

Clinical Medical Services in Remote Deployed Maritime Environments: Advantages and Challenges

Dr Madeleine Wilcock and Dr Grania Murphy

Summary

The experience and learning of Aspen Medical come from working in proximity to Defence. The provision of clinical medical services in remote deployed maritime environments comes with advantages, limitations, and challenges. Advantages are the immediate provision of evidence-based health care and in cooperation with other health agencies, there is an additional positive effect on the operational needs of the deployed Maritime Unit and the extended crew. Limitations of clinical personnel, medical resources, remoteness at sea, resupply issues, repatriation delays and suboptimal communications exist, however, improvement of data connectivity may alleviate some of these challenges.



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Advantages of Clinical Services in Remote Deployed Maritime Environments

The provision of clinical services in remote deployed maritime environments goes part way to providing the required care¹ by keeping members medically, dentally, and psychologically suitable for employment and deployment. Early intervention facilitates their return to the civilian community, improving the management of their service-related illnesses and injuries.

The specific advantages of the provision of clinical services in remote deployed maritime environments are in situ medical support with contemporaneous medical records and clinical pathways for Basic Life Support capability. This access to early clinical intervention may result in less repatriation or disruption to operations. A more expedient return to health increases the efficiency of tactical operations and reduces costs.

A clinical team assists with event preparedness by involvement in ship drills including Safety of Lives at Sea (SOLAS) and mass casualty. This also provides readiness of capability to medically assist with international search and rescue, humanitarian, and SOLAS operations.

Limitations of Clinical Services in Remote Deployed Maritime Environments

Limitations of clinical services in remotely deployed maritime environments include the:

- Number of medical personnel on board.
- Deployable clinicians with appropriate scope of practice.
- Clinical equipment due to physical space.
- Access port to restock consumables.

Challenges that Face Clinical Services in Remote Deployed Maritime Environments

Vessels are often days away from any port. The challenges of unpredictable or inclement weather at sea can cause seasickness and loss of productivity. These conditions also contribute to the challenges faced in the repatriation of medical cases, SOLAS, and mass casualty events.

Poor communication via Internet or telephone may be a multi-faceted and complex challenge. These areas are “often far from the mainland, making it difficult to establish and maintain reliable communication links”². Reliance on Information Technology (IT) has been a challenge due to reduced data bandwidth. The Satellite telephone may not be available for use when privacy is required.

Poor communication may also impact the mental health of crew or family members. In a Maritime Safety Awareness Bulletin, AMSA stated that “trends in maritime safety data and research highlight a critical need for seafarer mental health and wellbeing to be managed more effectively”³.

The maritime environment is a high-risk environment, and communication around safety is paramount. AMSA reported that between 2016 and 2020, there were 26 fatalities (24 crew and 2 passengers) associated with marine incidents. In 2020, a total of 146 injuries were reported, with 83 being crew and 63 passengers 11% lower than the 2019 data.⁴

Conclusion

The provision of clinical medical services in remote maritime environments provides many advantages to the personal health needs of crew members and others on board including early assessment, early treatment and early return to health. It also comes with limitations and challenges such as access to clinical staff with appropriate scope of practice, physical space, regular resupply, unpredictable or inclement weather, remoteness, and suboptimal communications. Improvements in data connectivity will help alleviate some of the challenges faced by clinical teams.

1 navalinstitute.com.au/why-navy-needs-maritime-health-doctrine – 2019 Neil Westphalen
2 utilitiesone.com/challenges-of-communication-in-remote-maritime-locations

3 amsa.gov.au/sites/default/files/maritime-safety-awareness-bulletin-12.pdf
4 amsa.gov.au/consequences-people-0