

PG52BP Guideline for transport of critically ill patients Background Paper 2024

Short title: Critically ill patient transport BP

1. Purpose of review

The transport of critically ill patients had previously been divided into two separate documents, one for intrahospital transfers and one for interhospital transfers (P04/PS39 Minimum standards for intrahospital transport of critically ill patients and P03/PS52/IC-10 Minimum standards for transport of critically ill patients). Both documents were reviewed in 2003 and following the establishment of the College of Intensive Care Medicine (CICM), formerly the Joint Faculty of Intensive Care Medicine, as an independent entity in 2010, the documents were republished following a review in 2013. This 2024 review is part of the usual review cycle to ensure that the guidelines reflect contemporary knowledge and are based on current evidence.

PG52 Critically ill patient transport is a co-badged and co-developed document between Australasian College for Emergency Medicine (ACEM), Australian and New Zealand College of Anaesthetists (ANZCA), and CICM. It was agreed at the last review that the lead role for subsequent reviews would rotate between the co-badging colleges with the ACEM responsible for the review in 2024.

The co-endorsed versions are identical in content and differ only in formatting and layout:

- ANZCA: PG52 Guideline for Transport of Critically III Patients
- ACEM: G03 Joint Guideline for the Transport of Critically III Patients
- CICM: IC10 Joint Guideline for the Transport of Critically III Patients

2. Background

Critically ill patients are at particular risk associated with reduced or exhausted physiological reserves. Transporting such patients requires the services of highly trained and skilled practitioners to manage these patients as they are exposed to additional risks during transport.

As part of the process of continuing improvement in college professional documents each document is considered from the perspective of the intended end-users and stakeholders, with a view to simplification and usability, as well as the intention of the document. In that context this document has been classified as a "guideline".

The guidelines associated with this background paper are intended for medical practitioners and apply to all stages of critical patient transport be that prehospital, interhospital or intrahospital.

The goal of this document is to assist medical practitioners and hospitals develop and implement strategies and protocols that reduce risks of transporting critically ill patients and maximise their safety.

3. Discussion of issues

In view of the spectrum of practitioners involved in transporting critically ill patients the document development group (DDG) was formed with representation from each of the colleges of emergency medicine, intensive care medicine, and anaesthesia. This ensured that the expertise and experience of each specialty contributing to the management of critically ill patients was incorporated.

The principal issues considered include staffing, training, equipment, monitoring, transport, and governance.



While the guidelines strive for excellence it is recognised that transport services provided by non-medical practitioners, such as the ambulance services, have their own standards and protocols. However, these guidelines apply whenever medical practitioners are involved.

Where differences exist between intrahospital and interhospital transport, they have been identified and separately addressed.

There is evidence1-4 that in specific cases involving blunt trauma and those requiring procedures such as thoracostomy or hysterotomy physician involvement had a significant impact on improving outcomes and decreasing mortality (see item 7.1).

4. Paediatrics

In addition to the considerations noted in paediatric transport and care in *PG52*, it should be emphasised that the management and transport of children is highly specialised, due to many aspects of their anatomy, physiology and their patterns of illness or traumatic injury. This is particularly relevant in neonates, infants and younger children where clinical deterioration may be rapid if not recognised and treated effectively. Specialised teams with appropriate training and equipment should ideally undertake and coordinate transport tasks for these patients. The psychological care of the child is also paramount, and all effort must be made to reduce any stress on the child and their family. Whenever possible a parent or carer should travel with the child, particularly during pre-hospital and inter-hospital transfers.

5. Summary

Transport of critically ill patients exposes them to additional risks, which require the expertise of highly trained and skilled medical practitioners to mitigate these transport risks. The goal of this document is to assist medical practitioners and hospitals develop and implement strategies and protocols that reduce risks of transporting critically ill patients and maximise their safety.

References

- Bloomer R, Reid C, Wheatley R. Prehospital resuscitative hysterotomy. Eur J Emerg Med. 2011 Aug;18(4):241-242.
- Davies GE, Lockey DJ. Thirteen survivors of prehospital thoracotomy for penetrating trauma: a prehospital physician-performed resuscitation procedure that can yield good results. J Trauma. 2011 May;70(5):E75-78.
- 3. Garner A, Rashford S, Lee A, Bartolacci R. Addition of physicians to paramedic helicopter services decreases blunt trauma mortality. Aust N Z J Surg. 1999 Oct;69(10):697-701.
- 4. Lockey D, Crewdson K, Davies G. Traumatic cardiac arrest: Who are the survivors? Ann Emerg Med. 2006 Sep;48(3):240-244.

Process of document review

In accordance with a memorandum of understanding agreed to in 2010, a document development group (DDG) was established with representation from the three colleges.

Document development group 2024

The members of the Document Development Group for 2024 are listed in *PG52 Critically ill patient transport* p15.



Although ACEM was convening the current review, the process of review aligned as best as possible with that detailed in ANZCA professional document *CP24 Policy for the development and review of professional documents*.

The following stakeholders have been invited to provide feedback on the pilot version of PG52 (2024):

- ANZCA regional committees and NZ national committee
- FPI/
- ANZCA Trainee Committee
- Anaesthesia and Critical Care in Unusual and Transport Environments (ACCUTE) SIG
- Cardiothoracic, Vascular and Perfusion (CTVP) SIG
- · Diving and Hyperbaric Medicine SIG
- Neuroanaesthesia SIG
- Obstetric Anaesthesia SIG
- Rural SIG
- Trauma SIG

Professional documents of the Australian and New Zealand College of Anaesthetists (ANZCA) are intended to apply wherever anaesthesia is administered and perioperative medicine practised within Australia and New Zealand. It is the responsibility of each practitioner to have express regard to the particular circumstances of each case, and the application of these ANZCA documents in each case. It is recognised that there may be exceptional situations (for example, some emergencies) in which the interests of patients override the requirement for compliance with some or all of these ANZCA documents. Each document is prepared in the context of the entire body of the College's professional documents, and should be interpreted in this way.

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