the then CDF said in 2017 [underlining added]:

“I look at where we've come to now from back then [1999] and we are well ahead, with a far better understanding that joint isn't doing everything the same. Joint is about bringing the best of the three services and the public service together to get the best combination you can for that particular operation.”³⁶

Hopefully, by the end of this course, you'll have the background factual knowledge necessary to advocate on behalf of JHS and your single service, to your patients, commanders and anyone else. For those of you who end up making a long-term career, I hope it'll also give you a start on how you and your successors can avoid—or at least mitigate—some of the ‘unintended consequences’ made in days of yore. OK, any questions?

A hand came up from the audience.

‘Ma'am?’ It was a young Navy officer. ‘Lieutenant Ethan Lynch. Didn't returning the MSPAS stuff to the single-service directorates take everything back to where things were back in the 90s—you mentioned places like Duntroon?’

‘That's a good question,’ said Rasheeda. ‘And I can see why it might look that way. The answer is “no”. For a start, JHS sets the standards that Duntroon has to comply with, whereas 30 years ago it had to comply with three separate directorates. We now recognise that MSPAS advice has to reflect how each of the *personnel* directorates operate—even though their processes are often similar, the environments in which each Air Force, Army or Navy member lives and works means they can't be exactly the same. So, for example, if you're a Navy member on a ship and become medically unfit, you'll be posted ashore so the ship can get a replacement: that means there'll be a lot more urgency compared to Air Force or Army members, whose postings don't change unless their unit actually deploys. Hence, all Navy MSPAS go to DNH and all Air Force MSPAS go to DAFS. Army do theirs differently, again because of how they're organised: their MSPAS still go to a local regional confirming authority, with only the Central Army MSPAS going from there to DAH.

Another point to remember, is that these arrangements aren't too dissimilar to how aircrew, divers and submariners from all three services have been managed throughout the whole period we've been talking about. Yes, at the back?'

'Hi ma'am, Major Sophia Collins—I'm a reserve GP from Burnie. Could you expand on WGCDR Austin's references to 'antediluvian interservice jingoism?'

'Sure,' said Rasheeda. 'The point to make is that such statements would *only* be appropriate if *all* we did is treat patients. When someone presents with a limb fracture, we'd all agree their *clinical* treatment doesn't depend on the treating MO's uniform colour. However, the issue these statements miss pertains to the *other* two missions: clearly, the operational impact for the patient's commander will differ if it's during a deployment somewhere as opposed to the base setting, while the operational impact in the deployed setting won't be the same for a ship at sea compared to somewhere ashore. Likewise, properly documenting the work-relatedness of long-term mental health conditions, in particular, will be problematic—both in terms of developing rapport and knowing what to ask—if the treating MO has no idea what the patient's work actually entails.

While it's taken far too long, I'd like to think the way the ADF's health service personnel have had to work with each other over the last 30 years since has led to better understanding, acceptance and respect as to what, when, why and how each of the services has a bona fide need to do some of the same things a bit differently, because of how it works better for everyone overall.'

'Next question? Yes, over there...'

Disclaimer

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

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References

- 1 Westphalen N. Occupational and environmental medicine in the Australian Defence Force, Australian Defence Force Journal. 2016 Nov/Dec;200:49-58. Available from: http://www.defence.gov.au/ADC/ADFJ/Documents/issue_200/Westphalen_Nov_2016.pdf.
- 2 Westphalen N. Primary health care in the Australian Defence Force, Australian Defence Force Journal. 2017 Jul/Aug;202:91-7. Available from: http://www.defence.gov.au/adc/adfj/Documents/issue_202/Westphalen_July_2017.pdf.
- 3 Westphalen N. Assessing medical suitability for employment and deployment in the Australian Defence Force, Australian Defence Force Journal. 2018 Jan;203:67-74. Available from: http://www.defence.gov.au/adc/adfj/Documents/issue_203/ADF_per_cent20Journal_per_cent20203_Article_Westphalen.pdf.
- 4 Heslop DJ, Westphalen N. Medical CBRN Defence in the Australian Defence Force, Journal of Military and Veteran's Health. 2019 Jan;27(1):66-73. Available from: <https://jmvh.org/wp-content/uploads/2019/01/Compensation-in-the-Australian-Defence-Force.pdf>
- 5 Westphalen N. Compensation in the Australian Defence Force, Journal of Military and Veteran's Health. 2019 Jan;27(1):58-65. Available from: <https://jmvh.org/wp-content/uploads/2019/01/Compensation-in-the-Australian-Defence-Force.pdf>.
- 6 Westphalen N. Rehabilitation in the Australian Defence Force, Journal of Military and Veteran's Health. 2019 Oct;27(4):7-14. Available from: <https://jmvh.org/wp-content/uploads/2019/10/AMMA-JMVH-October-2019.pdf>.
- 7 Westphalen N. Casualty Evacuation in the Australian Defence Force, Journal of Military and Veteran's Health. 2020 Jan;28(1):29-38. Available from: <https://jmvh.org/wp-content/uploads/2020/04/AMMA-JMVH-Jan-2020.pdf>.
- 8 Westphalen N. Military Medicine Capabilities in the Australian Defence Force, Journal of Military and Veteran's Health. 2020 May;28(2):39-49. Available from: <https://jmvh.org/article/military-medicine-capabilities-in-the-australian-defence-force>.

- 9 Westphalen N. Health Promotion in the Australian Defence Force, *Journal of Military and Veteran's Health*. 2021 Mar;29(1):52-60. Available from: <https://jmvh.org/article/health-promotion-in-the-australian-defence-force>.
- 10 Westphalen N. 'Military Health Support' in the Australian Defence Force, *Journal of Military and Veteran's Health*. 2021 Mar;29(4): 16-26, available from <https://jmvh.org/article/military-health-support-in-the-australian-defence-force>.
- 11 Productivity Commission. Overview: A better way to support veterans and their families, 2019 Jul. Available from: <https://www.pc.gov.au/inquiries/completed/veterans/report/veterans-overview.pdf>. [It is essential to note this report uses the term 'veteran' to refer to current as well as ex-serving ADF members]
- 12 Productivity Commission. RACP submission to the draft Productivity Commission report. A Better Way to Support Veterans. 2019 Feb 2019. Available from: https://www.pc.gov.au/_data/assets/pdf_file/0003/236811/subdr234-veterans.pdf.
[Disclaimer: the author was requested to draft this submission, as a member of the AFOEM Policy and Advocacy Committee (PAC). It was cleared by both the Faculty and College PACs prior to submission]
- 13 See Department of Defence, *Defence Capability Development Handbook, 2012*. Available from: <http://www.defence.gov.au/publications/DefenceCapabilityDevelopmentHandbook2012.pdf>. This reference describes the following Fundamental inputs to (in this case health) Capability (FiCs).
 - Personnel;
 - Organisation;
 - Collective training;
 - Facilities;
 - Supplies;
 - Major systems;
 - Support, and
 - Command and management.
- 14 Examples include:
 - Australia: Department of Defence. *Australian Defence Review*. Canberra ACT: Australian Government Publishing Service: 19.72 March.
 - Tange Sir AH. *Australian Defence: Report on the Reorganisation of the Defence Group of Departments*. Canberra: Australian Government Publishing Service: 1973 November.
 - Utz JW. *The Higher Defence Organisation in Australia: Final Report of the Defence Review Committee*. Australian Government Publishing Service: Canberra ACT; 1982.
 - Dibb P. *Review of Australia's defence capabilities*. Canberra ACT: Australian Government Publishing Service; 1986 March.
 - Sanderson JM. *The Report on the Structural Review of Higher ADF Staff Arrangements June 1989*. Canberra: Headquarters Australian Defence Force; 1989.
 - Australia: Department of Defence. *Force Structure Review: Report to the Minister for Defence, May 1991*. Canberra: The Department; 1991.
 - Australia: Department of Defence. *Future Directions for the Management of Australia's Defence: Addendum to the Report of the Defence Efficiency Review Secretariat Papers*. Canberra ACT: Defence Publishing and Visual Communications Centre; 1997.
- 15 Australian National Audit Office. *Audit Report No. 34 1996-97: Australian Defence Force Health Services Performance Audit*. Canberra, ACT; 1997 May 27.
- 16 Andrews E. *The Department of Defence. The Australian Centenary History of Defence. Vol 5*. South Melbourne VIC: Oxford University Press; 2001. pp. 278-303.
- 17 Smart, AVM T.L. Graeme Shirtley Oration, 2019 AMMA Conference, 2019 Oct 5. Transcript held by author.

- 18 Butler AG. The Australian Army Medical Services in the War of 1914-1918. Vol 2. Canberra: Australian War Memorial; 1940. p. 263-4; see also Westphalen N. Colonel Arthur Graham Butler's 'Allegiances': Today's 'Military Health Service Missions', *Journal of Military and Veteran's Health*. 2021 Apr;29(2):17-28. Available from: <https://jmvh.org/article/colonel-arthur-graham-butlers-allegiances-todays-military-health-service-missions>.
- 19 Dr Lara Roeske. Chapter of Military Medicine in focus. Being Specific newsletter, Royal Australian College of General Practitioners; 2019 April. Available from: <https://www.racgp.org.au/the-racgp/faculties/specific-interests/newsletters/being-specific-april-2019>.
- 20 ROSO: Return of Service Obligation. Initial period of service after completion of tertiary education, equivalent to time spent as an undergraduate plus one year (i.e. total two to five years); commences for MOs at the end of their second postgraduate year.
- 21 Notional figure premised on Navy and Air Force achieving female work force participation rates of 25 per cent, and Army 20 per cent, by 2023: see Women in the ADF Report 2017-18 Department of Defence. Available from: <https://www.defence.gov.au/annualreports/17-18/Downloads/WomenInTheADFReport2017-18.pdf>.
- 22 Westphalen N. Occupational and environmental medicine in the Australian Defence Force. *Journal of Military and Veteran's Health*. 2017 Jan;25(1):44-52. Available from: <https://jmvh.org/article/occupational-and-environmental-health-in-the-adf/>.
- 23 Britt H, Miller GC, Henderson J, Bayram C, Harrison C, Valenti L, Wong C, Gordon J, Pollack AJ, Pan Y, Charles J. General Practice Series Number 38: general practice activity in Australia 2014-15. Sydney NSW: Family Medicine Research Centre, Sydney School of Public Health, The University of Sydney; 2015 Nov. Available from: https://ses.library.usyd.edu.au/bitstream/2123/13765/4/9781743324530_ONLINE.pdf.
- 24 See Pope, R, and Orr, R. Incidence rates for work health and safety incidents and injuries in Australian Army Reserve vs full time soldiers, and a comparison of reporting systems, *Journal of Military and Veteran's Health*. 2017 Apr; 25(2):16-25. Available from: <https://jmvh.org/wp-content/uploads/2017/07/Original-Artical-Incidence-rates.pdf>.
- 25 See Westphalen N. Compensation in the Australian Defence Force. *Journal of Military and Veteran's Health*. 2019 Jan;1:58-65. Available from: <https://jmvh.org/wp-content/uploads/2019/01/Compensation-in-the-Australian-Defence-Force.pdf>.
- 26 Australian National Audit Office. Audit Report No. 34 1996-97: Australian Defence Force Health Services Performance Audit, p. 16 para 2.17. Canberra, ACT; 1997 May 27.
- 27 Defence Health Manual (only on Defence intranet).
- 28 Exceptions to this statement include ABR 1991 RAN Health Service Manual Chapter 8 (currently being rewritten), and Army Standing Instruction (Personnel), Part 8, Chapter 3 'The Application of the Medical Employment Classification System and PULHEEMS Employment Standards in the Australian Army'. Both these references are only available on the Defence intranet.
- 29 Austin TK. Would That White Coat Be Purple. *Journal of Military and Veteran's Health*. 1993;2(2):24. Available from: <https://jmvh.org/wp-content/uploads/2018/04/AMM-Journal-Vol-2-Issue-2.pdf>
- 30 Schedlich RB. Editorial—Credibility. *Journal of Military and Veteran's Health*. 1996;5(2):1-2. Available from: https://jmvh.org/wp-content/uploads/1996/08/amm_v5_2.pdf.
- 31 Schedlich RB. Editorial—Credibility. *Journal of Military and Veteran's Health*. 1996;5(2):1-2. Available from: https://jmvh.org/wp-content/uploads/1996/08/amm_v5_2.pdf.
- 32 For a typical example regarding of the extent to which this statement has still not been accepted, see https://www.linkedin.com/posts/ian-young-am-34704566_navy-doctor-luke-activity-6693466311198154752-LpvN.
- 33 Australasian Faculty of Occupational Medicine. Health Benefits of Good Work [Online]. Royal Australasian College of Physicians. 2019. Available from: <https://www.racp.edu.au/advocacy/division-faculty-and-chapter-priorities/faculty-of-occupational-environmental-medicine/health-benefits-of-good-work>.

- 34 See Australia: Productivity Commission. Overview: A better way to support veterans and their families. 2019 Jul. Available from <https://www.pc.gov.au/inquiries/completed/veterans/report/veterans-overview.pdf>.
- 35 Australia: Productivity Commission. RACP submission to the draft Productivity Commission report 'A Better Way to Support Veterans'. 2019 Feb. Available from: https://www.pc.gov.au/data/assets/pdf_file/0003/236811/subdr234-veterans.pdf.
- 36 Air Chief Marshal Mark Binskin AC, Chief of the Defence Force. Quoted in McPhedran I. The smack track. Inside the Navy's war: chasing down drug smugglers, pirates and terrorists. Sydney NSW: HarperCollins; 2017. p. 278.