

# DRAFT

New Zealand Standard

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Standards New Zealand

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## Committee representation

This standard was prepared by the P8156 Committee. The membership of the committee was approved by the New Zealand Standards Approval Board and appointed by the New Zealand Standards Executive under the Standards and Accreditation Act 2015.

The committee consisted of representatives of the following nominating organisations:

Accident Compensation Corporation, Clinical Advisory Group  
Air Rescue Group – Hawke’s Bay Rescue Helicopter Trust  
Ambulance New Zealand  
Auckland District Health Board  
Auckland University of Technology  
Australasian College of Emergency Medicine (ACEM)  
Canterbury District Health Board  
Healthcare Horizons Limited  
Ministry of Health  
National Ambulance Sector Office (NASO)  
New Zealand Ambulance Association  
New Zealand Air Ambulance Service Limited  
New Zealand College of Air and Surface Transport Nurses (COASTN) of the New Zealand Nurses Organisation  
New Zealand Defence Force  
New Zealand Transport Agency  
St John New Zealand  
Wellington Free Ambulance  
Whitireia New Zealand

## Acknowledgement

Standards New Zealand gratefully acknowledges the contribution of time and expertise from all those involved in developing this standard, especially Ambulance New Zealand for preparing an initial draft for the committee to review.

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NZS 8156

New Zealand Standard

**Ambulance,  
paramedicine, and  
patient transfer services**

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Superseding NZS 8156:2008

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## Referenced documents

Reference is made in this document to the following:

### New Zealand standards

SNZ HB 8152:2001                      Sentinel events workbook

### Joint Australian/New Zealand standards

AS/NZS 3551:2012                      Management programs for medical equipment

AS/NZS ISO 9001:2016                Quality management systems – Requirements

AS/NZS ISO 31000:2009               Risk management – Principles and guidelines

### International standard

ISO 19600:2014                        Compliance management systems – Guidelines

### Other publications

Ambulance New Zealand. *New Zealand ambulance major incident and emergency plan (AMPLANZ)*. Wellington: Ambulance New Zealand, 2016.

Australasian Fire and Emergency Service Authorities Council Limited. *Emergency Medical Response (AFAC Publication No. 3044)*, 2016

Civil Aviation Authority. *Civil Aviation Rules, Part 119: Air operator certification*. Wellington: Civil Aviation Authority, 2017.

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Ministry of Health. *Pandemic planning and response*. 2018. Retrieved from <http://www.health.govt.nz/your-health/healthy-living/emergency-management/pandemic-planning-and-response> (14 March 2018)

New Zealand Aeromedical and Air Rescue Standard. Wellington: Ambulance New Zealand, 2018

New Zealand College of Air and Surface Transport Nurses (COASTN). *Standards of practice*. Wellington: New Zealand Nurses Organisation, 2016.

New Zealand Health and Disability Services. *National Reportable Events Policy*, 2012

Officials' Committee for Domestic and External Security Coordination. *The New Zealand coordinated incident management system*. 2nd ed. Wellington: Department of the Prime Minister and Cabinet, 2014.

Privacy Commissioner. *Health information privacy code 1994*. Wellington: Privacy Commissioner, 1994.

### Legislation

Care of Children Act 2004

Charitable Trusts Act 1957

Companies Act 1993  
 Crimes Act 1961  
 Education Act 1989  
 Employment Relations Act 2000  
 Health and Disability Commissioner (Code of Health and Disability Services Consumers' Rights) Regulations 1996  
 Health and Safety at Work Act 2015  
 Health Practitioners Competence Assurance Act 2003  
 Health (Retention of Health Information) Regulations 1996  
 Human Rights Act 1993  
 Incorporated Societies Act 1908  
 Medicines Act 1981  
 Medicines (Standing Order) Regulations 2002  
 Mental Health (Compulsory Assessment and Treatment) Act 1992  
 Misuse of Drugs Act 1975  
 New Zealand Sign Language Act 2006  
 Privacy Act 1993  
 Protected Disclosures Act 2000  
 Public Finance Act 1989  
 Radiocommunications Act 1989  
 Vulnerable Children Act 2014

### Websites

Australasian College of Emergency Medicine	<a href="https://acem.org.au">https://acem.org.au</a>
Australasian Fire and Emergency Service Authorities Council	<a href="http://www.afac.com.au">www.afac.com.au</a>
Civil Aviation Authority	<a href="http://www.caa.govt.nz/rules/civil-aviation-rules">www.caa.govt.nz/rules/civil-aviation-rules</a>
Health Safety and Quality Commission New Zealand	<a href="http://www.hqsc.govt.nz/">www.hqsc.govt.nz/</a>
New Zealand Legislation	<a href="http://www.legislation.govt.nz">www.legislation.govt.nz</a>
Medsafe	<a href="http://www.medsafe.govt.nz/">www.medsafe.govt.nz/</a>
Major Trauma National Clinical Network	<a href="http://www.majortrauma.nz">www.majortrauma.nz</a>
Ministry of Health – National Health Emergency Plan	<a href="http://www.health.govt.nz/our-work/emergency-management/national-health-emergency-plan">www.health.govt.nz/our-work/emergency-management/national-health-emergency-plan</a>
Ministry of Health – Pandemic Planning and Response	<a href="http://www.health.govt.nz/your-health/healthy-living/emergency-management/pandemic-planning-and-response">www.health.govt.nz/your-health/healthy-living/emergency-management/pandemic-planning-and-response</a>
New Zealand Blood Service	<a href="http://www.nzblood.co.nz">www.nzblood.co.nz</a>

### Latest revisions

The users of this standard should ensure that their copies of the above-mentioned New Zealand standards are the latest revisions. Amendments to referenced New Zealand and joint Australian/New Zealand standards can be found on [www.standards.govt.nz](http://www.standards.govt.nz).

## **Review of standards**

Suggestions for improvement of this standard will be welcomed. They should be sent to the Manager, Standards New Zealand, PO Box 1473, Wellington 6140.



## Foreword

### Background and intent

Ambulance services in New Zealand fulfil a variety of roles, including answering public requests for assistance, urgent and non-urgent ambulance responses, patient transfers, clinical cover at events, referral to other health or support services, and the provision of advice for self-care. These roles continue to expand.

There is an expectation by the public that when it calls for assistance, whether through the '111' emergency service system or other means, the ambulance service will respond promptly and competently and in a manner appropriate to the emergency. As the scale and complexity of incidents varies, ambulance services need to be capable of operating flexibly in order to bring about the best outcomes with the available resources. An ambulance service response may entail the provision of advice or referral rather than a vehicular response.

Ambulance Clinical Communications Centres (ACCCs) link requests for service with the provision of clinical assistance or referral. This is achieved through the triage of calls and the dispatch of appropriate resources. The variety of resources available to an ACCC includes traditional ambulances (including air and marine responses), secondary triage, clinical advice, and referral pathways. ACCCs also provide communications services to the responding ambulances and coordinate fleet deployment in conjunction with ambulance service plans.

Patient transport services interact with other health domains (including primary and secondary health services). In addition to providing appropriate positioning for the patient during transport, patient transport services need to operate in a reliable and timely manner to ensure minimum disruption to schedules and patient flow.

Providing clinical services at public events requires a systematic approach to ensure that the level of service given matches the predictable potential demand. Conformity with this standard will allow people attending a public event to have confidence that the level of service offered is clinically safe and appropriate to the nature of the event and the resulting potential sickness or injuries.

To promote consistency, the standard describes the current scopes of practice. Appendix A provides a table to illustrate the relationship between scopes of practice, educational requirements and skill sets. Scopes of practice include emergency medical technician (EMT), paramedic, and intensive care paramedic (ICP). It is the responsibility of the clinical governance framework to approve additional practice domains and their associated scope of practice for roles developed to meet new demand or to manage existing demand via new methods and processes. This approach provides a robust system for managing organisational and individual risk associated with the delegation of clinical practice in the absence of 'health professional' recognition or registration.

In the absence of legislative requirements, it is intended that through conformance with this standard, the public will have confidence that clinical personnel will provide safe, timely, competent, and efficient services as far as is practicable within the available resources.

Changes have been made throughout this standard to update it and bring it into line with current good practice. Key changes include:

- (a) Additions to the scope relating to clinical coverage;
- (b) Broadening the classification of services and core functions of ambulance services;
- (c) Updated criteria for complying with the standard;
- (d) Redrafted sections on recognition of Māori values and beliefs, and patient-centred care;
- (e) Changes to clauses on governance and management;
- (f) Additions to clause on medication and blood products management;
- (g) Additions to clinical governance, including delegated and registered scope of practice, competence, and clinical guidelines;
- (h) Changes to the section on service delivery, including continuity of care, patient records, and infection prevention, control, and management;

- (i) Updates to sections 8 to 10 and appendices including land, air, and marine ambulance responses and equipment; clinical services at mass gatherings; scopes of practice and qualifications; and emergency ambulance equipment.
- (j) New section 9 focussing on inter-hospital transfers

**Review period**

It is intended that this standard remains a dynamic document reflecting the challenges and changes experienced by the health and disability sector. In order to achieve this, a regular review of the standard is required to ensure it remains appropriate and applicable. This publication shall be reviewed every 3 years but may be reviewed more frequently.

**Transition period**

The transition period, to achieve newly agreed variations to the standards contained within this document, is 1 year.

# 1 GENERAL

## 1.1 Scope of application

This standard applies to all modes of road vehicle where ambulance provision is the primary capability of the vehicle and to aircraft and marine craft specifically equipped for ambulance provision when being used for that purpose.

It applies to any organisation or person delivering clinical care to a patient, and that also:

- (a) Provides an ambulance service (as defined by this standard);
- (b) Provides clinical care during transfer of patients to or between healthcare facilities, or other planned locations;
- (c) Uses the expression ambulance, paramedic, or medic to describe its staff or services;
- (d) Operates an emergency vehicle (ambulance) as defined by the NZ Transport Agency (NZTA);
- (e) Provides an ambulance service to transport acute or admitted hospital patients (such as patient transfer services and health transfer services);
- (f) Provides a first response on behalf of an ambulance service that exceeds the level of first aid unless contracted directly with the Crown;
- (g) Operates an ambulance clinical communication centre (ACCC);
- (h) Provides clinical services for mass gatherings or events; or
- (i) Provides clinical care of patients travelling on scheduled domestic or international commercial aircraft or chartered aircraft (excluding emergency or "Good Samaritan" care).

## 1.2 Interpretation and key definitions

Appendix C contains a list of key definitions and abbreviations used in this standard.

For the purposes of this standard, the word 'shall' refers to requirements that are essential for compliance with the standard, while the word 'should' refers to practices that are advised or recommended.

The terms 'normative' and 'informative' have been used in this standard to define the application of the appendix to which they apply. A 'normative' appendix is an integral part of a standard, while an 'informative' appendix is for information and guidance only.

The generic term 'staff' includes both paid and voluntary personnel responsible for the direct provision of care and treatment or coordination and advice to the patient

Once paramedic registration occurs in New Zealand, the term 'paramedic' will take on the meanings and protections defined by the registering body.

Until such time, the term 'paramedic' applies to all clinical positions with a minimum requirement of a BHSc (Paramedic) qualification.

Organisations may adopt adjuncts to the title to better describe current and future roles and levels of practice. Such adjuncts currently include:

- (a) Intensive care paramedic;
- (b) Flight paramedic;
- (c) Urgent community care paramedic;
- (d) Extended care paramedic; or
- (e) Clinical paramedic advisor.

NOTE – A grandfather clause applies to all personnel currently holding an authority to practice at the levels listed above but not holding a BHSc degree.

## 1.3 New Zealand legislation

Appendix D includes a list of New Zealand legislation relevant to the management and provision of an ambulance service or an ACCC.

## 2 CLASSIFICATION OF SERVICES

### 2.1 Classification

In this standard, services are classified as emergency ambulance service, non-emergency ambulance service, event service, or ambulance clinical communication centre (ACCC).

- (a) Emergency ambulance service;
- (b) Non-emergency ambulance service;
- (c) Event service; and
- (d) Ambulance clinical communication centre (ACCC).

### 2.2 Core functions of emergency ambulance services

The core functions of emergency ambulance services shall include, but are not limited to:

- (a) Providing a response (by any means, including telephone triage or advice) to any situation when requested via the public service access point ('111' service) or some other means where it is believed on reasonable grounds that a person requires emergency pre-hospital or inter-hospital care;
- (b) If necessary, transporting patients to an appropriate receiving facility in vehicles, aircraft, or vessels equipped with suitable lifesaving resuscitation and transport equipment;
- (c) Communicating internally within an incident or event, and externally between the scene of an incident and the ACCC;
- (d) Providing assessment and treatment of the patient in accordance with clinical guidelines, documented protocols, and standing orders issued by the organisation's clinical governance framework;
- (e) Providing clinical advice or referral when it is the appropriate response;
- (f) Providing transport for patients where it is appropriate to do so;
- (g) Cooperating with other healthcare providers and clinical personnel to foster a team approach, provide leadership and ensure services are provided in a timely and integrated fashion;
- (h) Working with the local and national health sector to implement health strategies and improve patient outcomes.

### 2.3 Core function of non-emergency ambulance service

The core function of a non-emergency ambulance service shall include, but is not limited to, providing transport of patients, who have been clinically assessed, between hospitals or other locations accompanied by clinical staff appropriate to the patient needs. This service shall also be capable of providing assessment and treatment of the patient in accordance with clinical guidelines, documented protocols, and standing orders issued by the organisation's clinical governance framework.

### 2.4 Core function of event service

The core function of an event service is to provide assessment, care, treatment, or transport to ill or injured patients by staff with an ability to provide care and treatment at public gatherings or events. See Appendix A and Appendix B.

### 2.5 Core functions of an ACCC

The core functions of an ACCC shall include, but are not limited to:

- (a) Providing a comprehensive and integrated 24-hour, 7-day centralised communications system, via nationally recognised emergency numbers including '111', and emergency answering point linked to other emergency services;
- (b) Prompt receipt and triage of incoming calls from the public;
- (c) Provide clinical advice or referral when it is the appropriate response;
- (d) Dispatch resources according to the medical or criteria-based priority decision support system;
- (e) Coordinate resources to enable the triage, advice, treatment and transport of patients; and
- (f) Respond to mass-casualty incidents and other national disasters.

### 2.6 Compliance with this standard

All organisations covered by the scope of this standard shall meet all criteria relevant to the service they provide.

## **2.7 Health Information Privacy Code**

Compliance with this standard will assist organisations to meet their obligations under the Health Information Privacy Code and under the Privacy Act. The standard should be interpreted in a manner consistent with ensuring the protection of individual privacy. Organisations to which this standard applies shall ensure that staff are familiar with the relevant aspects of the code and of the associated obligations.

## **2.8 Health and Disability Commissioner (Code of Health and Disability Services Consumers' Rights) Regulations**

Compliance with this standard will assist organisations to meet their obligations under the Code of Health and Disability Services Consumers' Rights. The standard should be interpreted in a manner consistent with this code. Organisations to which this standard applies shall ensure that staff are familiar with the relevant aspects of the code and of the associated obligations.

## **2.9 The New Zealand Aeromedical & Air Rescue standard**

The New Zealand Aeromedical and Air Rescue Standard defines aircraft specifications and pilot training and experience for different levels of air ambulance provision over and above the Civil Aviation Rules. Those standards also specify safety training requirements for individuals working in the air ambulance environment.

However, nothing in this standard shall be interpreted to compromise the legal authority and responsibility of the pilot in command of the aircraft for the safe operation of the aircraft and compliance with the Civil Aviation Rules.

This standard does not duplicate these aviation and safety requirements; rather it specifies minimum clinical staffing, clinical equipment, and clinical infrastructure. Organisations providing air ambulance services shall comply with both documents. Compliance with the clinical aspects may be delegated to a second-party organisation, where the second organisation provides (and continues to employ) the clinical personnel used by an air ambulance operator.

## **2.10 Maritime New Zealand – safe ship management system**

The safe ship management (SSM) system administered by Maritime New Zealand makes ship owners and operators responsible for the daily safe operation of their vessels.

This standard anticipates that masters of coastguard or other vessels conveying clinical personnel and patients should ensure that those clinical personnel are briefed and equipped as necessary in relation to marine safety requirements.

## 3 PATIENT FOCUS

### 3.1 Patient rights

**Outcome 3.1** *Patients receive services that are safe, effective, and meet as practicable their specific cultural needs.*

**Criteria 3.1.1** Each organisation shall ensure that clinical personnel are familiar with, and comply with, their obligations as set out in the Code of Health and Disability Services Consumers' Rights.

**3.1.2** Each organisation shall implement policies and procedures to meet its consumer rights obligations.

**3.1.3** Clinical personnel shall comply with their obligations as set out in the Code of Health and Disability Services Consumers' Rights.

### 3.2 Recognition of Māori values and beliefs (Te aro nui ki ngā uara me ngā tikanga a te Māori)

**Outcome 3.2** *Consumers and their whānau who identify as Māori have their health and disability needs met in a manner that respects and acknowledges their individual and cultural values and beliefs.*

**Criteria 3.2.1** The criteria required to achieve this outcome shall include the organisation ensuring that Māori consumers and their whānau:

- (a) Receive services consistent with their cultural values and beliefs;
- (b) Have access to appropriate services, and barriers to access within the control of the organisation are identified and eliminated;
- (c) Receive services commensurate with their needs; and
- (d) Rights to practise their cultural values and beliefs while receiving services are acknowledged and facilitated by service providers.

### 3.3 Patient-centred care

**Outcome 3.3** *Patients receive care that is respectful of, and responsive to, individual patient needs, and values and beliefs.*

**Criteria 3.3.1** Each organisation shall ensure that patient-centred care (the practice of caring for patients and their families in ways that are meaningful and valuable to the individual patient<sup>1</sup>) is the focus of service delivery, and recognises the importance of:

- (a) Coordination and integration of care;
- (b) Information and education;
- (c) Physical comfort;
- (d) Emotional support and alleviation of fear and anxiety;
- (e) Involvement of family, whānau, and other support people;
- (f) Continuity and transition; and
- (g) Access to care.

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<sup>1</sup> Institute of Medicine. *Crossing the quality chasm: A new health system for the 21st century*. Washington, DC: The National Academies Press, 2001.

### 3.4 Confidentiality of patient information

**Outcome 3.4** *The confidentiality of patients and patient information is maintained in compliance with the requirements of the Privacy Act and the Health Information Privacy Code.*

**Criteria 3.4.1** Each organisation shall develop and implement policies and procedures for patient confidentiality that meet the requirements of the Privacy Act and the Health Information Privacy Code.

**3.4.2** Information is provided to patients explaining why their personal information is being collected, their rights in relation to that information, and what it will be used for.

### 3.5 Consent to treatment

**Outcome 3.5** *Consent to treatment is obtained in accordance with Right 7 of the Code of Health and Disability Services Consumers' Rights.*

**Criteria 3.5.1** Each organisation shall develop and implement informed consent policies and procedures that comply with the requirements of current legislation, approved Ministry of Health guidelines, 'duty of care' as defined by the Crimes Act, and the Code of Health and Disability Services Consumers' Rights.

**3.5.2** Informed consent policies and procedures shall provide clear guidance on:

- (a) Consent processes for the following situations as appropriate:
  - (i) Routine and emergency situations,
  - (ii) Whenever a patient has diminished competence,
  - (iii) Do-not-resuscitate situations and advance directives,
  - (iv) Involvement in research or teaching about the care of the patient, and
  - (v) Storage, disposal, and return of body parts and tissues;
- (b) Information (including documentation) to be provided to the patient by the organisation;
- (c) Meeting any particular needs of patients with disabilities;
- (d) Patient rights to refuse services and to withdraw consent to treatment; and
- (e) Recording requirements documenting consent decisions.

**3.5.3** Clinical personnel shall comply with the organisation's policies and procedures and obtain informed consent from the patient unless there are reasonable grounds for believing that the patient is not competent. Patients who are potentially unable to provide consent may include:

- (a) Young children (refer to *Consent in child and youth health* and the Care of Children Act);
- (b) Patients with either permanently or temporarily impaired cognitive function as a result of medical conditions, injury, dementia, use of alcohol, drugs, medication, or substance or solvent abuse; or
- (c) Patients with acute mental health conditions (refer to the Mental Health (Compulsory Assessment and Treatment) Act).

**3.5.4** Clinical personnel shall be educated in the principles and practices of gaining informed consent and patients' rights to information.

**3.5.5** The consent procedure should be evaluated as part of the organisation's quality assurance programme.

## 4 GOVERNANCE AND MANAGEMENT

### 4.1 Corporate governance

**Outcome** 4.1 *Each organisation is governed effectively and according to its legal status.*

**Criteria** 4.1.1 Each organisation's governing body shall establish governance practices to ensure risks are managed effectively and that it complies with all relevant legislation (for example the Charitable Trusts Act, the Companies Act, the Incorporated Societies Act, the Public Finance Act, the Health and Safety at Work Act, and the Vulnerable Children Act).

(a) The organisation shall have processes that ensure it is aware of changes to all relevant legislation and standards; and

(b) The organisation shall implement any changes within the time frames stipulated within the relevant legislation and standards.

4.1.2 The governing body shall provide leadership, direction, and appropriate financial stewardship, including an annual independent audit of its financial performance.

4.1.3 The governing body shall have a process to monitor and oversee the clinical governance of the organisation.

4.1.4 Each organisation should, when developing services and innovations, align them with the strategic themes of the New Zealand Health Strategy.

4.1.5 Each organisation shall have a compliance programme to assist it with meeting legal obligations, as well as relevant industry and organisational standards.

NOTE – ISO 19600 provides suitable guidance on compliance programmes.

4.1.6 Each organisation shall have appropriate public indemnity and professional liability insurance.

### 4.2 Management

**Outcome** 4.2 *Each organisation optimises patient outcomes through effective management of its own resources and through interface with other organisations.*

**Criteria** 4.2.1 Each organisation shall clearly define its service capability.

4.2.2 Each organisation shall clearly define the responsibility of management and their delegated authority.

4.2.3 Each organisation shall have documented policies and procedures for the full range of services provided.

4.2.4 Each organisation shall establish and maintain ongoing relationships of mutual support and cooperation with other emergency services and health services personnel as relevant.

4.2.5 Each organisation shall be aware of, and where appropriate, contribute to, regional or national large-scale contingency planning and be able to operate in accordance with such plans including:

(a) The National Health Emergency Plan, Ministry of Health;



- (b) The New Zealand Coordinated Incident Management System (CIMS2);
- (c) The New Zealand Ambulance Major Incident and Emergency Plan (AMPLANZ); and
- (d) Pandemic Planning and Response, Ministry of Health.

- 4.2.6** Where the organisation provides a response for unplanned care (emergency ambulance service, non-emergency ambulance service (patient transfer service), or ACCC) it shall have business continuity plans in place. These shall cover reduction, readiness, response, and recovery, to ensure the ongoing provision of emergency responses and critical patient transfers during a large-scale emergency or disaster. Continuity planning should include, but is not limited to:
- (a) Exercising of plans;
  - (b) Inter-agency reciprocal aid agreements;
  - (c) Logistical support, including the acquisition and distribution of critical supplies;
  - (d) Staff continuity planning; and
  - (e) Communications.

### 4.3 Human resources

- Outcome 4.3** *Each organisation effectively plans and manages its human resources.*
- Criteria 4.3.1** Each organisation shall implement effective human resource planning and management systems that comply with all relevant legislation (examples include the Employment Relations Act and Human Rights Act). This shall include, but is not limited to, ensuring:
- (a) Job descriptions are available for each position, including clinical competencies for scopes of practice that are key components of the role;
  - (b) Professional qualifications or registration documentation and references are verified prior to appointment where relevant for the role;
  - (c) Pre-recruitment and ongoing police screening is undertaken in accordance with legislated requirements;
  - (d) Drug and alcohol testing is undertaken as required;
  - (e) All staff receive an orientation or induction for their position at the commencement of their appointment;
  - (f) Currency of practising certificates or authority to practice are verified annually where relevant to the role;
  - (g) Ongoing or continuing education and professional development is planned, implemented, and reviewed annually including introduction to new technology, equipment, or clinical procedures and treatments;
  - (h) A record of staff training is verified;
  - (i) A fair and transparent process is used for investigating complaints or disciplinary issues;
  - (j) All clinical staff participate in annual performance reviews; and
  - (k) All staff meet the requirements of the Vulnerable Children Act.
- Outcome 4.3.2** *Each organisation has a process for staff support including access to incident debriefing.*
- Criteria 4.3.3** The organisation shall provide:
- (a) Access to mental health or counselling services and incident debriefing; and
  - (b) A wellness programme for staff, including guidance on and support for mental well-being and resilience.

#### 4.4 Health, safety, and wellness management

**Outcome 4.4** *Each organisation establishes and maintains a health and safety management system in accordance with the requirements of the Health and Safety at Work Act.*

**Criteria 4.4.1** The health and safety management system shall cover the activities of all employees and the organisation's impact on patients and the public.

**4.4.2** Each organisation shall document and implement health and safety procedures.

#### 4.5 Risk management and quality assurance

**Outcome 4.5** *Each organisation effectively identifies and manages its risks and opportunities, and maintains a quality management system.*

**Criteria 4.5.1** Risk shall be managed in a way that reflects the principles and guidelines of AS/NZS ISO 31000.

**4.5.2** Each organisation shall have systems to assess, treat, monitor, and review all forms of risk that could affect achievement of its objectives including those concerned with staff and patient well-being. As part of its system of risk management, it shall have an assurance system appropriate to its size and structure to monitor the effectiveness of the risk management processes including those dealing with quality of service delivery.

**4.5.3** Each organisation shall have a quality management system and processes that help it meet public and customer expectations. The quality management system shall be documented and shall include improvement and review processes.

NOTE – AS/NZS ISO 9001 offers appropriate guidance on quality management systems and processes.

**4.5.4** The risk management system shall be supported by a quality management system such as the requirements of AS/NZS ISO 9001.

**4.5.5** Each organisation shall have a process in place to continually improve the effectiveness and efficiency of its services.

**4.5.6** Organisations shall undertake and maintain external third-party certification to this standard (NZS 8156) by the Joint Accreditation System of Australia and New Zealand (JAS-ANZ) or equivalent member of the International Accreditation Federation (IAF).

#### 4.6 Complaint management

**Outcome 4.6** *Each organisation's complaint management system is accessible and effective.*

**Criteria 4.6.1** Each organisation shall have a documented process for lodging and investigating complaints and implementing remedial action and follow up. Without limiting the generality of this requirement, the complaint management system shall conform to the Code of Health and Disability Services Consumers' Rights.

**4.6.2** The complaint management system shall include an internal reporting system that links to the quality and risk management system to facilitate feedback and service improvements.

## 4.7 Reportable events management

**Outcome 4.7** *Each organisation records, analyses, and reports all reportable events in order to identify opportunities to improve service delivery, manage risks and comply with statutory and regulatory requirements.*

**Criteria 4.7.1** Reportable events relevant to the organisation shall be identified. These include but are not limited to:

- (a) Incidents and accidents;
- (b) Hazardous conditions;
- (c) Adverse clinical events;
- (d) Service delivery shortfalls; and
- (e) Non-compliance with legislation, regulation or professional practice standards.

NOTE – It is recommended that organisations record and analyse near misses.

**4.7.2** Clinical reportable events shall be scored using the Severity Assessment Code (SAC) defined by the Health Quality and Safety Commission New Zealand:

- (a) Events categorised as SAC 1 or SAC 2 shall be reported to the Ministry of Health within the appropriate time frames; and
- (b) All incidents shall be reviewed and resources for the review shall be allocated according to the SAC score.

NOTE – The Health Quality and Safety Commission New Zealand provides guidance on managing reportable events.

**4.7.3** Management of reportable events shall be linked to the risk and quality assurance system.

**4.7.4** Each organisation shall practise open disclosure and communication. The organisation's reportable events processes shall be linked to open disclosure and communication processes. Consumers have a right to know what has happened to them.

NOTE – For further information refer to the Health and Disability Commissioner's guidance.

**4.7.5** Each organisation shall comply with any statutory or regulatory requirements in relation to external and mandatory notification reporting, such as notifiable diseases.

NOTE – For further information refer to SNZ HB 8152.

## 4.8 Medication and blood product management

**Outcome 4.8** *Each organisation has safe medication management systems that comply with legislative requirements.*

**Criteria 4.8.1** Each organisation shall develop, implement, and monitor policies and procedures that comply with all relevant legislative requirements to ensure safe medication management. The policies and procedures shall include the following areas:

- (a) Safe procurement – assuring the chain of ownership and storage during procurement;
- (b) Transportation and storage – ensuring all medications are safely and effectively stored according to manufacturers' recommendations and are safe from theft; and

- (c) Appropriate recording and accounting of controlled and prescription drugs.

NOTE – The Medicines (Standing Order) Regulations specify that standing orders must be reviewed by the issuer at least once per year.

- 4.8.2** Where the organisation stocks or administers blood or blood products, the organisation shall develop and implement systems to ensure safe and high-quality care of blood and blood products. These systems shall comply with New Zealand Blood Service (NZBS) guidelines. The organisation shall:
- (a) Monitor the effectiveness of the blood management systems;
  - (b) Comply with NZBS guidelines on the storage, transport, and handling of blood and blood products;
  - (c) Track and trace blood products from entry into the organisation to transfusion, discard, or transfer; and
  - (d) Have guidelines for the safe and appropriate use of blood or blood products that minimise the risks associated with transfusion.

## 4.9 Equipment management and maintenance

**Outcome 4.9** *Each organisation's equipment used in the provision of ambulance and paramedical services is fit for purpose.*

- Criteria 4.9.1** Each organisation shall have a documented maintenance programme for all equipment utilised for out-of-hospital patient care. Calibration shall be conducted wherever necessary and against a test device of known accuracy. Medical devices shall be documented in compliance with AS/NZS 3551. This documentation shall comprise a complete maintenance history from purchase to disposal.
- 4.9.2** Individuals performing scheduled maintenance or repairs shall be appropriately technically qualified and possess the knowledge of relevant standards, legislation, and codes of practice.
- 4.9.3** The periodic maintenance on all equipment shall meet the criteria recommended by the manufacturer, or a nationally or internationally recognised standard.
- 4.9.4** Each organisation shall have a documented fault procedure to deal with device failures or suspected failures including the production of a fault report and the tagging and removal of the device from service as prescribed in the relevant standards.
- 4.9.5** Any malfunctioning medical device shall be notified to the regulatory authority in compliance with reporting requirements.
- 4.9.6** When introducing new or modified equipment the impact on continuity of care with other providers is considered, and those providers are notified.
- 4.9.7** The storage and use of equipment shall comply with all relevant legislation.
- 4.9.8** Any equipment used in an aircraft shall comply with CAA rules and regulations and be approved by the aircraft operator.

## 4.10 Fleet management

**Outcome 4.10** *Vehicles, aircraft, and vessels used in the provision of ambulance services are fit for purpose.*

- Criteria**
- 4.10.1** The specific vehicle, aircraft, and vessel requirements of NZTA, Civil Aviation Authority of New Zealand (CAA), Aviation New Zealand, and Maritime New Zealand shall be met. In particular:
- (a) Road ambulance services and relevant event service vehicles shall comply with the requirements of NZTA in respect of passenger transport vehicles;
  - (b) Air ambulance services shall comply with the obligations of the CAA and New Zealand Aeromedical and Air Rescue Standard in respect of air ambulance aircraft; and
  - (c) Marine ambulance services shall comply with the requirements of Maritime New Zealand and safety management systems shall be implemented to ensure that commercial vessels are maintained and operated safely.
- 4.10.2** Operators or drivers of vehicles shall hold the appropriate class of licence or have appropriate qualifications to operate vehicles relevant to the circumstances in which the vehicles are deployed.
- 4.10.3** Organisations shall have policies and procedures in place to meet safe operating standards and to meet legislative requirements.

## 5 CLINICAL GOVERNANCE

### 5.1 Organisational clinical governance

- Outcome 5.1** *Each organisation is clinically focused and governs clinical practice effectively.*
- Criteria 5.1.1** Each organisation shall establish clinical governance practices to ensure the competent performance of clinical personnel.
- 5.1.2** Each organisation shall have a process to monitor and oversee clinical decision making and clinical safety in the organisation.
- 5.1.3** Each organisation shall have written standing orders for medication administration that meet the requirements of the Medicines (Standing Order) Regulations, or the registering bodies' protocols.
- 5.1.4** Each organisation shall have a credentialling policy and process for clinical personnel and all staff treating patients shall comply with it.
- 5.1.5** Each organisation shall have a documented policy and procedure for the delegation of clinical interventions, including clinical advice, which shall be reviewed and approved by the organisation's medical director in line with the organisation's clinical governance structure.
- 5.1.6** The medical director shall be responsible for patient care, clinical practice, and clinical advice by:
- (a) Ensuring that the organisation meets the requirements of the Medicines (Standing Order) Regulations;
  - (b) Advising management on the development and maintenance of, and adherence to, the organisation's credentialling process;
  - (c) Working with management in the credentialling and re-credentialling of clinical staff;
  - (d) Delegating treatment and care procedures carried out by staff;
  - (e) Participating in the handling of complaints related to clinical care;
  - (f) Assisting with advice in the evaluation of new equipment;
  - (g) Providing advice on procedures, current accepted practice, significant research findings, and other items of interest for distribution to staff; and
  - (h) Ensuring that advice provided to patients by individuals or systems is supported by clinical evidence and complies with current accepted practice standards.
- 5.1.7** The medical director shall be responsible for governance of clinical audit by:
- (a) Overseeing the clinical audit of patient records to ensure staff work within their delegated scope of practice and standing orders, and to assist in the identification of adverse incidents;
  - (b) Monitoring the provision of care through audit, field supervision, discussions with staff, and reviewing clinical events;
  - (c) Liaising with management when competency gaps are identified so a remedial programme can be put in place for the individuals or the organisation as required;
  - (d) Assisting with the follow-up and feedback on noteworthy cases within the hospital system by providing the link between the hospital and the organisation; and
  - (e) Assisting the organisation in evaluating clinical performance statistics.
- 5.1.8** The medical director shall be responsible for clinical liaison by:

- (a) Liaising and developing close relationships with staff within receiving hospitals and other healthcare providers;
- (b) Maintaining links with medical directors of other ambulance organisations both nationally and internationally to ensure current accepted practice is maintained; and
- (c) Liaising with local and national health groups, including clinical networks, to ensure the development of treatments, clinical pathways, and destination policies in line with local and national health strategies.

**5.1.9** The medical director shall represent the organisation in the process for developing national clinical procedures and guidelines.

**5.1.10** The medical director shall ensure that research conducted or participated in, by the organisation, reaches current accepted practice, including ethical consent processes.

## 5.2 Medical director practice expectations

**Outcome 5.2** *The medical director provides clinical leadership to the organisation and ensures patient outcomes are optimised, through effective participation in clinical governance.*

**Criteria 5.2.1** Each organisation shall have a formally appointed medical director who accepts responsibility for the clinical delivery of the service and shall be formally recognised as part of the senior management team.

**5.2.2** The medical director shall be responsible for mandating the delegated scope of practice of clinical personnel.

**5.2.3** Where the organisation has only one formally appointed medical director, an acting medical director shall be appointed to cover absences when the medical director is unavailable.

**5.2.4** The medical director may formally delegate duties within the role to other appropriate personnel within the organisation.

NOTE – This will be particularly relevant for small organisations.

**5.2.5** The medical director shall:

- (a) Be a registered medical practitioner with the Medical Council of New Zealand and hold a current annual practising certificate, and
  - (i) Understand the complexity of providing the service in the environment (land, water, or air) in which the service is being provided and maintain credibility within the sector by maintaining records of attending such incidents, including attending incidents on request,
  - (ii) Only delegate skills or procedures that fall within their own scope of practice, and
  - (iii) Be responsible for issuing clinical standing orders;
- (b) For emergency ambulance organisations, be registered within a vocational scope of practice in intensive care medicine, anaesthesia or emergency medicine;
- (c) For non-emergency ambulance organisations, be registered within a vocational scope of practice appropriate to the services provided, and the acuity of the patient being cared for. Retrieval services also require experience in pre-hospital retrieval medicine; and
- (d) For event ambulance services, be registered within a vocational scope of practice appropriate to the services provided and the acuity of the patient being cared for.

- 5.2.6 Each organisation shall ensure the medical director's identity is publicly available.
- 5.2.7 The medical director shall be readily available to all staff operating under their delegated authority and, where the medical director is unavailable, have a process that ensures cover by another suitably qualified medical practitioner.
- 5.2.8 The medical director shall contribute to clinical education and the development of staff by:
  - (a) Participating in the education of clinical personnel, assisting clinical educators, and providing advice on areas for clinical professional development as appropriate; and
  - (b) Contributing to workshops on specific clinical procedures or medical conditions.

### 5.3 Clinical personnel practice expectations

**Outcome 5.3** *Each organisation optimises patient outcomes through effective clinical practice.*

NOTE – Application of the following content shall be at a level appropriate to the individual's scope of practice or registration.

- Criteria 5.3.1** Clinical personnel with a delegated or registered scope of practice shall be responsible for maintaining their knowledge and skills by understanding and applying:
- (a) The key concepts of the biological, physical, social, psychological, and clinical sciences relevant to their scope of practice;
  - (b) Pre-hospital emergency care principles, understanding how these are expressed and translated into action through a number of different approaches to practice, and how to select or modify approaches to meet the needs of an individual; and
  - (c) The need to establish and maintain a safe clinical practice environment.
- 5.3.2** Clinical personnel with a delegated or registered scope of practice shall be responsible for practising with autonomy and accountability by:
- (a) Practising within the legal requirement and ethical boundaries of their delegated or registered scope of practice;
  - (b) Practising in a non-discriminatory manner;
  - (c) Maintaining confidentiality and obtaining informed consent;
  - (d) Exercising a standard of care;
  - (e) Knowing the limits of their practice and when to seek advice; and
  - (f) Understanding and fulfilling the obligation to maintain fitness to practise.
- 5.3.3** Clinical personnel with a delegated or registered scope of practice shall be responsible for practising and maintaining professional relationships by:
- (a) Understanding the scope of their practice;
  - (b) Working, where appropriate, in partnership with other healthcare providers, staff, patients, and their families/whānau;
  - (c) Contributing effectively to work undertaken as part of a multidisciplinary team;
  - (d) Communicating effectively throughout the care of the patient to ensure continuity of care; and
  - (e) Demonstrating effective skills in communicating information, advice, instruction, and clinical opinion to colleagues, patients, and family/whānau.



- 5.3.4** Clinical personnel with a delegated or registered scope of practice shall be responsible for identifying and assessing treatment and care needs by:
- (a) Meeting the requirements of the Medicines (Standing Orders) Regulations, or where appropriate, meeting the obligations of their registration (such as Primary Response in a Medical Emergency (PRIME) responders or registered paramedics);
  - (b) Gathering appropriate information;
  - (c) Using appropriate assessment techniques;
  - (d) Analysing and evaluating the information collected; and
  - (e) Meeting the requirement of the national clinical procedures and guidelines (CPGs) and standing orders.
- 5.3.5** Clinical personnel with delegated or registered scopes of practice shall be responsible for the formulation and delivery of plans for meeting treatment and care needs by:
- (a) Drawing on appropriate knowledge and skills in order to make clinical judgements;
  - (b) Conducting appropriate diagnostic or monitoring procedures, treatment, therapy, or other actions safely and skilfully; and
  - (c) Maintaining records appropriately.
- 5.3.6** Critically evaluating their own practice by monitoring effectiveness, and reviewing their practice and participating in clinical audits and incident reviews.

## 5.4 Delegated and registered scopes of practice

- Outcome 5.4** *Each organisation optimises patient outcomes by ensuring clinical personnel work within their registration or delegated scopes of practice.*
- Criteria 5.4.1** Clinical personnel who are not registered under the Health Practitioners Competence Assurance Act (HPCA Act) shall operate under one of the following delegated scopes of practice as defined by the ambulance sector's National Clinical Leadership Group:
- (a) First Responder (FR);
  - (b) Emergency Medical Technician (EMT);
  - (c) Paramedic; or
  - (d) Intensive Care Paramedic (ICP).
- 5.4.2** Additional scope of practice levels developed to meet future needs should have nationally agreed titles and scopes where this is feasible. Future scopes of practice shall be agreed between the organisation and its medical director or the relevant registration body. Further information on delegated scopes of practice is set out in Appendix A.
- 5.4.3** Transport medicine (TM) and Pre-Hospital and Retrieval Medicine (PHRM) clinical personnel with registration under the HPCA Act (excluding paramedics who are considered elsewhere) shall operate under one of the following scopes of practice:
- (a) Transport nurse;
  - (b) PHRM practitioner; or
  - (c) Transport medicine practitioner.

## 5.5 Competence

- Outcome 5.5** *Clinical personnel are competent to perform their duties.*
- Criteria 5.5.1** Each organisation shall, with medical director oversight, implement and be accountable for a credentialing process that includes:

- (a) Verification of registration (where appropriate), credentials, qualifications, and experience in order to identify the practice;
- (b) Scope of all personnel used in a clinical capacity;
- (c) Issuing authority to practise (a delegated authority to use a standing order or clinical guideline issued by the medical director);
- (d) Monitoring continuing professional development, clinical exposure, and patient contacts for personnel with authority to practise; and
- (e) Reviewing and reissuing the standing orders as appropriate.

**5.5.2** Each organisation shall provide a framework that enables personnel to demonstrate (or provide evidence to support) that they are safe and competent to practise. This may be a formal revalidation framework or may form part of a broader approach to continuing professional development.

**5.5.3** Where the organisation uses responders from other agencies (such as a formal co-response or first response framework), the organisation shall ensure a memorandum of understanding exists that defines any training, governance, and response arrangements as necessary to ensure the safe and effective operation of that arrangement:

- (a) For medications administered under standing orders, this will be annually; and
- (b) For everything else, this will be every 2 years.

NOTE – The document entitled *Emergency medical response*, produced by the Australasian Fire and Emergency Service Authorities Council (AFAC), provides an appropriate guideline for fire service first responder programmes.

## 5.6 Clinical-risk management

**Outcome 5.6** *Clinical risks are as low as reasonably practicable*

**Criteria: 5.6.1** Each organisation shall have a systematically managed approach to improving the quality and safe delivery of healthcare by establishing and maintaining a comprehensive clinical-risk management programme.

**5.6.2** Each organisation should promote a safety culture that is open and fair, and that promotes early and accurate reporting of incidents (refer to the Protected Disclosures Act), adverse and sentinel events.

**5.6.3** Each organisation shall identify circumstances that put patients at serious risk of harm.

**5.6.4** Each organisation shall have policies and procedures on the action clinical personnel should take following any clinical adverse event, including how it should be documented and investigated.

**5.6.5** Each organisation shall develop and maintain a structured programme to investigate and analyse adverse events in a timely manner. The focus should be on:

- (a) Examining the systems in which the event occurred; and
- (b) Implementing solutions for reducing or removing the potential for a similar adverse event in the future.

**5.6.6** Each organisation shall ensure that all clinical personnel are registered or hold an authority to practice under the authority of a medical director in order to practice.

## 5.7 Clinical audit

- Outcome 5.7** *Patient outcomes are improved through effective clinical audit.*
- Criteria 5.7.1** Each organisation shall have a continuous clinical-audit process that meets all regulatory requirements and assesses the performance of clinical personnel, including the acknowledgement of quality performance.
- 5.7.2** Each organisation shall have a continuous clinical-audit process to assess the effectiveness of treatment and care received by patients.
- 5.7.3** Each organisation shall review departures from the organisation's approved procedures to identify deficiencies and provide corrective actions for the following:
- (a) The organisation's patient care procedures and standing order processes;
  - (b) The organisation's systems and processes;
  - (c) The organisation's training programme; and
  - (d) An individual's practice.

## 5.8 Clinical education

- Outcome 5.8** *Each organisation has appropriately educated clinical personnel.*
- Criteria 5.8.1** Each organisation shall have an ongoing clinical education programme to ensure maintenance of clinical competencies.
- 5.8.2** Each organisation shall ensure clinical qualifications are from accredited education institutions.
- 5.8.3** Each organisation should establish and maintain links with educators or researchers to ensure the advancement of practice through academic development and research.

## 5.9 Clinical guidelines

### All ambulance organisations

- Outcome 5.9.1** *Clinical care provided by ambulance organisations is standardised and auditable through the use of documented clinical procedures, guidelines (CPGs), and standing orders.*
- Criteria: 5.9.1.1** Each organisation that provides an ambulance service shall utilise best practice CPGs at a level appropriate to the service being provided.
- NOTE – CPGs include standing orders.
- 5.9.1.2** Staff shall be provided with printed or electronic copies of the CPGs.
- 5.9.1.3** The CPGs shall be in a readily useable format and be easily accessible to treating staff.

### National Ambulance Sector Clinical Working Group clinical procedures and guidelines

- Outcome 5.9.2** *Standardised CPGs promote consistency of care across New Zealand.*
- Criteria: 5.9.2.1** Each organisation shall utilise applicable sections of the National Ambulance Sector Clinical Working Group (NASCWG) CPGs when delivering clinical care.

NOTE – The CPGs are developed by the National Ambulance Sector Clinical Working Group (NASCWG). The CPGs are available to all ambulance organisations from Ambulance New Zealand.

- 5.9.2.2** Each ambulance organisation shall clearly define which sections of the NASCWG CPGs fall within the scope of practice of its clinical staff.

NOTE –

- (1) Example 1: The NASCWG CPGs contain guidelines for all levels of practice, yet a paramedic is limited to those guidelines designated to the paramedic scope of practice.
- (2) Example 2: The financial implications of equipment and training may delay the implementation of some CPGs within some organisations, or be inappropriate in others (such as event and private hire organisations).

- 5.9.2.3** Use of the NASCWG CPGs does not prohibit developing guidelines to meet a local need, nor does it dictate the use of guidelines that are unnecessary or unsustainable in the population and environment that the organisation serves.

### Maintenance and review of NASCWG CPGs

**Outcome 5.9.3** *The NASCWG CPGs are maintained and reviewed to reflect current best practice.*

**Criteria: 5.9.3.1** The NASCWG CPGs shall be formally reviewed biannually, or as stipulated by Ambulance New Zealand. Individual sections of the CPGs may be reviewed more frequently, according to need.

**5.9.3.2** The CPGs are developed and regularly reviewed to ensure that clinical care is delivered safely and consistently using evidence-based, current accepted best practice.

**5.9.3.3** The National Clinical Leadership Group will determine representation on the NASCWG for the development of CPGs. An organisation shall be represented by its medical director or delegate. Other representatives shall be at the invitation of the Chair of the NASCWG.

**5.9.3.4** Each organisation may contribute to the ongoing development of the CPGs by submitting proposals for new guidelines or relevant feedback on the application of existing guidelines, particularly when the feedback relates to clinical safety or unintended implications for patient safety.

**5.9.3.5** Each organisation may develop local variations to the CPGs to meet clinical needs or to support innovation:

- (a) Newly developed guidelines shall be consistent with national and international current accepted practice standards, except where it can be shown that national or regional constraints or advances prohibit this, and patient safety is not compromised;
- (b) Each organisation's newly developed guidelines should be shared with the National Ambulance Sector Clinical Working Group (NASCWG) if clinically relevant at a regional or national level; and
- (c) The NASCWG will review all submitted guidelines and determine their suitability for inclusion in the national CPGs.

### Independently developed clinical procedures, guidelines, and standing orders

**Outcome 5.9.4** *Clinical procedures, guidelines, and standing orders developed by individual ambulance organisations are safe for the patient and provider.*

**Criteria: 5.9.4.1** Each organisation developing or acquiring its own clinical procedures, guidelines, or standing orders shall do so utilising its clinical governance structure.

- 5.9.4.2 CPGs shall be consistent with national and international standards, except where it can be shown that national or regional constraints or advances prohibit this, and patient safety is not compromised.
- 5.9.4.3 CPGs shall be approved and authorised by each organisation's medical director.
- 5.9.4.4 The CPGs shall be reviewed at least every 2 years to ensure that clinical care is delivered safely and consistently using evidence-based, current best practice standards. Individual sections of the CPGs may be reviewed more frequently, according to need.
- 5.9.4.5 Each organisation's own standing orders shall comply with the Medicines (Standing Orders) Regulations.

## 5.10 Destination policies and pathways

**Outcome** 5.10 *The use of destination policies and pathways enhances patient outcomes by ensuring that patients are delivered to the most appropriate receiving facility.*

**Criteria:** 5.10.1 Each organisation shall utilise regional and national destination policies and pathways unless it is clinically inappropriate to do so.

- 5.10.2 The organisation may contribute to the development of regional and national destination policies and pathways via ambulance representation on national clinical networks. National destination policies and pathways shall be agreed within the NASCWG before being shared with the National Clinical Leadership Group (NCLG) and Ambulance New Zealand.

NOTE – Ambulance New Zealand coordinates the sector representatives on pathway development in consultation with ambulance service providers.

## 6 SERVICE DELIVERY

### 6.1 Patient assessment and triage

- Outcome 6.1** *The priority and form of treatment and care reflects the condition of the patient.*
- Criteria 6.1.1** Clinical personnel shall assess patients, via telehealth or face to face, then prioritise treatment according to urgency.
- 6.1.2** Clinical personnel shall assess the need for and, if required, request additional resources at the scene of an incident.
- 6.1.3** Clinical personnel shall assess and, if required, prioritise patients for transport to the appropriate healthcare facility.
- 6.1.4** Clinical personnel shall use the agreed patient status and triage system as defined in the national CPGs and Ambulance National Major Incident Plan for New Zealand (AMPLANZ).

### 6.2 Treatment provision

- Outcome 6.2** *Patients receive appropriate treatment, care, referral, or advice.*
- Criteria 6.2.1** Clinical personnel shall recommend or provide treatment, referral, or advice within their delegated scope of practice.
- 6.2.2** Each organisation shall have processes to ensure that all treatment, referral, care, and advice are recorded appropriately.

### 6.3 Continuity of care/handover

- Outcome 6.3** *Continuity of care is maintained during transfer of the patient between healthcare providers.*
- Criteria 6.3.1** All information and supporting documentation on the patient shall be communicated effectively to personnel at the receiving healthcare facility to facilitate continuity of care.
- 6.3.2** Each organisation shall ensure that all clinical personnel are able to provide both verbal and written (including electronic) reports competently. The organisation shall use a structured system such as:
- (a) IMIST-AMBO (See Appendix C) for clinical handover, at times when all or part of the care of a patient is transferred between clinical providers (including between paramedics) or organisations;
  - (b) ISOBAR (See Appendix C) for making clinical requests for the assessments, treatments, and advice offered to patients.
- 6.3.3** Clinicians shall use structured clinical handover processes that include:
- (a) Preparing and planning for handover, including setting the location, time, and mode of communication;
  - (b) Having information from all relevant sources;
  - (c) Requesting relevant clinicians and others to participate;
  - (d) Supporting patients, family members, whānau, and carers to be involved in handover; and
  - (e) Communicating the patient's goals and preferences.
- 6.3.4** Each organisation shall ensure that mechanisms are in place to notify personnel

at the receiving healthcare facility in advance of the arrival or handover of all life-threatened patients.

- 6.3.5** Each organisation shall liaise with local healthcare facilities and develop procedures for notifying them of the impending arrival of patients, the status of the patient, and sufficient information to activate resourcing or care protocols (for example trauma call or ST-elevation myocardial infarction (STEMI) pathway).
- 6.3.6** Clinical personnel shall ensure that a documented patient record is available to the receiving treatment provider for all patients. See 6.4.

## 6.4 Patient records

**Outcome 6.4** *Complete and accurate records are documented for each patient in compliance with legislative requirements. The records are made available to:*

- (a) Clinicians at the point of care;*
- (b) Patients and their nominated representative; or*
- (c) The client's primary health provider or other vested health practitioner with the express permission of the client.*

**Criteria 6.4.1** Each organisation shall specify the minimum requirements for patient records, including:

- (a) A system for the identification of individual patient records; and
- (b) The minimum contents of the health record as determined by the relevant regulations (including the Medicines (Standing Orders) Regulations). The record shall contain, but is not restricted to:
  - (i) A patient's personal details;
  - (ii) Presenting signs and symptoms;
  - (iii) Relevant history, including medication history;
  - (iv) Observations and vital signs, including any recordings taken;
  - (v) Interventions used and their outcomes, and
  - (vi) All legally required information.

**6.4.2** All patient records shall be legible, accurate, and permanent. This may be achieved by, but is not limited to, ensuring all entries are:

- (a) Made in ink and written clearly, or electronic;
- (b) Clearly identifying the patient where the patient's identity is known;
- (c) Objective and factual, using only recognised abbreviations;
- (d) Containing the name and designation of clinical provider and of the author;
- (e) Signed (including electronic signature);
- (f) Dated; and
- (g) Not defaced.

**6.4.3** An error on a written patient record shall be amended with a clear single line through the deletion that ensures the crossed out text can still be read. The amendment shall be authorised by the clinical provider. Electronic records shall have changes recorded in an auditable log that is associated with that particular record and is accessible for review.

**6.4.4** Each organisation shall maintain records and systems to ensure timely and relevant information is collected, maintained, and available. This includes the ability to audit or uniquely identify all responses and to be able to trace a particular event to that response.

**6.4.5** Each organisation shall store records in a manner that complies with the Health Information Privacy Code, Health (Retention of Health Information) Regulations,

and the Privacy Act.

- 6.4.6** Each organisation should utilise the national electronic patient report form (ePRF) system to assist in meeting its obligations for documenting patient information.

## 6.5 Infection prevention, control, and management

**Outcome 6.5** *Governance and quality improvement systems for preventing and controlling healthcare-associated infections are in place to support and promote infection prevention and control. The vehicle operator (including air and marine ambulances) is responsible for ensuring infection control systems are in place and functioning.*

**Criteria 6.5.1** Each organisation shall have an infection prevention and control and management system that specifies processes for preventing and controlling healthcare-associated infections, including:

(a) Policies and procedures including, but not limited to:

- (i) Hand hygiene,
- (ii) Standard precautions,
- (iii) Transmission-based precautions,
- (iv) Prevention and management of infection in service providers,
- (v) Antimicrobial usage,
- (vi) Outbreak management,
- (vii) Cleaning, disinfection, sterilisation, and reprocessing of reusable medical devices (if applicable) and equipment,
- (viii) Single use items, and
- (ix) Consideration of infection control in design and construction;

(b) The organisation shall have access to a specialist in infection prevention and control, for advice on the control of infection, and shall monitor, assess, and use data to reduce the risks associated with healthcare-associated infections.

**6.5.2** Each organisation shall have effective systems to safely manage patients with communicable infections. These will ensure that:

- (a) Patients presenting with, or with risk factors for, infection or colonisation with an organism of local, national, or global significance are identified promptly and receive the necessary management and treatment; and
- (b) Patients presenting with, or suspected of, communicable disease shall be transported in a manner that ensures the safety of treating personnel and patients subsequently transported in that vehicle.

**6.5.3** Where reusable equipment, instruments and invasive devices are used, the organisation has systems for reprocessing that are consistent with relevant national standards and compatible with manufacturers' guidelines.

## 6.6 First responder programmes

**Outcome 6.6** *Organisations or personnel delivering a first response on behalf of an ambulance organisation shall meet a minimum standard of care and comply with the relevant sections of this standard.*

**Criteria 6.6.1** An inter-agency agreement shall be established where another service or entity co-responds on behalf of an ambulance service as a first response in order to provide care above the level of first aid.

NOTE – This commonly occurs to assist patients whose main presenting problem is either



cardiac arrest or highly likely to deteriorate to cardiac arrest.

The inter-agency agreement shall ensure that:

- (a) First responder staff are appropriately trained and credentialled;
- (b) First responder personnel administering medication shall do so in accordance with the Medicines (Standing Orders) Regulations, either through appropriate registration of the individual or through the use of standing orders;
- (c) The use of clinical equipment complies with the appropriate regulations;
- (d) First responder personnel appropriately document the assessment, treatment, and outcome (while in their care) for each patient they attend as the initial care provider;
- (e) Clinical audit processes are in place;
- (f) Dispatch processes and incident types responded to are agreed;
- (g) Inter-agency communication, including dispute and complaint resolution processes are established;
- (h) Data management, patient documentation, reporting, and handover procedures are implemented; and
- (i) Media communications are agreed.

NOTE – First aid includes cardiopulmonary resuscitation (CPR) and automated external defibrillation (AED).

**6.6.2** The *Emergency medical response* guideline produced by the Australasian Fire and Emergency Service Authorities Council ([www.afac.com.au](http://www.afac.com.au)) should be used for guidance.

**6.6.3** Training for first responder personnel should include, but not be limited to:

- (a) Scene updates and handover processes to ambulance personnel;
- (b) Advance directives and non-resuscitation orders;
- (c) Obtaining and recording patient information and patient assessments;
- (d) Providing and recording treatment;
- (e) Conducting patient handovers; and
- (f) Operating within a crime scene.

**6.6.4** An organisation providing a first response capability to an ambulance service shall comply with sections 1 to 4, 6, and 8 of this standard.

## 7 AMBULANCE CLINICAL COMMUNICATIONS CENTRES

### 7.1 General

**Outcome 7.1.1** *The public and other stakeholders have a reliable means to access ambulance services.*

**Criteria 7.1.1.1** The Ambulance Clinical Communication Centre (ACCC) shall have:

- (a) Clear listings in local telephone directories;
- (b) Processes to appropriately triage and direct calls received via the '111' system and other means, including medical alarms. Resolution of calls may occur via ambulance response (urgent or non-urgent), the provision of advice, or referral to other agencies or individuals;
- (c) Integrated systems linking other ACCC centres throughout New Zealand; and
- (d) Electronic communication with other emergency service communications centres throughout New Zealand.

NOTE – An organisation providing ambulance services is not required to provide an ACCC and an organisation providing an ACCC is not required to provide ambulance services. An ACCC may be provided by an individual organisation or joint venture.

**Outcome 7.1.2** *The ACCC effectively supports air, land, and marine responses to incidents.*

**Criteria 7.1.2.1** The ACCC shall:

- (a) Ensure real-time monitoring of available resources and dispatch these in an efficient, effective, and timely manner (see Appendix E);
- (b) Contribute to a smooth integration of first response, air, ground, and hospital services, and other emergency agencies, for example, fire and police;
- (c) Coordinate responding services, including Primary Response in a Medical Emergency (PRIME) providers, general practitioners where applicable, other ambulance services, or other emergency agencies such as fire and police;
- (d) Monitor the status of an ambulance resource throughout the incident;
- (e) Use radio-telephone procedures developed in compliance with the Radiocommunications Act;
- (f) Provide adequate and reliable radio linkages between dispatch, field units, and healthcare facilities;
- (g) Ensure Emergency Medical Dispatcher (EMD) qualified personnel provide pre-arrival instructions. See Appendix E for the EMD level definitions;
- (h) Ensure dispatchers have access to immediate clinical advice;
- (i) Ensure that the medical-based decision support system compliance targets are met;
- (j) Ensure compliance is routinely and externally monitored, and provide feedback to clinical personnel;
- (k) Ensure operational changes are implemented rapidly; and
- (l) Comply with ACCC operating procedures.

### 7.2 Clinical governance of ambulance clinical communication centres

**Outcome 7.2** *ACCCs are managed with a strong clinical focus to ensure that the systems and processes used by the ACCC contributes to improved patient outcomes by complying with advice from appropriately experienced, skilled, and qualified medical specialists.*

**Criteria 7.2.1** The ACCC shall have a designated qualified medical director, who meets the

criteria stated in 5.2.4, when:

- (a) Developing or implementing systems such as:
  - (i) Call triage, including response prioritisation,
  - (ii) Secondary triage (processes and guidelines),
  - (iii) Oversight and delegations of clinical advice to public or ACCC and clinical staff; and
- (b) Reviewing adverse incidents and events that contain a clinical component.

### 7.3 Corporate governance

**Outcome 7.3** *The ACCC is managed utilising sustainable and measurable systems.*

- Criteria 7.3.1** The ACCC shall comply with sections 1 to 4 of this standard and shall:
- (a) As required by the Ministry of Health (MoH), provide evidence of compliance with MoH performance targets in the form of timely reports; and
  - (b) Adapt or develop systems and processes as required to provide ACCC support to approved new initiatives in health delivery within the ambulance sector.

### 7.4 Call taking

**Outcome 7.4** *The ACCC has a process to accurately categorise patients according to urgency.*

- Criteria 7.4.1** The ACCC shall:
- (a) Provide timely and seamless access to ambulance services;
  - (b) Provide a comprehensive, integrated 24-hour communications system;
  - (c) Meet recognised current accepted practice for emergency call processing;
  - (d) Provide a single public safety answering point (PSAP) for the system;
  - (e) Categorise all calls for service;
  - (f) Provide caller line identification (CLI) – number and address where available;
  - (g) Identify special-needs requirements, such as meeting the needs of the hearing impaired (refer to the New Zealand Sign Language Act) and non-English speaking callers; and
  - (h) Provide seamless access to non-urgent health advice (telehealth) for members of the public when an ambulance response may not be required or appropriate.

### 7.5 Response to incidents

**Outcome 7.5** *Appropriate resources are dispatched to the incident.*

- Criteria 7.5.1** The ACCC shall:
- (a) Triage requests to determine the type and priority of response;
  - (b) Allocate the necessary resources using medical-based decision support systems; and
  - (c) Dispatch only ambulance resources that comply with this standard.

### 7.6 Dispatch

**Outcome 7.6** *The ACCC dispatches the appropriate response to each incident.*

- Criteria 7.6.1** The ACCC shall:
- (a) Triage requests to determine the most appropriate response, including advice, mode of transport, clinical qualification and priority of response;

- (b) Have links in place to other emergency agency ACCCs throughout New Zealand;
- (c) Allocate the necessary resources using medical-based priority decision support systems;
- (d) Ensure real-time monitoring of available resources and dispatch these in an efficient, effective, and timely manner;
- (e) Ensure operational changes are implemented rapidly;
- (f) Ensure there is a smooth integration of first response, air, ground, and hospital services, and other emergency agencies, for example, fire and police. See Appendix F for response priority categories;
- (g) Use radio-telephone procedures developed in compliance with the Radiocommunications Act;
- (h) Provide adequate and reliable radio linkages between dispatch, field units, and healthcare facilities;
- (i) Ensure emergency medical dispatch (EMD) qualified personnel provide pre-arrival instructions and priority dispatching with access to immediate clinical advice. See Appendix E for information on EMD level descriptors;
- (j) Ensure that the medical-based priority decision support system compliance targets are met;
- (k) Ensure compliance is routinely and externally monitored, and provide feedback to staff; and
- (l) Comply with national helicopter dispatch protocols.

## 7.7 On-scene support

**Outcome 7.7** *The ACCC assists in the coordination of on-scene activities.*

- Criteria 7.7.1** The ACCC shall:
- (a) Coordinate services, including PRIME providers, general practitioners where applicable, other ambulance services, or other emergency agencies (such as fire and police);
  - (b) Communicate with ambulance personnel *en route* and at the scene to ensure their safety; and
  - (c) Liaise with the receiving healthcare facility where necessary to ensure:
    - (i) The facility is prepared to receive the patient,
    - (ii) The patient is transported to the most appropriate facility, and
    - (iii) Bypass criteria or protocols are met, including national and regional pathways.

## 7.8 Coordination of major incidents

**Outcome 7.8** *The ACCC efficiently coordinates major incidents in line with approved AMPLANZ specifications.*

- Criteria 7.8.1** The organisation shall:
- (a) Ensure major incident, disaster, and recovery plans are exercised at scheduled intervals, in real time; and
  - (b) Lessons learnt from exercises are incorporated into standard operating procedures.

## 7.9 Coordination of patient transfers and retrievals

**Outcome 7.9** *Patients are transferred between healthcare facilities in a coordinated manner.*

- Criteria 7.9.1** The organisation shall be capable of providing coordination of the resources

(clinical personnel and mode of transport) required to transport:

- (a) Critical and urgent patients from one healthcare facility to another;
- (b) Non-urgent patients from one healthcare facility to another; and
- (c) Patients, whose transport has been scheduled in advance, to or from healthcare provider locations.

**7.9.2** Where a centralised or a national clinical coordination system is established outside the ACCC to coordinate the inter-hospital transfer of critically ill patients, the ACCC shall have systems and procedures to interface with such a clinical coordination system where necessary.

## 7.10 Communications business continuity systems

**Outcome 7.10** *The ACCC implements systems and processes to ensure that the provision of service is uninterrupted.*

**Criteria 7.10.1** Each organisation shall ensure that business continuity systems provide a seamless service across the national virtual system.

**7.10.2** Each organisation shall provide for adequate business continuity from other ACCC locations, by providing reciprocal arrangements for systems including, but not limited to, the following:

- (a) Telephone answering;
- (b) Emergency and other call registration;
- (c) Recording of all digital communications (telephone, radio and other);
- (d) Playback provision of incoming calls such as 111 and radio calls to assist with call taking and dispatch tasks;
- (e) Dispatch;
- (f) Vehicle tracking;
- (g) Radiocommunications;
- (h) Digital mapping;
- (i) Seamless access to non-urgent health advice (telehealth); and
- (j) Auditing infrastructure that connects electronic and audio sources to the personnel involved.

## 7.11 Resources

**Outcome 7.11** *The ACCC is resourced in a manner that ensures operational standards are met at all times.*

**Criteria 7.11.1** Each organisation shall ensure that:

- (a) All emergency medical dispatchers are trained and registered with a recognised emergency medical dispatch authority and hold a relevant qualification;
- (b) The centre is staffed to the level required to meet the call volume, demand, and quality requirements; and
- (c) It has access to fully qualified replacement personnel as required to maintain service levels.

**7.11.2** Each organisation shall ensure that:

- (a) Critical and environmental systems are protected by generator business continuity and adequate uninterruptible power supply;
- (b) Buildings have adequate space for routine operations with additional space for business continuity and disaster situations;
- (c) The technology platform supports interfaces between emergency calls,

- dispatching, major incident management, and administrative processes;
- (d) Automatic vehicle location (AVL) is available, with adjustable polling and back transmission or reception capabilities, on a channel independent of voice; and
  - (e) The mapping system integrates with AVL, computer aided dispatch (CAD), and caller line identification (CLI) and is consistent with field maps and gazetteers.

## 7.12 ACCC staff education

**Outcome 7.12** *The ACCC has appropriately educated staff.*

- Criteria 7.12.1** Each organisation shall ensure:
- (a) A training and assessment process is in place to provide a progressive pathway from EMD level 1 to EMD level 4 (or their equivalents);
  - (b) The delivery of EMD training is carried out by qualified EMD trainers; and
  - (c) Revalidation of emergency medical dispatchers occurs in line with the requirements of the recognised emergency medical dispatcher's authority.

## 7.13 Data management

**Outcome 7.13** *The ACCC data is managed and reporting provided on performance levels.*

**Criteria 7.13.1** Each organisation collects, manages, analyses, securely stores, and reports on communication and ambulance operational activities in line with contractual requirements and service level agreements. Data containing personal or medical information shall be managed and stored in accordance with the Health (Retention of Health Information) Regulations, Privacy Act, and the Health Information Privacy Code. This includes data transmitted to, or stored or viewable on, remote devices such as ambulance data terminals.

- 7.13.2** Each organisation shall ensure:
- (a) Data is collected that allow key service elements to be analysed;
  - (b) Operational and clinical data guide the decision-making processes;
  - (c) Production hours are measured and these resources are utilised to achieve efficiency and effectiveness; and
  - (d) Defined communications processing times are met.

## 8 LAND AMBULANCE RESPONSE

### 8.1 Response capability

**Outcome 8.1** *The clinical capability and timeliness of the land ambulance response is appropriate to the patients' needs.*

**Criteria 8.1.1** Land ambulances shall be resourced to be capable of dealing effectively with pre-hospital emergencies. In some instances the organisation may use a combination of resources to achieve the required response.

**8.1.2** The response capability shall be determined by the highest delegated scope of practice and the available equipment.

**8.1.3** All ambulances providing an emergency response with the intention to transport patients shall operate with a minimum of two clinical personnel. This is intended to minimise risk to the safety of staff and patients.

**8.1.4** The second crew member of an ICP-crewed ambulances should hold a minimum authority to practice (ATP) of paramedic.

**8.1.5** The minimum clinical qualification of any ambulance crew member should be EMT, but shall not be less than FR. Every patient being transported should be attended by a crew member with a minimum ATP of EMT.

NOTE – The transition to consistently providing two personnel when transporting patients will take time to achieve as personnel numbers are increased in consultation with funding agencies. It is anticipated this will be achieved within 3 years of implementing this standard.

**8.1.6** All ambulances providing an emergency response with the intention to transport patients shall be capable of transporting a supine patient with access for clinical care at the patient's head and one side.

**8.1.7** Vehicles crewed by personnel to assess and treat in the community without transporting the patient shall be equipped and tasked to provide community-based patient assessment and treatment. Such vehicles may operate single crewed with registered health professionals or staff with a minimum scope of practice as paramedic.

**8.1.8** Rapid response vehicles shall be equipped to provide rapid patient assessment and urgent treatment (not transport) especially in urban areas and may operate with one crew member and equipment appropriate to the scope of practice of the crew member.

NOTE – Rapid response vehicles are designed for situations which may be time critical or to support ambulance clinical personnel with patients requiring a higher level of care.

**8.1.9** First responder vehicles shall be equipped and tasked to provide basic life support, including AED, and patient assessment and treatment prior to the arrival of a higher level of care in rural areas and may operate with one clinical provider. The response capability shall be at least first responder.

NOTE – These vehicles only transport in exceptional circumstances and normally towards other responding resources.

**8.1.10** Patient transport ambulances shall be sufficiently equipped to enable the provision of basic life support, including AED, and are tasked primarily for the

purpose of providing patient transport when the patient has been clinically assessed and determined to be stable or an escort is provided and may be operated with one clinical provider. The minimum crewing scope of practice shall be at least comprehensive first-aid training with CPR and AED.

NOTE – Such patients are still classified as inpatients of a healthcare facility, and care and treatment *en route* is normally provided by the healthcare facility staff.

- 8.1.11** Event services vehicles shall be resourced and equipped to enable the provision of the agreed level of care.

## 8.2 Equipment maintenance and safety

**Outcome 8.2** *All land vehicles are appropriately equipped, safe, and capable of providing appropriate pre-hospital emergency care for each known or suspected patient condition.*

**Criteria 8.2.1** All emergency road ambulances shall carry BLS and AED equipment, and any additional equipment as required for a particular incident.

**8.2.2** Each organisation shall have a fleet-management programme in place to ensure the ongoing safety and maintenance of all vehicles and equipment.

**8.2.3** Each organisation shall ensure patients and staff are safe while travelling in vehicles by specifying organisational expectations for the use of patient and staff safety restraint systems.

**8.2.4** Each organisation shall comply with all relevant safety restraint legislation in relation to equipment installation and storage.

**8.2.5** Each organisation shall ensure bariatric transport equipment is available when transporting patients who exceed the limitations of the standard stretcher installation.

**8.2.6** Each organisation shall ensure paediatric transport equipment is available when transporting paediatric patients.



## 9 INTER-HOSPITAL TRANSFERS

### 9.1 Clinical care requirements

**Outcome 9.1** *Land and air ambulances providing Inter-hospital Transport (IHT) are resourced, crewed and capable of providing appropriate care for each patient.*

**Criteria 9.1.1** Organisations providing IHT shall ensure that clinical management during transport meets the clinical needs of the patient.

NOTE –

- (1) Such patients are classified as inpatients of a DHB or healthcare facility, and in such cases, the responsibility for the care and treatment *en route* is that of the DHB or healthcare facility staff. This clinical responsibility may be contracted to an ambulance service to provide this clinical care and treatment; and
- (2) The standard of care for critically ill patients should be according to: Australasian College for Emergency Medicine PS03 AND Australian College of Anaesthetists PS52 AND College of Intensive Care Medicine of Australia and New Zealand 'Guidelines for Transport of Critically Ill Patients' IC10 (latest version).

**9.1.2** Patients for IHT shall be designated as one of the following 4 categories which should be agreed upon between the clinician managing the patient prior to transfer, and the IHT service clinician. Patients in Categories 1, 2 and 3 may require either time critical, urgent or routine (non-urgent) transport. Patients in Category 4 will generally require routine (non-urgent) transport. Clinical staff performing IHTs should meet the training and experience requirements in Appendices A and B.

- (a) Category 1 (Intensive Care Level) patients shall be attended by an appropriately trained and equipped critical care team capable of assessing and treating the patient prior to transport, and initiating or continuing treatment during transport that may be required given the patient's underlying condition. The team shall consist of a minimum of two clinicians, one of these shall be either a Transport Medicine Doctor or a Prehospital and Retrieval Medicine Doctor, and the other shall be an Intensive Care Transport Nurse, an anaesthetic technician or an ICP with additional training in Intensive Care Level IHTs. Clinical care required may include but is not limited to: mechanical ventilation, anaesthesia, multiple vasopressor infusions and intra-aortic balloon pump. Patients in this category will require ongoing support in an ICU and includes all invasively ventilated patients and those at significant risk of requiring advanced airway intervention during transfer.
- (b) Category 2 (High Dependency Level) patients shall be attended by an appropriately trained Transport Medicine Doctor, Prehospital and Retrieval Medicine Doctor or Intensive Care Transport Nurse with the necessary skills to initiate and sustain treatment for the high dependency patient, which may include invasive or non-invasive monitoring, multiple infusions and non-invasive ventilation. Patients may require one or two clinicians. This category includes patients that have the potential to require cardiovascular or respiratory support. For time critical transfers (for example, patients with stroke being transferred for endovascular clot retrieval and patients with STEMI being transferred for percutaneous coronary intervention) if a TM doctor or ICU Transport Nurse is not immediately available they may be replaced by another clinician with the required skills to initiate and sustain treatment for that patient if this is deemed in the best interests of the patient.
- (c) Category 3 (Medium – Low Dependency Level) patients are clinically stable, with a low potential for deterioration. This may include patients with stable acute neurological and cardiovascular conditions being transferred for time critical interventions. Patients are unlikely to need intervention beyond the scope of practice of the Transport Doctor, Prehospital and Retrieval Medicine Doctor, Transport Nurse or ICP involved in the transfer. Most of these transfers will be conducted with a single clinician.

(d) Clinical Category 4 (Low – No Dependency Level) patients are clinically stable, generally requiring no clinical intervention. They may be transferred with a single clinician with, at a minimum, basic first aid and CPR/AED skills.

**9.1.3** Any doctor, nurse, midwife, anaesthetic technician or ICP involved in the transfer of a patient shall have the ability to immediately contact a doctor with appropriate vocational registration for advice.

**9.1.4** Specific clinical expertise shall be required in the following transfers:

- (a) For the transfer of obstetric cases, the clinical personnel shall be appropriately skilled in obstetric care;
- (b) For the transfer of paediatric cases, the clinical personnel shall be appropriately skilled in paediatric care;
- (c) For the transfer of neonatal cases, the clinical personnel shall be appropriately skilled in neonatal care;
- (d) For the transfer of ECMO patients the clinical personnel shall be appropriately skilled in ECMO delivery; and
- (e) For transfers occurring using clinical personnel described in (a) to (d) above, at least one clinician in the transport team shall meet the requirements of Transport Nurse, Transport Midwife, **Prehospital and Retrieval Medicine Doctor** or Transport Medicine Doctor.

## 10 AIR AMBULANCE RESPONSE

### 10.1 Response capability

**Outcome 10.1** *Air ambulances are resourced appropriately and are capable of providing appropriate pre-hospital emergency and inter-hospital transport and care for each known or suspected patient condition.*

**Criteria 10.1.1** Organisations providing the aircraft and flight crew for an air ambulance operation shall comply with the New Zealand Aeromedical and Air Rescue Standard and shall ensure that the clinical staff are supported by an organisation complying with this standard.

**10.1.2** Aircraft safety training and equipment familiarisation shall occur on an annual basis, shall be recorded in an auditable format, and shall be supplemented by a specific pre-flight briefing according to the nature of the tasking.

**10.1.3** Clinical responsibility for the patient shall be that of the designated lead clinician on board. Such responsibility begins at the scene for Primary Response and Primary Transports, and on handover from the referring facility clinical staff for IHT. Such responsibility ends following the handover at the referring facility.

**10.1.4** All clinical staff crewing an air ambulance shall be educated in all aspects of local and regional retrieval systems.

**10.1.5** All pilots flying primary retrieval or inter-hospital transfers shall comply with Civil Aviation Rules and meet the New Zealand Aeromedical and Air Rescue Standard.

### 10.2 Primary Response and Primary Transport (pre-hospital)

**Outcome 10.2** *Emergency Air Ambulances dispatched to an incident as a Primary Response or with the intention to provide Primary Transport are resourced and capable of providing appropriate pre-hospital emergency care for each known or suspected patient condition, having regard to available intelligence on the incident and other ambulance or resources available to be dispatched to the incident.*

**Criteria 10.2.1** Emergency Air Ambulances shall be:

- (a) Dispatched by the national centre authorised to dispatch air ambulances utilising the appropriate processes; and
- (b) Capable of becoming airborne within the time frames specified by National Ambulance Sector Office (NASO) contracts or, in the absence of such contracted performance criteria, within 10 minutes during the day or 20 minutes at night; or taking into account weather and other considerations, in the minimum time frame possible to ensure safety and successful completion of the mission.

**10.2.2** Organisations providing an emergency air ambulance response shall operate with a minimum of two clinical providers (excluding pilot(s)) in the following three possible combinations:

(a) *Paramedic-paramedic team*: The first clinical crew member of an air ambulance should hold a minimum Authority to Practice (ATP) of ICP but shall not be less than paramedic, and the second clinical crew member should be paramedic, but shall not be less than EMT, and shall be trained to support the first crew member; or

- (b) *Doctor-paramedic team*: The first clinical crew member shall be a doctor suitably skilled and experienced in pre-hospital care, who meets the requirements of the PHRM Doctor scope of practice (Appendix B1.6.1) or PHRM Specialist scope of practice (Appendix B1.6.2), and the second clinical provider shall be authorised to practice to the ICP or paramedic scope; or
- (c) *Paramedic-transport nurse team*: The first clinical crew member shall be authorised to practice to the ICP scope, and the second clinical provider shall be a transport nurse suitably skilled, educated and experienced in pre-hospital care.

**10.2.3** The urgent transport of a patient from a facility that has been used for staging may be conducted as a primary transport.

NOTE – Staging is a temporary stop to facilitate hand over to a second primary transport team. This may be in the field or at a healthcare facility that is unable to provide the required time critical primary care.

## 11 DEDICATED MARINE AMBULANCE RESPONSE

### 11.1 Response capability

**Outcome 11.1** *All dedicated marine ambulance responses are appropriately resourced and capable of dealing effectively with each known or suspected patient condition.*

NOTE – Where contracted staff or services are employed, they should be from an organisation that complies with this standard.

**Criteria 11.1.1** Designated response vessels operating primarily as a marine ambulance shall operate with a minimum of two clinical personnel. The first clinical crew member of a marine ambulance should hold a minimum authority to practice (ATP) of ICP and shall not be less than paramedic. The second clinical crew member should be paramedic, but shall not be less than EMT, and shall be trained to support the first crew member.

**11.1.2** Inshore and enclosed-waters marine responses shall only be undertaken by clinical personnel authorised to practise to either an EMT, paramedic, or ICP domain, and who have undergone appropriate education in the following key aspects of marine safety:

- (a) Local retrieval systems;
- (b) Marine-related transport matters;
- (c) Roles of the clinical and non-clinical team personnel;
- (d) General vessel awareness and safety; and
- (e) Inshore life jacket use.

**11.1.3** Offshore marine responses shall only be undertaken by clinical personnel authorised to practise to either a paramedic or ICP domain and who have undergone appropriate education in the following key aspects of marine safety in addition to the requirements for inshore:

- (a) Dressing for the marine environment;
- (b) Offshore life jacket use;
- (c) Survival/exposure suit use;
- (d) Life raft use;
- (e) Related safety equipment use;
- (f) Firefighting;
- (g) Water survival; and
- (h) Marine/VHF radio use.

NOTE –

- (1) The Royal New Zealand Coastguard day skipper course covers some elements of the above training.
- (2) Due to the potential for isolation in the marine environment, consideration should be given to providing ICP-level response.

**11.1.4** All vessels shall comply with the applicable maritime rules.

### 11.2 Equipment

**Outcome 11.2** *Dedicated marine ambulances carry or have ready access to equipment and clinical personnel capable of responding to the known or suspected status of persons involved in a particular incident.*

**Criteria 11.2.1** All marine ambulances shall at a minimum carry BLS and AED emergency ambulance equipment and consumables, and any additional equipment for any higher level of clinical personnel qualification assigned to the marine ambulance.

- 11.2.2** All equipment shall be suitable to operate in the specific marine environment they are intended to be used in.

## 12 CLINICAL SERVICES AT MASS GATHERINGS AND EVENTS

- Outcome** 12.1 *All providers of clinical services at mass gatherings and events are appropriately resourced and capable of delivering the services required and have effective systems in place to request emergency assistance via the ACCC.*
- Criteria**
- 12.1.1 Each organisation shall have a process to assess and document the risk for each situation prior to undertaking it, in consultation with the client, and shall provide resources to reflect that assessment. The assessment shall include any foreseeable change in context and shall continue to be monitored over the course of the event. The risk assessment should conform to the guidelines described in AS/NZS ISO 31000.
  - 12.1.2 Each organisation shall have a clear understanding of the level of care that may be required and the capability to provide this including:
    - (a) Clinical competence;
    - (b) Access to medical advice;
    - (c) Equipment (clinical and communications); and
    - (d) Staffing requirements for the duration of the contract.
  - 12.1.3 Each organisation shall operate with clinical personnel appropriate to the level of risk as identified in the risk analysis and have a current delegated scope of practice or be registered.
  - 12.1.4 Each organisation shall ensure that the level of service claimed to be available is actually provided. For example an organisation shall not promote itself as an organisation capable of providing services in the ICP domain if there is no immediate availability of clinical personnel holding an authority to practice to the ICP domain and immediate access to the appropriate equipment.
  - 12.1.5 Prior to an event that is likely to impact the local emergency ambulance service provider, the organisation shall notify the nearest ACCC of the location, timing, and general nature of the event.

## APPENDIX A – SCOPES OF PRACTICE – GUIDANCE

(Informative)

### A1 Ambulance personnel

The scopes of practice for first responder, emergency medical technician, paramedic, intensive care paramedic, and paramedic consultant are set out in Table A1. The qualifications and courses identified in the table are provided as guidance only and are to assist organisations with assessing the scope of practice of clinical personnel.

**Table A1 – Ambulance personnel – scopes of practice**

Scope level	Educational requirements	Practice skill sets (guidance only)
<b>First responder</b>	<p><b>Current qualification:</b> New Zealand Certificate in Emergency Care (First Responder)</p> <p><b>Previous qualifications:</b> Short Course Certificate Level 3 – 4</p> <p>Certificate in Pre-hospital Emergency Care</p> <p>Short Course Certificate in Emergency Medical Response</p> <p>Short Course Certificate in Primary Care</p> <p>NZDF, Defence Health School (NZ), Combat Lifesaver course<sup>2</sup></p> <p>NZ Elementary Ambulance Aid (1988 – 1995)</p>	<p>Fundamentals of pre-hospital emergency care.</p> <p>Knowledge and skills to perform assessment and management of life-threatening situations.</p>
<b>Emergency medical technician</b>	<p><b>Current qualifications:</b> New Zealand Diploma in Ambulance Practice</p> <p>Diploma in Paramedic Science (Level 6) University level</p> <p><b>Previous qualifications:</b> National Certificate in Ambulance (Patient Care &amp; Transport)</p> <p>National Certificate in Ambulance (Patient Care and Transport) (Level 4)</p> <p>NZ Proficiency Ambulance Aid (1977 – 1995)</p> <p>Foundation Certificate Level 4 – 5</p>	<p>Independent clinician who has the knowledge, skills, and clinical expertise to assess, treat, diagnose, administer medicines, manage, discharge, and refer patients in out-of-hospital settings across a range of critical, urgent, and emergent situations.</p> <p>The delegated scope of practice encourages referral to other clinicians when further assessment or intervention is required.</p> <p>Skills and interventions as per NASCWG CPG, ATP, and Practice Levels.</p>

<sup>2</sup> Military scopes are primarily for the management of military personnel with civilians treated in emergencies only and by exception.



Scope level	Educational requirements	Practice skill sets (guidance only)
	NZDF, Defence Health School (NZ), Military Medical Technician [FN1]	
<b>Paramedic</b> Formerly intermediate life support (ILS)	<b>Current qualification:</b> BHSc Paramedicine (or equivalent)  Degree Level 7  <b>Previous qualifications:</b> Short Course Certificate in Cardiology and Certificate in Intravenous Therapy  NZ Intermediate Care Certificate (1977 – 1995)  NZDF, Defence Health School (NZ), Medic	Independent clinician who has the knowledge, skills, and clinical expertise to assess, treat, diagnose, administer medicines, manage, discharge, and refer patients in a range of urgent, emergency, or critical out-of-hospital settings.  Skills and interventions as per NZ CPG Authority to Practise and Practice Levels.
<b>Intensive care paramedic</b>  (Encompasses roles that specialise in scopes outside of intensive/critical care pathway)	<b>Current qualification:</b> BHSc Paramedicine  + Postgraduate Certificate & Diploma in Health Sciences (resuscitation, aero-medical , or other relevant subject)  <b>Previous qualifications:</b> BHSc (Paramedic)  National Diploma in Ambulance (Paramedic)  NZ Advanced Ambulance Aid (1977 – 1995)  Post Grad – Cert HSc  Post Grad – Dip HSc	Independent clinician who has an enhanced knowledge base, skills and clinical expertise to assess, treat, diagnose, supply and administer medicines, manage, discharge and refer patients in a range of urgent, emergency, critical, or out-of-hospital settings.  Utilise a delegated scope of practice within a specific context, such as critical care, aero-medicine, or community care.  Demonstrate clinical leadership skills.  Skills and interventions as per NZ CPG Authority to Practise and Practice Levels.
<b>Paramedic specialist</b> Degree Level 7 + Postgraduate Level 8 – 9	<b>Current qualifications:</b> BHSc Paramedicine  + Postgraduate Certificate & Diploma in Health Sciences (resuscitation, aero-medical, or other relevant subject)  Level 9 Masters degree  MHSc/MPhil/MEmg/MHPrac	Independent paramedic or intensive care paramedic with an extended role in one or more of the following: community health, intensive care, research, emergency management.  Recognised scope of practice, expert knowledge base, and competencies in analysis and complex decision-making skills in their area of expertise.  May include but is not restricted to: <ul style="list-style-type: none"> <li>• Clinical settings</li> <li>• Governance</li> <li>• Education</li> <li>• Research</li> <li>• Leadership</li> </ul>
<b>Consultant paramedic</b> Doctoral qualification	PhD, DHSc	Leading paramedic research.

**A2 Transport Nurses**

Registered nurses working as transport nurses require a specific range of training, skills, and experience to safely practice in this arena, including:

- (a) Autonomous assessment and management of patients within the scope of nurse-only transfers;
- (b) Independent administration of medications in accordance with transport service standing orders; and
- (c) Independent procedural interventions as defined by service clinical practice guidelines.

Transport nurses are classified as Intensive Care Transport Nurses or Transport Nurses.

**A3 Transport Midwives**

Registered midwives working as transport midwives require a specific range of training, skills, and experience to safely practice in this arena, including:

- (a) Autonomous assessment and management of patients within the scope of midwife-only transfers;
- (b) Independent administration of medications in accordance with transport service standing orders; and
- (c) Independent procedural interventions as defined by service clinical practice guidelines.

**A4 Anaesthetic Technicians**

The scope of practice for anaesthetic technicians involved in the transport of patients includes:

- (a) Support for the safe transportation of patients, both within the hospital environment and between hospitals or surgical healthcare facilities; and
- (b) IHT's would always being in conjunction with an anaesthetically trained transport doctor.

**A5 Transport Medicine (TM) Doctors**

The scope of practice for doctors in Transport Medicine includes:

- (a) Autonomous assessment and management of urgent and critical patients within the scope of response of the transport medical service;
- (b) Inter-hospital transport, including stabilisation of patients prior to transport; and
- (c) Independent procedural interventions and drug administration as defined by service clinical practice guidelines and specialist medical clinician qualifications and practice.

**A6 Pre-Hospital and Retrieval Medicine (PHRM) Doctors**

The scope of practice for doctors in pre-hospital and retrieval medicine (PHRM) includes:

- (a) Autonomous assessment and management of urgent and critical patients within the scope of response of the pre-hospital and retrieval medical service;
- (b) Pre-hospital and retrieval medical service, primary response (emergency ambulance service), search and rescue, or disaster (major incident) response; and
- (c) Independent procedural interventions and drug administration as defined by service clinical practice guidelines and specialist medical clinician qualifications and practice.

## APPENDIX B – REGISTERED HEALTHCARE PROVIDERS TRAINING AND EXPERIENCE REQUIREMENTS

(Normative)

### **B1 Minimum training and experience requirements for registered health professionals working under this standard**

**B1.1** The minimum training and experience requirements for registered clinicians who are involved in the transport of patients (which currently include Transport Nurses, Transport Midwives, Anaesthetic Technicians, Transport Medicine Doctors, and PHRM doctors and anaesthetic technicians) are set out below. All registered clinicians who are involved in the transport of patients by air shall also meet the minimum requirements for the New Zealand Aeromedical and Air Rescue Standard.

#### **B1.2 Transport Nurse**

Registered nurses working as Transport Nurses or Critical Care Transport Nurses require a specific range of training, skills, and experience to safely practice in this specialised field.

Minimum eligibility requirements to the Transport Nurse scope of clinical practice under this standard specifically include all the following:

- (a) Registered with the Nursing Council of New Zealand;
- (b) At least 4 years post graduate nursing experience;
- (c) For Intensive Care Transport Nurses at least 2 years critical care (intensive care or emergency medicine) experience;
- (d) Current NZRC CORE Advanced certification (or equivalent);
- (e) In addition, Transport Nurses performing IHTs by air transport shall:
  - (i) Have completed a formal, structured Aeromedical Transport course, and
  - (ii) Have a sound knowledge of transport physiology including stressors of flight and aviation physiology.

#### **B1.3 Transport Midwife**

Registered midwives working as Transport Midwives (i.e. conducting inter-hospital transfers) require a specific range of training, skills, and experience to safely practice in this specialised field.

Minimum eligibility requirements to the Transport Midwife scope of clinical practice under this standard specifically include all of the following:

- (a) Registered with the Midwifery Council of New Zealand;
- (b) At least 4 years post graduate midwifery or nursing experience;
- (c) Current NZRC CORE Advanced certification (or equivalent);
- (d) In addition, Transport Nurses performing IHTs by air transport shall:
  - (i) Have completed a formal, structured Aeromedical Transport course, and
  - (ii) Have a sound knowledge of transport physiology including stressors of flight and aviation physiology.

#### **B1.4 Anaesthetic Technicians**

Minimum eligibility requirements for anaesthetic technicians involved in patient transports are:

- (a) Registered with the Medical Sciences Council of NZ as an anaesthetic technician;
- (b) Current NZRC CORE Advanced certification (or equivalent);
- (c) Have a sound knowledge of transport physiology including stressors of flight and aviation physiology if IHTs are conducted by air.

#### **B1.5 Transport Medicine Doctors**

Doctors working in TM require a specific range of training, skills and experience to safely practice in this specialised field. Their scope includes caring for patients requiring IHT.

Note: Overseas experience should be considered if it is considered equivalent to positions recognised by the relevant Australasian College.

##### **B1.5.1 Minimum Eligibility Requirements – TM Doctor**

A TM doctor should have the training, skills and experience to effectively manage all known or expected clinical conditions for patients that require IHT. Minimum eligibility requirements for a TM doctor are:

- (a) Registration with the Medical Council of New Zealand (MCNZ);
- (b) At least Postgraduate Year 4 (PGY4 – that is, to have completed PGY3);
- (c) Current NZRC CORE Advanced certification (or equivalent);
- (d) Training in aspects of care provided during the transport of patients managed by the organisation. Training in Advanced airway management and mechanical ventilation is required for category 1 (intensive care) patients and for category 2 (high dependency) and category 3 patients for whom a requirement for airway management is considered a possibility.
- (e) For critically ill patients shall meet the requirements of *PS03/PS52 Guidelines for Transport of Critically Ill Patients*;
- (f) Supervision by a TM Specialist as defined in this standard;
- (g) In addition, TM Doctors performing IHTs by air transport shall have a sound knowledge of transport physiology including stressors of flight and aviation physiology.

### **B1.5.2 Minimum Eligibility Requirements – TM Specialist**

This standard addresses the general requirements for a TM Specialist. There are different requirements for a TM Specialist working in a dedicated paediatric, ECMO, obstetric, or neonatal retrieval service.

Minimum Eligibility requirements to the TM Specialist scope of practice under this standard specifically include all of the following:

- (a) Vocationally registered with the MCNZ as a Specialist in Intensive Care Medicine, Emergency Medicine or Anaesthetics;
- (b) Training in the transport of critically ill patients managed by their organisation, including clinical and logistical aspects; and
- (c) Specific experience and training in the transport of children, neonates or ECMO patients if this is part of their service provision.

### **B1.6 Doctors working in Pre-hospital and retrieval medicine (PHRM)**

Doctors in PHRM require a specific range of skills and experience to safely practice in this specialised field. Their scope includes caring for patients requiring primary retrieval.

Note: Overseas experience should be considered if it is considered equivalent to positions recognised by the relevant Australasian College.

#### **B1.6.1 PHRM Doctor**

Minimum eligibility requirements for a PHRM are:

- (a) Registration with the Medical Council of New Zealand (MCNZ);
- (b) At least postgraduate year 5 (PGY5 – that is, to have completed PGY4);
- (c) Advanced trainee or fellow of ACEM, ANZCA, CICM, or overseas equivalent;
- (d) Training in the transport of critically ill patients managed by their organisation;
- (e) All of the following (at registrar/specialist level):
  - (i) 6 months in Emergency Medicine (which must be obtained in a post accredited for advanced training by ACEM),
  - (ii) Intensive care experience (which shall be obtained in a post accredited by CICM):
    - A. 6 months experience in intensive care, or
    - B. 3 months intensive care and an additional further 3 months made up of emergency medicine or anaesthetics,
  - (iii) Anaesthesia experience (which shall be obtained in a post accredited by the ANZCA):
    - A. 6 months experience in anaesthesia, or
    - B. 3 months anaesthesia and an additional further 3 months made up of emergency medicine or intensive care,
  - (iv) Paediatric experience (which shall be obtained in a post accredited by the Royal Australian College of Physicians – Paediatrics and Child Health Division; Terms in paediatric intensive care unit (PICU), neonatal ICU, paediatric emergency medicine, paediatric anaesthetics or general paediatrics will also be accepted):
    - A. 6 months experience in paediatrics, or
    - B. 12 months experience in a mixed adult/paediatric emergency department;
- (f) Supervision by a PHRM specialist, as defined in this standard; and
- (g) In addition, PHRM Doctors performing primary retrievals or IHTs by air transport shall have a sound

knowledge of transport physiology including stressors of flight and aviation physiology.

### B1.6.2 PHRM Specialist

Minimum eligibility requirements to the PHRM Specialist scope of clinical practice under this standard include all of the following:

- (a) The clinician shall be vocationally registered with the MCNZ as a specialist in emergency medicine, anaesthesia, or intensive care medicine;
- (b) Training in the transport of critically ill patients managed by their organisation, including clinical and logistical aspects;
- (c) All of the following (at registrar/specialist level unless stated otherwise):
  - (i) Pre-hospital and Retrieval Medicine experience – 6 months in PHRM (which must be obtained in a post accredited by an Australasian Specialist College),
  - (ii) Emergency Medicine experience – 6 months in Emergency Medicine (which must be obtained in a post accredited for advanced training by ACEM),
  - (iii) Intensive care experience, (which shall be obtained in a post accredited by CICM):
    - A. 6 months experience in intensive care, or
    - B. 3 months intensive care and an additional 3 months made up of emergency medicine, PHRM or anaesthesia,
  - (iv) Anaesthesia experience, (which shall be obtained in a post accredited by ANZCA):
    - A. 6 months experience in anaesthesia, or
    - B. 3 months anaesthesia and an additional further 3 months made up of emergency medicine, PHRM, or intensive care, and
  - (v) Paediatric experience, which shall be obtained in a post accredited by the Royal Australian College of Physicians – Paediatrics and Child Health Division (Terms in Paediatric Intensive Care (PICU), Neonatal Intensive Care (NICU), paediatric emergency medicine, paediatric anaesthetics or general paediatrics shall also be accepted):
    - A. 6 months experience in paediatrics, or
    - B. 12 months experience in a mixed adult/paediatric emergency department;
- (c) Credentialling by the organisation (to meet the requirements of *PS03/PS52 Guidelines for Transport of Critically Ill Patients*, taking into account formal qualifications, professional training and clinical experience as well as their ongoing CPD directly relevant to TM) to define the clinician's scope of practice within the organisation; and
- (d) In addition, PHRM Specialists performing primary retrievals or IHTs by air transport shall have a sound knowledge of transport physiology including stressors of flight and aviation physiology.

## APPENDIX C – EXPLANATION OF TERMS

(Normative)

For the purposes of this standard the following definitions shall apply:

<b>Term</b>	<b>Description</b>
<b>Accountability</b>	A clinical provider's responsibility to account for, or be liable for, fulfilling an action – whether or not that action is carried out by that service
<b>Accredited education institution</b>	An education institution that meets the requirements of the Education Act (refer to sections 162 and 259) or an international equivalent. This may also be an ambulance provider who delivers education as a registered private training establishment (PTE). Professional accreditation of courses by the Convention of Ambulance Authorities provides further industry endorsement that Australasian graduates are appropriately prepared for ambulance roles
<b>Ambulance</b>	Any conveyance operated by an organisation which is designed and used principally for the carriage of sick or injured person(s)
<b>Authority to practice</b>	Refers to the right to provide a healthcare service within the constraints and according to the conditions of a scope of practice and terms of appointment to an organisation. It is the authorisation of a person to use clinical procedures and guidelines (CPGs) by an ambulance service medical director. Authority to practice is granted at a specified practice level that has a delegated scope of practice. A delegated scope of practice defines the medicines and procedures that personnel may administer or perform when treating patients
<b>Automatic vehicle location</b>	A system that can track ambulances or vehicles and display them on a digital map (AVL)
<b>Caller line identification.</b>	Automatically provides call taker with telephone number and address details where available (CLI)
<b>Computer aided dispatch.</b>	System that provides decision support for dispatchers (CAD)
<b>Clinical audit</b>	A systematic review of an organisation's patient care overseen by the medical director
<b>Clinical governance</b>	A system of accountability participated in by clinical staff in an organisation, and at all levels throughout the organisation, to assure quality, safety, and efficacy, with ultimate governing body responsibility
<b>Clinical personnel</b>	Individuals who deliver clinical services. Clinicians may be registered health practitioners (e.g. doctors, nurses, midwives, anaesthetic technicians) or who deliver clinical services under the delegated authority of registered health practitioners (e.g. ambulance personnel).  This includes the provision of care and treatment to the patient by all staff responsible or accountable to the organisation when providing care and treatment to the patient
<b>Coordinated incident management system</b>	The system is designed to improve the management of the response phase to emergency incidents through better coordination between the major emergency organisation (for example, fire, rural fire, police, ambulance, civil defence) and between the many other organisations that also have a role in mounting an emergency response
<b>Credentialling</b>	The formal process used to verify the qualifications, experience and other relevant attributes for the purpose of forming a view about the competence, performance, and suitability of an individual to provide safe healthcare within specific environments

<b>Current accepted practice</b>	Involves the current accepted range of safe and reasonable practice that results in efficient and effective use of available resources to achieve quality outcomes for patients. Current accepted practice should also reflect standards for service delivery where these exist. This may include but is not limited to: <ul style="list-style-type: none"> <li>(a) Codes of practice;</li> <li>(b) Research;</li> <li>(c) Evidence based practice;</li> <li>(d) Professional standards;</li> <li>(e) Best practice guidelines;</li> <li>(f) Recognised/approved guidelines; and</li> <li>(g) Benchmarking</li> </ul>
<b>First responder</b>	A scope of practice that is in the Basic Life Support (BLS) domain
<b>Inshore &amp; enclosed waters</b>	The 'enclosed water limits' as set out in Appendix 1 of the Maritime Rules, Part 20
<b>Inter-hospital Transport (IHT)</b>	Transport of a patient between two healthcare facilities
<b>Medical priority dispatch system</b>	Non-computerised version of the triage system used by the ACCC (MPDS).
<b>Offshore</b>	The area not more than 200 miles from the coast of the North Island or the South Island or Stewart Island or any of the islands in the Chatham Island Group; and <ul style="list-style-type: none"> <li>(a) Includes the area enclosed by the 12 mile New Zealand territorial limit around the Auckland Island group; and</li> <li>(b) Is inside the following two lines commencing at the position 27049'S, 177034'W: <ul style="list-style-type: none"> <li>(i) The line bearing 2040 to the New Zealand 200 mile limit</li> <li>(ii) The line bearing 1800 for 100 miles then 2010 to the New Zealand 200 mile limit</li> </ul> </li> </ul>
<b>Organisation</b>	Includes associations, agencies, groups, independent practitioners, and individuals accountable for the delivery of the service to the consumer
<b>Patient</b>	The recipient of the service. Where appropriate this may include the family/whānau or other representatives
<b>Primary retrievals</b>	The recovery of patients or casualties from the scene of their injury, illness, or incident, mostly undertaken by road ambulances or helicopters
<b>Primary Response in a Medical Emergency</b>	A system using rural doctors and nurses who are funded under contracts between those providers and ACC and the emergency ambulance providers (PRIME)
<b>Rapid response vehicle</b>	Any conveyance whose primary purpose is to provide rapid response to the scene
<b>Re-credentialling</b>	The formal process used to reconfirm authority to practice
<b>Response priority</b>	A resource priority assigned to a dispatch in response to a call
<b>Review</b>	A formal process of updating, amending, or replanning based on the evaluation of outcomes as part of a quality assurance process
<b>Risk management</b>	A formal process of minimising the likelihood of adverse events within the context of the overall management of an individual, group, or community, to achieve the best possible outcome, and deliver a safe and appropriate service

<b>Scope of practice</b>	The extent of an individual's clinical practice within a particular organisation based on the individual's credentials, competence, performance, and suitability, and the needs and the capability of the organisation to support the individual's scope of practice
<b>Staging</b>	A temporary stop to facilitate hand over to a second primary transport team. This may be in the field or at a healthcare facility that is unable to provide the required time critical primary care. See also Staging Guidelines, February 2017, in Major Trauma National Clinical Network, <a href="http://www.majortrauma.nz/resources">www.majortrauma.nz/resources</a>
<b>Standing order</b>	A written instruction issued to administer medication. Standing orders shall be issued by a designated medical director, retained by the organisation, authorising any specific class of persons engaged in the delivery of health services, to supply or administer any specific class of medicines to any class of person in circumstances specified in instruction, without a prescription and meets the requirement of the Medicines (Standing Order) Regulations
<b>Telehealth</b>	The process or system of communicating with a patient, or a clinician at the patients side, via phone or other telecommunications technology, in order to provide clinical assessment, clinical advice, self-treatment advice, referral advice and/or recommendations for transport

For the purposes of this standard the following are a list of abbreviations in common use:

<b>Abbreviation</b>	<b>Description</b>
<b>ACC</b>	Accident Compensation Corporation
<b>ACCC</b>	Ambulance clinical communication centre
<b>ACEM</b>	Australasian College for Emergency Medicine
<b>ACRRM</b>	The Australian College of Rural and Remote Medicine
<b>AED</b>	Automated external defibrillator
<b>ALS</b>	Advanced life support
<b>AMPLANZ</b>	Ambulance National Major Incident Plan for New Zealand
<b>ANZCA</b>	The Australian and New Zealand College of Anaesthetists
<b>BLS</b>	Basic life support
<b>CAA</b>	Civil Aviation Authority of New Zealand
<b>CAD</b>	Computer aided dispatch. System that provides decision support for dispatchers
<b>CCPHRM</b>	Australasian Conjoint Committee of Pre-hospital and Retrieval Medicine
<b>CCSOPs</b>	Communications Centre Standard Operating Procedures
<b>CICM</b>	College of Intensive Care Medicine
<b>CIMS2</b>	New Zealand Coordinated Incident Management System
<b>CORE</b>	Certificate of Resuscitation and Emergency Care
<b>COASTN</b>	New Zealand College of Air and Surface Transport Nurses
<b>CPG</b>	Clinical procedures and guidelines
<b>CPR</b>	Cardiopulmonary resuscitation



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<b>DHB</b>	District health board
<b>ECMO</b>	Extra Corporeal Membrane Oxygenation
<b>EMA</b>	Emergency medical assistant
<b>EMD</b>	Emergency medical dispatcher
<b>EMT</b>	Emergency medical technician
<b>ePRF</b>	Electronic Patient Report Form
<b>FR</b>	First responder
<b>ICP</b>	Intensive care paramedic
<b>ICU</b>	Intensive care unit
<b>IHT</b>	Inter-hospital transport
<b>ILS</b>	Intermediate life support
<b>IMIST-AMBO</b>	Handover protocol which stands for identification of the patient, mechanism of injury or medical complaint, injuries or information related to complaint, signs and symptoms, treatment and trends, allergies, medication, background, other information
<b>ISOBAR</b>	Handover protocol which stands for identify, situation, observations, background, agreed plan, read back
<b>MCI</b>	Mass casualty incident
<b>MPDS</b>	Medical priority dispatch system
<b>NASCWG</b>	National Ambulance Sector Clinical Working Group
<b>NASO</b>	National Ambulance Sector Office
<b>NCLWG</b>	National Clinical Leadership Working Group
<b>NZBS</b>	New Zealand Blood Service
<b>NZRC</b>	New Zealand Resuscitation Council
<b>NZTA</b>	New Zealand Transport Agency
<b>PHRM</b>	Pre-hospital and retrieval medicine
<b>PRIME</b>	Primary response in a medical emergency
<b>PSAP</b>	Public safety answering point. Examples include police, fire service
<b>PTS</b>	Patient transport service. Non-urgent, non-emergency ambulance
<b>RACP</b>	Royal Australasian College of Physicians
<b>RCCNZ</b>	Rescue Coordination Centre New Zealand
<b>SAC</b>	Severity assessment code
<b>SAR</b>	Search and rescue
<b>SMS</b>	Safety management system

**SSM**

Safe ship management

## APPENDIX D – NEW ZEALAND LEGISLATION

(Informative)

Table D1 outlines New Zealand legislation relevant to ambulance services, and includes a brief description where specific references are made to ambulance or ambulance services.

**Table D1 – New Zealand legislation and specific references made to ambulance or ambulance services**

<b>New Zealand legislation</b>	<b>Specific reference to ambulance or ambulance services</b>
Accident Compensation Act 2001	Includes regulations on payment for transport of deceased persons by ambulance
Accident Compensation (Ancillary services) Regulations 2002	Defines 'ambulance' and 'ambulance operator' under ACC
Accident Compensation (Experience Rating) Regulations 2017	Risk levy groups/classifications
Accident Compensation (Motor Vehicle Account Levies) Regulations 2017	Defines ambulance as in section 2(1) of the Land Transport Act 1998. Sets vehicle levies
Accident Compensation (Work Account Levies) Regulations 2017	Levy rates from April 2017
Auckland International Airport By-laws Approval Order 1989	Prohibits false ambulance alarms Driving restrictions at Auckland International Airport
Building Act 2004	Defines <i>priority buildings</i> which includes ambulance response services
Building (Earthquake prone buildings) Amendment Act 2016	Defines ambulance stations as priority buildings
Children, Young Persons, and Their Families (Residential Care) Regulations 1996	Inclusion of ambulance in residence emergency management plans
Christchurch International Airport By-laws Approval Order 1989	Prohibits false ambulance alarms Driving restrictions at Christchurch International Airport
Civil Defence Emergency Management Amendment Bill	Potential inclusion of ambulance manager into CDEM coordinating executive groups
Customs and Excise Regulations 1996	Conditions on which drawbacks are allowed
Electricity Regulations 1997	
Employment Relations Act 2000	Emergency ambulance service considered to be an essential service
Geneva Conventions Act 1958	Restrictions on using the symbol of the Red Cross on ambulances
Health (Retention of Health Information) Regulations 1996	Includes providers of ambulance services to the public
Health and Disability Commissioner Act 1994	Defines any person who provides ambulance services to the public as a healthcare provider
Health and Safety at Work Act 2015	Inclusion of ambulance personnel as emergency service workers
Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016	Obligation to consult with ambulance services
Income Tax Act 2007	Exclusion of accommodation – definition
Land Transport Act 1998	The principal Act for land transport. It promotes safe road user behaviour and vehicle safety and provides for a system of rules governing road user behaviour, the licensing of drivers, and technical aspects of land transport

New Zealand legislation	Specific reference to ambulance or ambulance services
	Defines: <i>ambulance; passenger service</i>
Land Transport (Driver Licensing) Rule 1999	Rule for obtaining and renewing driver licences and endorsements.  Defines: <i>ambulance</i>
Land Transport Management Act 2003	The purpose of this Act is to contribute to an effective, efficient, and safe land transport system in the public interest.  Excludes ambulances from paying tolls
Land Transport (Road User) Rule 2004	Rule for the requirements of road users when using the road network  Defines: <i>ambulance service; emergency vehicle;</i>
Land Transport Rule: Dangerous Goods 2005	Rule for the safe transport of dangerous goods on land.  Defines: <i>emergency services personnel</i>
Land Transport Rule: Operator Licensing 2017	Rule for the requirements for operators and drivers of transport services. Excludes ambulance service drivers from driver identification card requirements.  Defines: <i>ambulance service; emergency service; passenger service</i>
Land Transport Rule: Passenger Service Vehicles 1999	Rule for construction requirements for passenger service vehicles. Vehicles that are ambulances designed to carry recumbent patients need not comply with this rule.
Land Transport Rule: Traffic Control Devices 2004	Rule for the requirements for the design, construction, installation, operation, and maintenance of traffic control devices.  Defines: <i>emergency services personnel</i>
Land Transport Rule: Vehicle Dimensions and Mass 2016	Rule for the dimension and mass limits for vehicles operating on New Zealand roads.  Defines: <i>ambulance service; emergency services</i>
Land Transport Rule: Vehicle Lighting 2004	Rule for the safety requirements and standards for vehicle lighting.  Defines: <i>ambulance service; emergency vehicle</i>
Land Transport Rule: Work Time and Logbooks 2007	Rule for the limits around work time hours and logbooks for a driver of a vehicle that requires a Class 2 – 5 licence, or is used in a transport service.  Requires a dispatcher to consider alternatives before sending a person who has exceeded their work time hours on a priority call.  Excludes/exempts emergency service vehicle drivers from logbook requirements, though an emergency service may be called upon to provide operational records.  Defines: <i>ambulance service; emergency; emergency service; priority call</i>
Mines Rescues Act 2013	Requirement to consult, duties of the incident controller
National Civil Defence Emergency Management	Defines ambulance providers roles and

New Zealand legislation	Specific reference to ambulance or ambulance services
Plan Order 2015	responsibilities within Health and Disability Services, St John to coordinate the provision of ambulance personnel, patient identification responsibilities, assisting with police investigation
Nelson Airport Bylaws Approval Order 2007	Prohibits false ambulance alarms Driving restrictions at airport
Palmerston North International Airport Bylaws Approval Order 2003	Driving restrictions at Palmerston North International Airport
Transport Services Licensing Regulations 1989	Private ambulances being exempt when providing services to the public (when public service is unavailable)
Vulnerable Children Act 2014	Ambulance services considered to be regulated health services
Wellington International Airport Bylaws Approval Order 1995	Driving restrictions at Wellington International Airport
Wellington Free Ambulance Act 1941	Empowerment for local authorities to contribute.

## APPENDIX E – EMERGENCY MEDICAL DISPATCH (EMD) LEVEL DESCRIPTIONS

(Informative)

Table E1 sets out the four levels of emergency call taker or dispatcher, and the descriptions of each level.

**Table E1 – Emergency medical dispatcher levels**

<b>Emergency call taker/dispatcher levels</b>	<b>Level descriptions</b>
<b>L1 emergency call taker</b>	A call taker who has completed the modules in the call taker training manual and has been signed off by two mentors as competent and able to take calls unsupervised. The timescale is estimated at approximately 6 months.
<b>L2 emergency call taker/dispatcher</b>	A call taker/dispatcher who is consolidating knowledge and skills, as well as learning the fundamentals of dispatch and can dispatch a low-call volume channel once signed off as competent by two mentors.
<b>L3 emergency call taker/dispatcher</b>	A call taker/dispatcher who can dispatch a moderate call volume channel once signed off as competent by two mentors
<b>L4 emergency call taker/dispatcher</b>	A call taker/dispatcher who can dispatch all channels once signed off as competent by two mentors.

## APPENDIX F – RESPONSE PRIORITY CATEGORIES

(Normative)

ACCs shall utilise agreed response priority categories when dispatching resources to an incident. The categories will incorporate an indication of the threat to life, the appropriate driving response (including, for example, use of warning devices or speed), and the appropriateness of interrupting meal or driving breaks or utilising co-responders.

The categories should be reviewed periodically and may evolve in response to evidence based need or risk.

NOTE – Each category may be subdivided or have sub-categories.

Table F1 outlines the response priority categories currently used by ambulance services.

**Table F1 – Response priority categories**

<b>Response priority category</b>	<b>Incident</b>
Purple	Immediately life threatening, such as cardiac or respiratory arrest
Red	Life or limb at risk Potential for life at risk Not enough information to exclude life at risk
Orange	Life or limb not immediately at risk, may be upgraded to red with clinical discretion
Green	Life or limb not at risk/routine Time out as requested
Grey	Life or limb not at risk/routine Potential to resolve the incident via tele-triage