

# Paramedics in the Australian Defence Force – A Time for Change?

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## Abstract

Paramedic practice is rapidly changing due to the ongoing pressures on health care systems. Paramedics are increasingly being integrated into primary health care roles, initiating interventions on scene and autonomously making clinical judgements based on operational guidelines. Evolving professional standards have resulted in the advancement of clinical skills, degree-based education and paramedic registration. This expanding professional profile of paramedics in the civilian health system is not being reflected in defence career options. New roles for paramedics in the Australian Defence Force (ADF) could be based on Physician Assistant and Emergency Care Practitioner roles implemented in the United States and United Kingdom respectively. While this would require organisational change, it does not replace the need for medics or medical and nursing officers. Ultimately, the aim is to find a best-fit role that recognises paramedic education, skill and experience to the equivalence of other health services roles.

**Key Words:** paramedic, defence career, education, pre-hospital care

## Introduction

Reviewing the nature of modern warfare and peacekeeping operations, it is apparent that the characteristics of medical emergencies are increasing in complexity and variability, placing added demand on health services<sup>1</sup>. Military health capability is increasingly stretched between its primary goal of providing health services to its own forces and its responsibility under the Geneva Convention, 1948, to provide care to civilian populations<sup>1</sup>.

In 2012, recognition of the need for higher level pre-hospital care led to the development of Combat Paramedic roles within Army Reserves allowing paramedics to utilise their civilian scope of practice<sup>2</sup>. Since then, the role and capabilities of civilian paramedics have changed greatly, including degree-level education, advanced interventions and clinical care roles.

The traditional understanding of paramedics as 'swoop and scoop' care providers is rapidly changing; driven by increasing pressures on existing health systems<sup>1,3,4</sup>. Recognising this professionalisation of practice, new national laws are being created to protect the title of 'Paramedic', and establish standards of education, experience and scope of practice for all practicing paramedics in Australia as of 2018<sup>5</sup>. According to the Australian Health

Practitioner Regulation Agency (AHPRA), persons wishing to identify as paramedics must meet the approved education standards, as well as a minimum period of experience for those under previous diploma-based studies. Under registration, Australian Defence Force (ADF) medics who have completed accredited courses in paramedicine can also apply for consideration for registration<sup>5</sup>.

With a rapidly shifting paradigm of pre-hospital care and greater professional practice within paramedicine, the question remains how will registered paramedics fit within the ADF health structure? This paper explores current standards in paramedicine and considers new options for paramedics within the ADF.

## Contemporary paramedic practice

Pre-hospital care is quickly evolving with a focus on rapid transport, early intervention and prevention of secondary injury. Paramedics have subsequently increased their proficiency in medication administration, complex medical procedures and rapid differential diagnosis. While paramedics still work predominantly on scene, their increasing utilisation within health care pathways has created greater opportunities to adapt their experience to clinical and in-hospital settings<sup>4,6,7</sup>.

Clinically, paramedics require the ability to quickly identify patient conditions and signs of deterioration and initiate interventions, as well as determine when to commence or terminate resuscitation<sup>4</sup>. While variation exists between states, Australian paramedics are now qualified in diverse advanced interventions and medication administration which can include endotracheal intubation, cricothyroidotomy, needle thoracentesis, intraosseous access and blood sample collection, as well as the administration of thrombolytics and schedule 8 medications<sup>8</sup>. Non-clinical paramedic skills have also expanded, from extrication and transport to on-scene leadership, triage, resource coordination and management, the use of bypass protocols and team safety, referrals or treat and not transport pathways<sup>4,6,7</sup>. The need for these interventions, and subsequent practice, is largely determined by paramedics who autonomously make decisions based on standard operating procedures and clinical guidelines which grant authority to practice under a physician's licence<sup>4,6</sup>.

While paramedics are required to follow standard operating procedures and guidelines, it is an understanding of pathophysiology and patient conditions that determine how guidelines are utilised<sup>4</sup>. The need for wider understanding of pathologies, medications and interventions has also led to improved training including degree-based qualifications. Post-paramedic registration and degree-level qualifications (or higher) will now be required to practice as a paramedic within Australia. Former diploma-level studies will only be accepted under a grandparenting scheme, likely to cease after three years<sup>5</sup>. Beyond graduate qualifications, paramedics are also able to undertake postgraduate-accredited courses in emergency management, extended care, mass casualty incidents, aeromedical evacuation and critical care.

### Paramedics in the ADF: role considerations

As paramedic practice evolves, existing roles offered to qualified paramedics in the ADF will also require consideration. Currently, only one paramedic titled option is available in Army Reserves as an other-ranks role, only open to paramedics employed by a State Ambulance Service<sup>9</sup>. Furthermore, there are no commissioned officer roles available to paramedics other than logistics roles<sup>9</sup>. Those in full-time ADF service, should they become registered paramedics, will not be eligible to be promoted to officer within their chosen specialty, unlike other degree-qualified ADF health professionals. This disparity in rank contrasts with civilian practice, where paramedics provide on-scene leadership and control, coordinate

teams and resources, make autonomous clinical decisions and work as peers with registered nurses within hospital environments<sup>4,5</sup>.

When reconsidering the role and function of registered paramedics in the ADF, inspiration could be drawn from the successful integration and use of Physician Assistants (PA) by the United States (US) military. In their military capacity, PAs are commissioned officers (permanent and reserves), who provide primary health care, examination, diagnosis, investigations and treatments with limited prescribing rights<sup>10</sup>. A qualified PA's autonomy and scope of practice is similar to that of a paramedic working under the authority of a physician without direct supervision<sup>10</sup>. The use of PAs by the ADF was proposed by Forde and Pashen in 2009<sup>10</sup>, citing successful US examples and the trial of PAs in various clinical settings around Australia. It was asserted that both ambulance officers and medics could use this pathway to extend their clinical contribution; however, given the similarity in function, it is possible the US military PA example could instead be used for developing ADF paramedic roles<sup>10</sup>.

Additionally, United Kingdom (UK) paramedics have the opportunity to practice as Extended Care Practitioners (ECP). An ECP requires a nursing or paramedical background and perform non-complex patient assessment, management and referrals<sup>11</sup>. A literature review by Hill, McKeen and Price (2014)<sup>11</sup> found ECPs performed highly in areas of patient and staff satisfaction and cost efficiency, delivering a benefit to the National Health Service. Similarly, in rural and remote Australia, paramedics are being successfully integrated into primary health care roles with an extended scope of practice including injuries, phlebotomy, wound care and sutures, catheterisation, supervision of difficult patients, vascular access, stabilisation and resuscitation<sup>7,12</sup>. Additionally, paramedics support health promotion strategies, advocacy and liaison services, preventative services and referral pathways<sup>4,7,12</sup>.

The successful integration of Paramedics into extended care roles in the US, UK and Australia, highlight the potential for the development of new officer roles encompassing pre-hospital and clinical settings. This would allow paramedics to practice with similar autonomy and skill sets to that of civilian roles, while providing a direct pathway for medics currently studying degrees in paramedicine.

### Potential barriers to change

Adapting traditional ADF health care roles to encompass new standards in paramedicine will

inevitably cause debate. While there is immense potential for increased contribution to ADF health services, the deeply entrenched perception of paramedics as emergency responders with limited primary health care capabilities remains in existing organisational structures. This is not unique to the ADF, as the evolution of paramedicine blurs the boundaries of patient care, it has been highlighted as a concern for other health professionals<sup>6,7</sup>. Reconceptualising paramedic practice in the ADF may result in similar concerns; however, resisting change could impact upon recruitment and retention of paramedics in the ADF due to lack of professional recognition.

Careful consideration will also be required when identifying suitable paramedic qualifications for ADF roles. While no national skill level exists, paramedics in some states are qualified to perform advanced invasive procedures, which would be limited to intensive or critical care paramedics in different states. Additionally, simply being registered professionals or having degree-level qualifications does not automatically make all paramedics suitable for military employment. Interested candidates would need to meet existing recruiting requirements including selection boards, as well as military and employment training, as expected of all ADF health professionals.

### Conclusion

Over the last decade there has been significant development in the clinical scope and professional roles for qualified paramedics. In response to continually increasing pressure on the health care system, paramedic clinical and non-clinical skills are frequently being utilised in new roles in both

pre-hospital and in-hospital or clinic environments. While the pressures faced by health systems are reflected in the ADF, the changing professional standards for paramedic practice are not. This directly impacts career options for paramedics in the ADF. In other health systems, PAs and ECPs have been successfully filling roles in pre-hospital and in-hospital care with similar qualification levels and skill sets held by paramedics within Australia. While there will be debate on the professional boundaries and scope of practice, there is definite potential for the ADF to utilise these models as a framework for paramedics. By acknowledging the modernisation of paramedic practice, the ADF will be able to proactively adapt to upcoming reform of the profession.

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