

Paramedicine Scope of Practice: Emergency Department Pilot – Mudgee Health Service

Integrated Paramedic Workforce Model Project

Context

Paramedic is a health practitioner title protected by legislation within the Health Practitioner Regulation National Law, as in force in each state and territory. In order to lawfully practice as a paramedic in Australia, a paramedic must be registered with the Paramedicine Board of Australia.

As registered health practitioners, paramedics apply their clinical knowledge, skills and judgement to provide healthcare services traditionally in the provision of urgent and/or emergency assessment, diagnosis and treatment of patients, including provision of clinical advice, referral and where required escalation to acute medical care when working from a mobile platform¹. They are health professionals who have the capability to make sound judgements in the absence of full information and to manage varying degrees of risk when there is complex, competing or ambiguous information or uncertainty.

Paramedics' ability to adapt to any situation and patient presentation results in transferable capability that can be applied to a variety of contexts². From this perspective paramedicine can be defined as:

*"A domain of practice and health profession that specialises across a range of settings including, but not limited to, emergency and primary care. Paramedics work in a variety of clinical settings such as emergency medical services, ambulance services, hospitals and clinics as well as non-clinical roles, such as education, leadership, public health and research. Paramedics possess complex knowledge and skills, a broad scope of practice and are an essential part of the healthcare system. Depending on location, paramedics may practice under medical direction or independently, often in unscheduled, unpredictable or dynamic settings."*³

The following descriptors apply to paramedic roles within NSW Ambulance:

- **Paramedic:** paramedics are registered health practitioners with the qualifications, knowledge, skills, capabilities and judgement to provide urgent and non-urgent mobile health care to the community across age and acuity spectra. They assess each situation to determine the nature and severity of problems and apply the required knowledge and experience to provide person-centred care with the best interest of patients as their primary concern and responsibility.
- **Intensive Care Paramedic:** paramedic specialists with advanced training, knowledge and skills in the management of critically unwell patients.
- **Extended Care Paramedic:** paramedic specialists with advanced training, knowledge and skills in the management of low acuity patients and referral pathways.

¹ <https://gazette.govt.nz/notice/id/2020-gs5307>

² Shannon B, Eaton G, Lanos C, Leyenaar M, Nolan M, Bowles KA, Williams B, O'Meara P, Wingrove G, Heffern JD, Batt A. The development of community paramedicine; a restricted review. Health Soc Care Community. 2022 Nov;30(6):e3547-e3561

³ Williams, B., Beovich, B., & Olausson, A. (2021) The definition of paramedicine: An international delphi study, Journal of Multidisciplinary Healthcare, 14, pp 3561-3570.

Clinical Approach to Care

Paramedics manage and assess undifferentiated patients “in place” within the community (spanning age and acuity), determining the patient’s disposition aligned to their health care needs. Paramedics undertake focussed patient assessment as a dynamic process in which the response to treatment informs ongoing management. This approach is characterised by:

- Purposeful information gathering
- Navigation of ambiguity and complex problems
- Understanding and considering the patient in the context of their place or environment in the community
- Synthesis and critical analysis of information gathered
- Formulation and implementation of a care plan
- Assessment and management of risk
- Ability to work in various systems
- Ability to make teams work utilising the people who are available
- Engagement in consultation with health professionals and able to work independently and take decisions
- Advocacy for patients based on their appreciation of patient’s context in the community

Paramedic management is typically goal-directed rather than strictly adherent to protocolised regimes. In the NSW Ambulance context, a suite of clinical guidelines provide the authorising environment for clinical practice and are holistically applied, rather than in a linear fashion, to guide patient centred clinical decision making for provision of care.

Registration Requirements

1. Qualifications

Paramedics must meet the Paramedicine Board of Australia’s qualification requirement to gain registration as a paramedic. This involves completing a paramedicine qualification issued from an approved or accepted program of study⁴. This now involves completion of an undergraduate degree.

2. Suitability⁵

The Paramedicine Board has established the registration standards that define the requirements all paramedics must meet to be registered. There are 5 registration standards for paramedicine that paramedics must satisfy:

- Continuing professional development registration standard
- Criminal history registration standard
- English language skills registration standard
- Professional indemnity insurance arrangements registration standard
- Recency of practice registration standard

To be deemed suitable for registration as a paramedic a person must⁶:

⁴ <https://www.paramedicineboard.gov.au/Qualifications.aspx>

⁵ <https://www.paramedicineboard.gov.au/Professional-standards/Registration-standards.aspx>

⁶ <https://www.paramedicineboard.gov.au/Registration.aspx>

- Have no impairment that, when practising, would be a risk to the health and safety of the public
- Have no criminal history that the board deems as making the person unsuitable for registration (see the board's criminal history registration standard)
- Have no outstanding regulatory issues including disqualification cancellation or suspension as a health care practitioner in any jurisdiction
- Have suitable English language skills as set out in the board's *English language skills registration standard*
- Satisfy the board's recency of practice requirements as set out in the *recency of practice registration standard*
- Satisfy the requirements of all the board's registration standards regarding suitability for registration, and
- Be a fit and proper person and competent to practice safely

3. Capabilities⁷

The Paramedicine Board has produced professional capability statements that define the minimum knowledge, skills and professional attributes necessary for practice as a paramedic. The Board states that professional capability reflects how a practitioner applies their professional judgement, decision-making skills, and experiential knowledge to use their scientific knowledge, practical skills and ability in any given situation. The capabilities have been grouped into 5 domains that identify elements of practice. Each domain contains a list of statements that identify the scope of capabilities a paramedic must demonstrate.

- Domain 1: The professional and ethical practitioner
- Domain 2: The communicator and collaborator
- Domain 3: The evidence-based practitioner
- Domain 4: The safety and risk management practitioner
- Domain 5: The paramedicine practitioner

Paramedics are expected to practice in alignment with these capabilities.

Code of Conduct

Paramedics must meet the standards of professional conduct set out in Paramedicine Board's Code of Conduct⁸. This aligns with the Code of Conduct for all registered health practitioners. Paramedics working for any health service or entity within NSW Health must meet the standards of ethical and professional conduct set down in the NSW Health Code of Conduct.⁹

Employment Context

NSW Ambulance is supporting the Integrated Paramedic Workforce Model Project through the availability of suitable paramedics for secondment to authorised pilots. As a statewide integrated mobile health service, NSW Ambulance is an agency of NSW Health. NSW Ambulance paramedics are therefore subject to the same standards as all NSW health clinical employees. This includes:

- Allocation of a Stafflink Number

⁷ Paramedicine Board of Australia *Professional capabilities for registered paramedics* <https://www.paramedicineboard.gov.au/Professional-standards/Professional-capabilities-for-registered-paramedics.aspx>

⁸ https://www.ahpra.gov.au/Resources/Code-of-conduct/Shared-Code-of-conduct.aspx?_gl=1*1uqjosc*_ga*MTI4Mjk4NTc3MC4xNzA4NDgxNDA5*_ga_F1G6LRCHZB*MTcxODkzODQxOS4yNC4xLjE3MTg5Mzg0MjguMC4wLjA

⁹ https://www1.health.nsw.gov.au/pds/Pages/doc.aspx?dn=PD2015_049

H24/130981

- Completion of standard police checks
- Orientation to and compliance with the NSW Health Code of Conduct
- Completion of HETI mandatory training and education utilising the MyHealth platform

NSW Ambulance paramedics maintain compliance with the NSW Ambulance credentialing policy and procedure requirements which include:

- Current registration with the Paramedicine Board of Australia
- Current paid employment Working with Children Check
- Compliance with Schedule A Vaccination requirements
- Completion of annual NSW Ambulance mandatory clinical professional development requirements

Scope of Practice

1. NSW Ambulance

In the NSW Ambulance service delivery environment, paramedic authorised interventions and medications informing scope of practice exist within a context of paramedicine professional standards, service planning and public health.

NSW Ambulance authorises a scope of practice (Appendix 1) aligned to Paramedicine Board of Australia approved education programs, Paramedicine Board of Australia paramedic professional capabilities and the paramedicine clinical approach.

The NSW Ambulance clinical practice guidelines provide the authorising environment for the paramedic scope of practice. Paramedics use a range of guidelines simultaneously to guide their practice relevant to the patient's presentation. Specific paramedic interventions and medications are applied within the context of these guidelines as clinical decisions guide patient care. Appendix 1 provides a summary of key practices, procedures and medications that are applied within the context of the clinical guidelines. Whilst interventions and procedures are listed against particular roles, the possibility exists for micro-credentialing in individual procedures to reflect local need. The NSW Ambulance paramedic clinical practice guidelines are publicly available and can be accessed through the Apple Store and Google Play.

The specific interventions and medications authorised for NSW Ambulance paramedics do not represent the possible paramedic scope of practice. Scope is always context specific and varies from health service to health service. The NSW Ambulance paramedic scope is specific to the NSW Ambulance service delivery context as a statewide entity. It reflects what has been identified as producing health care benefits to patients in the context of current models of care provided by NSW Ambulance as a mobile health service integrated within the NSW Health System.

The scope of practice is subject to constant review and development aligned to emerging clinical evidence and demonstrated value for the community and system. Governance of the paramedic scope of practice within NSW Ambulance is provided by the Clinical Practice Committee and the peak clinical oversight body, the Clinical Governance Committee.

2. Pilot Scope of Practice – Mudgee Health Service, Emergency Department

The context of the pilot project is foundational to determining the adaptation of the NSW Ambulance paramedic scope. The nature of the health service and multi-disciplinary team environment are critical factors in determining the paramedic's scope of practice. The scope of practice for the Mudgee Emergency Department (ED) pilot is available at Appendix 2. Authorisation for the scope of practice is specific to paramedics participating in the pilot at Mudgee ED and is only endorsed for practice within that facility for the duration of the pilot.

Pilot Education Pathway

Paramedics selected to participate in the pilot will complete a training and education program to support their integration into the health service team, micro-credentialling where required, and orientation to key local systems and processes. This will be delivered in partnership by the LHD and NSW staff to reflect the scope of practice agreed for each pilot site.

The program incorporates online, didactic, simulation, and supervised practice elements. It will take an interactive and immersive approach to best support learning. The program will include but is not limited to pilot orientation, interprofessional awareness of scope of practice, facility orientation including work health and safety and medication handling, orientation to the LHD including additional virtual support services, referral and clinical pathways, key policies and procedures, Code of Conduct and CORE Values, ED equipment, as well as clinical and non-clinical ICT systems (including eMR and eMeds).

Micro-credentialling will occur during this orientation period for pre-approved areas requiring key competencies to be demonstrated that are within the Scope of Practice of a Paramedic, but which may be unique to the pilot setting (for example use of Point of Care Testing or POCT).

Medication Authorisation

Paramedics will administer medications either under a standing order or by following the direction of a medical practitioner. The list of medications for which standing orders will apply for the pilot site are included in the attached scope of practice at Appendix 2.

Appendix 1: NSW Ambulance Paramedic Interventions and Medications

The NSW Ambulance clinical practice guidelines provide the authorising environment for the paramedic scope of practice. Paramedics use a range of guidelines simultaneously to guide their practice relevant to the patient's presentation. Specific paramedic interventions and medications are applied within the context of these guidelines as clinical decisions guide patient care.

Assessment	Authorisation		
Item	Paramedic	Intensive Care Paramedic	Extended Care Paramedic
Primary Assessment	•	•	•
Secondary Assessment (incl. HR, RR, Temp, Pain, AVPU)	•	•	•
Glasgow Coma Scale	•	•	•
Neurological/Spinal assessment	•	•	•
Mental Health assessment	•	•	•
Pain Assessment	•	•	•
Pupil assessment	•	•	•
Pulse Oximetry	•	•	•
Blood Pressure	•	•	•
Capnography	•	•	•
Recognition of sick baby or child	•	•	•
Implementation of patient disposition care pathways - see and treat, see and escalate (ED), see and refer, see and discharge.	•	•	•

Procedures	Authorisation		
Item	Paramedic	Intensive Care Paramedic	Extended Care Paramedic
Blood Glucose Testing	•	•	•
B-Ketone test			•
Beta HCG Test			•
Arterial Tourniquet & Wound Packing	•	•	•
12 Lead ECG acquisition, interpretation, transmission and confirmation	•	•	•
Subcutaneous injection	•	•	•
Intramuscular injection	•	•	•

H24/130981

Intravenous cannulation	•	•	•
Intraosseus access		•	
Nebulised medication administration	•	•	•
Intranasal medication administration	•	•	•
Infusion sets	•	•	•
Agila Syringe Driver		•	
Needle Thoracostomy	•	•	•
Peak Expiratory Flow Rate	•	•	•
CPAP/PEEP	•	•	•
Conscious Sedation		•	
Prehospital Thrombolysis	•	•	•
Prehospital birth	•	•	•
Post partum haemorrhage	•	•	•
Breech Birth	•	•	•
Shoulder Dystocia	•	•	•
Management of 3 rd stage of Labour	•	•	•
Cervical Collar	•	•	•
Soft Collar	•	•	•
Limb Splinting –Cardboard &Traction	•	•	•
Pelvic Splint	•	•	•
Mechanical Restraint	•	•	•
Extrication Equipment – NEIJ device, scoop stretcher, extrication board, combi carrier	•	•	•
Bed pan and urinals	•	•	•
Fishhook Removal	•	•	•
Tick Removal	•	•	•
Skin Tears	•	•	•
Urinary Catherisation (IDC & SPC)			•

H24/130981

Gastrostomy Tubes			•
Reductions of anterior shoulder, patella, finger, toe and annular ligament dislocations.			•
Primary closure; Suturing, tissue glue			•
Digital nerve blocks			•
Nasal tampons			•
Dynacast Prelude, Plaster of Paris			•
Zimmer splint, Shoulder immobilisers, Crutches.			•
Otoscopy			•
Wound dressings (Allevyn, Aquacel, Osmocel, Kaltostat, Comfeel)			•

Resuscitation	Authorisation		
	Paramedic	Intensive Care Paramedic	Extended Care Paramedic
Basic Airway Care & Management incl oral suction	•	•	•
Oxygen Administration	•	•	•
Cardiac Arrest Management – medical and traumatic	•	•	•
Oropharyngeal Airway	•	•	•
Nasopharyngeal Airway	•	•	•
Bag Valve Mask	•	•	•
Supraglottic Airway (I-gel)	•	•	•
Upper Airway Obstruction	•	•	•
Laryngoscope and Magill Forceps	•	•	•
Endotracheal Intubation and extubation		•	
Video Laryngoscopy		•	
Manual Defibrillation	•	•	•
Endotracheal Intubation		•	
Post Intubation Sedation		•	
CPRIC Sedation	•	•	•

H24/130981

Tracheal Suction		•	
Intragastric tube		•	
Newborn Resuscitation	•	•	•
Lucas Mechanical CPR	•	•	•
Valsalva Manoeuvre	•	•	•
Synchronised Cardioversion		•	
Transcutaneous Pacing		•	

Medications	Authorisation		
	Paramedic	Intensive Care Paramedic	Extended Care Paramedic
Acetylsalicylic Acid	•	•	•
Adrenaline 1:1,000 (IM)	•	•	•
Adrenaline 1:10,000 (IV Adult Cardiac Arrest)	•	•	•
Adrenaline Infusion		•	
Adrenaline 1:1,000 (ETT)		•	
Adrenaline 1:10,000 (Newborn and paediatric resuscitation, asthma, bradycardia, cardiogenic shock, ROSC)		•	
Amiodarone		•	
Atropine		•	
Amoxicillin			•
Amoxicillin/ Clavulanic Acid			•
Benzyl Penicillin	•	•	•
Cephalexin			•
Calcium Gluconate		•	
Clopidogrel	•	•	•
Compound Sodium Lactate	•	•	•
Doxycycline			•
Droperidol	•	•	•

H24/130981

Enoxaparin Sodium	•	•	•
Fentanyl	•	•	•
Fexofenadine	•	•	•
Frusemide		•	
Glucose Gel	•	•	•
Glucose 10%	•	•	•
Hydrocortisone	•	•	•
Ibuprofen	•	•	•
Ibuprofen Suspension			•
Influenza Vaccine	•	•	•
Ipratropium Bromide	•	•	•
Ketamine		•	
Lignocaine 1%	•	•	•
Lignocaine 2%		•	•
Lignocaine 2% Gel			•
Lignocaine & Phenylephrine			•
Methoxyflurane	•	•	•
Metoclopramide	•	•	•
Midazolam	•	•	•
Morphine	•	•	•
Naloxone	•	•	•
Ondansetron	•	•	•
Oxygen	•	•	•
Oxytocin	•	•	•
Oxytocin Infusion		•	
Paracetamol	•	•	•
Paracetamol Suspension			•

H24/130981

Paracetamol with Codeine			•
Prednisolone			•
Salbutamol	•	•	•
Sodium Bicarbonate		•	
Sodium Citrotartrate			•
Tenecteplase	•	•	•
Trimethoprim			•

Appendix 2: Pilot Scope of Practice – Emergency Department Paramedic – Mudgee Health Service

Purpose

The paramedic will undertake their role in the pilot as an autonomous clinician in line with the recognised scope of practice of paramedicine which has been adapted below to suit the local pilot. Paramedics will work as part of the multi-disciplinary team to this scope of practice, the pilot role description, and the pilot service model, while adhering to local policies, procedures, and standing orders.

Name	Emergency Department Paramedic
Context of practice	Emergency Department Mudgee Health Service
Clinical service¹⁰	Emergency Department Level 3
Operational aspects	FTE hours aligned to 7-day roster
Core clinical practice	<p>Clinical care includes (but not limited to):</p> <ul style="list-style-type: none"> • NSW authority to implement NSW clinical guidelines where appropriate within the context of health service delivery of the ED • Comprehensive history taking and clinical assessment • Determination of provisional diagnosis and differential diagnosis • Symptom assessment and management • Provision of procedures • In line with relative procedures, provide Advanced Life Support as a member of a multidisciplinary team • Administer medications under MO direction or using approved pilot specific standing orders • Medication safety (e.g., best possible medication history, medication review, medication reconciliation, stewardship) • Use of approved pilot pathways and protocols to request limited diagnostic investigations • Completion of patient care coordination and planning • Review therapies and management • Advocacy, health promotion and education • Completion of documentation related to patient care • Collaboration with the ED health team and other relevant health teams • Undertaking patient risk assessment for hospital admissions • Referral to and from other health professionals (external referrals from supervising practitioner)
Non-clinical arrangements	Engages in activities relating to the delivery and evaluation of pilot.

¹⁰ [Guide to the Role Delineation of Clinical Services \(2024\)](#)

H24/130981

Operational responsibility	Clinical - Medical Line Manager - ED Nurse Unit Manager
Professional responsibility	Senior NSW Ambulance Paramedicine Clinician
Diagnostic	May request or undertake Point of Care Testing (POCT), relevant diagnostic investigations including plain x-ray (simple chest and isolated limb) utilising approved pilot pathways and protocols
Consulting	May be invited for consultation of patients treated by another practitioner
Micro-credentialling	Micro-credentialling to support pilot specific interventions e.g., POCT
Evaluation, quality & safety	Participates in evaluation of the pilot and practices in accordance with local safety and quality standards, and care delivery
Teaching and learning	Attends and contributes to clinical teaching, study days, in-services, conferences, mentorship, supervision or other learning
Emergency treatment	Paramedics must not exceed their pilot scope of practice. Paramedics should follow the endorsed clinical escalation and support service pathways to assist in an emergency.
Clinical escalation	If a clinical situation arises that is outside the paramedic's scope of practice or clinical expertise, the paramedic will consult with a senior clinician or senior medical officer (MO). The paramedic will work collaboratively to develop treatment plans, or handover care through referral to appropriate practitioners or health services.
Specific medications	Outlined below

The Project Executive Steering Committee agrees this scope of practice has been developed collaboratively and supports the practice for the named paramedic.

Scope of Practice granted for the period of:	Start Date	Start of pilot: 30/09/2024
	Finish Date	End of pilot: 09/12/2024

<i>Paramedic</i>	<i>Signature</i>	<i>Date</i>
<i>Name</i>		
<i>Position</i>		

H24/130981

<i>Clinical Lead/ Head of Department (Medical)</i>	<i>Signature</i>	<i>Date</i>
<i>Name</i> <i>Position</i>		

<i>Hospital Governance lead</i>	<i>Signature</i>	<i>Date</i>
<i>Name</i> <i>Position</i>		

<i>Project Governance lead/Representative</i>	<i>Signature</i>	<i>Date</i>
<i>Name</i> <i>Position</i>		

NSW Ambulance acknowledgement

<i>Associate Director Paramedicine and Clinical Practice</i>	<i>Signature</i>	<i>Date</i>
<i>Name</i>		
<i>Director Medical Services and Research</i>	<i>Signature</i>	<i>Date</i>
<i>Name</i>		

Medications

a) Authorisation under Standing Orders

- Adrenaline – Anaphylaxis
- Adrenaline – Cardiorespiratory Arrest
- Adrenaline – Severe or Life-Threatening Croup
- Aspirin
- Fentanyl
- Glucose gel
- Ipratropium bromide
- Lignocaine
- Morphine
- Naloxone
- Ondansetron
- Oxycodone
- Paracetamol
- Salbutamol
- Sodium Chloride 0.9%

b) Authorisation under Medical Officer Direction

- For medications not authorised under standing orders, provision of medications by paramedics in the Mudgee pilot will be authorised under medical officer direction.