QAS CLINICAL PRACTICE MANUAL

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enFlow® blood warmer  
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Extrication board  
Fracture reduction  
Helmet injury  
Manual inline stabilisation  
NEANN

**DRUG THERAPY PROTOCOLS**

Adrenaline  
Amiodarone  
Aspirin  
Atropine  
Benztropine  
Box jellyfish antivenom  
Calcium gluconate 10%  
Ceftriaxone  
Clopidogrel  
Enoxaparin  
Fentanyl  
Fenoterol  
Furosemide  
Glucagon  
Glucose 5%  
Glucose 10%  
Glucose gel  
Glycerol trinitrate  
Haloperidol  
Heparin  
Hydrocortisone  
Hydroxocobalamin  
Hypertonic saline 7.5%  
Insulin (Actrapid®)

Ipratropium bromide  
Isoprenaline  
Ketamine  
Lignocaine 2%  
Magnesium sulphate  
Methoxyflurane  
Metoclopramide  
Metoprolol  
Midazolam  
Morphine  
Naloxone  
Noradrenaline  
Ondansetron  
Oseltamivir  
Oxygen  
Packed red blood cells  
Paracetamol  
Phenytoin  
Promethazine  
Salbutamol  
Sodium bicarbonate 8.4%  
Sodium chloride 0.9%  
Tenecteplase  
Tirofiban  
Water for injection

**APPENDIX**

Medical abbreviations
The QAS aims to provide high standards of emergency treatment, patient care and transportation for sick and injured people. The new CPM reflects contemporary standards of clinical practice in the pre-hospital environment. It includes assessment and treatment information based on expert evidence.

The CPM is divided into three parts:

- clinical practice guidelines (‘CPGs’)
- clinical practice procedures (‘CPPs’)
- drug therapy protocols (‘DTPs’).
The CPGs cover a range of clinical conditions and situations commonly encountered by paramedics in the pre-hospital environment. In the case of a clinical condition, each CPG provides:

- Information regarding a typical clinical presentation
- The diagnostic pattern associated with the relevant condition
- Guidelines for clinical management.

Clinical practice guidelines

Eye injuries

Clinical features

- Pain
- Photophobia
- Flinching
- Eversion
- Straining
- Redness
- Inflammation
- Lacrimation
- Complaints of vision alteration

Clinical practice procedures

Intramuscular injection

Preparation

1. Assemble the equipment:
   - Parenteral injection set
   - Label of medication
   - Sterile tourniquet
   - Glove
   - Alcohol swab

2. Check the medication:
   - Verify the medication against the order
   - Check the expiration date
   - Ensure the correct dose

3. Prime the syringe:
   - Remove the needle cap
   - Check the syringe for air bubbles
   - Insert the needle into the medication vial
   - Draw the medication into the syringe
   - Remove the needle from the vial
   - Replace the needle cap

4. Administer the injection:
   - Position the patient on their side
   - Palpate the injection site
   - Clean the skin with alcohol swab
   - Insert the needle at a 90-degree angle
   - Inject the medication
   - Remove the needle
   - Apply pressure to the injection site

5. Document the injection:
   - Record the time of injection
   - Record the medication administered
   - Record any adverse effects

Prohibitions

- Do not use the same needle for multiple patients
- Do not reuse needles
- Do not inject into a vessel
- Do not inject into a bone

Complications

- Pain
- Infection
- Hypersensitivity
- Hematoma
- Nerve damage
- Fat embolism
- Air embolism

Precautions

- Use aseptic technique
- Use a non-sterile injection set
- Use a sterile needle
- Use a non-sterile tourniquet

Additional information

- Always use an autoclaved needle and syringe
- Use a new needle for each patient
- Use a new syringe for each patient
- Use a new alcohol swab for each patient
- Use a new needle cap for each patient

The CPPs cover specific clinical procedures that may be performed as part of the clinical management of a patient. The use of specific items of equipment carried by QAS ambulances is also addressed through relevant CPPs.
The **DTPs** provide directions for the use of pharmacological agents that have been authorised for use by QAS paramedics when performing duties for the QAS. A DTP exists for each pharmacological agent and provides parameters for its use in the pre-hospital environment.

To further assist QAS paramedics, a **Field Reference Guide (FRG)** has been created and issued to each paramedic. The FRG includes an algorithm for all CPGs as well as other reference material that may be helpful in the field. Paramedics are individually responsible for ensuring their personal FRG is updated to reflect periodic changes to the CPM.
POWERS OF AUTHORISED OFFICERS

The QAS Commissioner may authorise an officer or officers of a particular class or category, to exercise the powers that are set out in the *Ambulance Service Act 1991* (Qld) (‘the Act’).[1]

The Act provides that an authorised officer, when providing ambulance services for the QAS, may take any reasonable measure to:

- protect persons from any danger or potential danger associated with an emergency situation
- protect persons trapped in a vehicle, receptacle or vessel, or otherwise endangered
- protect themselves or other officers or persons from danger, potential danger or assault from other persons.

Measures that may be taken for a purpose of protecting persons from danger or potential danger, or those that are trapped may include, but are not limited to, the following:

- enter any premises, vehicle or vessel
- open any receptacle, using such force as is reasonably necessary
- bring any apparatus or equipment onto premises;
- remove from, or otherwise deal with, any article or material in the area
- destroy (wholly or partially) or damage any premises, vehicle, vessel or receptacle
- cause the gas or electricity supply or motor or any other source of energy to any premises, vehicle, vessel or receptacle to be shut off or disconnected
- request any person to take all reasonable measures to assist the authorised officer

- administer such basic life support and advanced life support procedures as are consistent with the training and qualifications of the authorised officer.

Measures that may be taken for the purpose of protecting themselves, other officers, and other persons from danger, potential danger or assault may include, but are not limited to, directing that a person not enter into, or remain within, a specified area around the patient or the site.

What constitutes ‘reasonable’ in any situation is that which a careful paramedic of a similar class or category would do in similar circumstances.

The content of the CPGs and CPPs, coupled with the education and training provided to QAS paramedics, will serve as a helpful guide as to what actions would be appropriate and reasonable in each circumstance.

Paramedics are also encouraged to consult with senior officers, clinicians and medical specialists if the circumstances warrant.

**Forced entry**

On occasion, officers may be left with no choice but to forcibly enter premises to locate a patient.

1. Officers on scene must advise that they are unable to rouse a response from any person at the premises or gain entry without force.
2. The communication centre will then follow standard procedures to ascertain the correct address has been given and will attempt to call-back the caller.
3. Once the communication centre has carried out standard procedures and verified the address by radio, the attending officers are to verify the address at the scene and notify the communication centre that they intend to make entry to the premise in accordance with the above directions. Every effort is to be made to cause the least damage as possible.
4. In these situations officers are to ensure the communication centre is notified of the measures taken to gain entry and if the building cannot be secured.

5. If the patient’s condition requires urgent transport, the communication centre is to notify the QPS and/or a senior QAS officer of the situation.

6. Every effort must be made to notify the owners/residents of the premises of the damage.

7. The use of forcible entry to gain access to premises is to be recorded on the ARF, including actual damage caused to the premises to gain entry.

ROLE OF THE PARAMEDIC

The role of the paramedic lies within the Queensland Emergency Medical System (QEMS). Paramedics have three primary tasks:

1. the assessment and prioritisation of the patient’s immediate and definitive needs

2. delivery of the appropriate immediate care, while concurrently

3. organising the provision of definitive care in the most time efficient manner.

The Paramedic must consider all resources available within the QEMS continuum when treating a patient, including QAS resources, community resources, other emergency services including aeromedical resources, ancillary medical facilities and receiving hospitals.

Obtaining the most appropriate care in the most efficient time-frame may encompass the following options:

- paramedic to administer care on-scene if trained and authorised
- rendezvous with an Intensive Care Paramedic (ICP) or appropriately trained officer on-scene
- rendezvous with an appropriate Doctor or ICP enroute
- utilise aeromedical services
- clinical consult with a doctor
- transport patient to the most appropriate definitive care specific to their needs.

The paramedic must make these decisions in conjunction with QAS Policy & Procedures, clinical training, experience and available advice.

BASIC PRINCIPLES OF MANAGEMENT

Basic Principles of Management are goals of care that apply to all cases:

- Review all communication centre dispatch information.
- Consider all environmental factors and approach a scene only when it is safe to do so.
- Identify potential and actual hazards and take the necessary precautions.
- Ensure the safety of yourself, other officers and emergency services personnel, your patients and the public.
- Ensure the scene is as safe as is practicable.
- Request assistance as required.
The basic principles of management also apply to all patients. Paramedics must:

- identify and manage life threatening conditions
- locate all patients first. If the number of patients is greater than resources, seek additional resources.
- assess the patient’s condition appropriately
- prioritise and manage the most life threatening conditions first
- provide sit-rep to communications as soon as possible after arrival on scene
- provide adequate oxygenation and ventilation
- optimise tissue perfusion
- identify and manage other conditions
- provide appropriate pain relief
- posture the patient according to the presenting condition
- ensure the maintenance of normal body temperature
- provide psychological support at all times
- transport as necessary

Where the number of patients overwhelms the existing resources refer to the QAS Multi-casualty Management Plan.[2]

INFECTION CONTROL

This guideline describes QAS infection control procedures for prevention of infectious disease transmission in the ambulance environment. The full guideline is on the DES portal.[3] Effective infection control is based on good hygiene centred around practices that arise from identifying hazards and implementing risk management procedures. Strategies for infection control are based on current understanding of the aetiology of infections involved and the most effective ways to control them.

STAFF SUPPORT

Paramedic work sometimes exposes staff to circumstances they find very difficult to cope with.

Sudden Infant Death Syndrome (SIDS), is one such circumstance and the following is provided to assist in the management of SIDS outside the clinical scope:

- Attempt resuscitation if appropriate.
- Treat the baby as a baby, rather than a body. Use the baby’s name if you can.
- Do not hurry the baby away from the house.
- Separation from the baby should occur when the parents are ready.
- Carry the baby to a place of comfort in the home and allow parents to remain with their baby if they wish.
- Other children need not be removed or separated.
- Explain that it could be SIDS but this will be confirmed after ‘an autopsy’ is completed. Explain that our laws require an autopsy to be carried out to ascertain the cause, if possible, of any sudden, unexpected death, whatever the age of the person.
• Reassure parents that an autopsy is a detailed operation carried out with gentleness and care by a pathologist. Tell the parents that the police will call and that this is normal. Tell the parents a formal inquest is not necessary if death is due to SIDS and that parents are not required to identify the baby at the Coronial Services Centre.

• Reassure the parents that, if it is SIDS, there is nothing known that they or anyone else could have done to prevent the death.

• Explain if the baby had blood, vomit, facial or body discolouration that these can occur after or during the dying process and are probably not the cause of the death of their child.

• Allow parents to express their shock and disbelief. Respect cultural mourning customs.

• Ask the parents if they would like you to telephone anyone for them or help them to do so in order that they can have support, e.g., relatives, doctor, workplace, SIDS.

If needed, call 1800 628 648 for SIDS 24-hour crisis service. SIDS counsellors are also available for ambulance staff.

Other traumatic events are managed by paramedics as per relevant guidelines and procedures. However outside the clinical requirements of these cases there may be difficulty in the management of personal emotions, thoughts and coping mechanisms.

All QAS staff should familiarise themselves with the Priority One counselling service through the DES Portal and the important service they provide.
## QAS Clinical Scope of Practice Levels

<table>
<thead>
<tr>
<th>Paramedic – Advanced Care 1</th>
<th>Paramedic – Advanced Care 2</th>
<th>Paramedic – Intensive Care</th>
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<tr>
<td><strong>Skills</strong></td>
<td><strong>Skills</strong></td>
<td><strong>Skills</strong></td>
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<tr>
<td>• 12-Lead ECG acquisition (auto interpretation)</td>
<td>• 12-Lead ECG acquisition (acquisitions/STEMI recognition)</td>
<td>• 12-Lead interpretations</td>
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<tr>
<td>• Adult CPR</td>
<td>• Capnography</td>
<td>• Endotracheal intubation</td>
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<td>• Application of aseptic dressing</td>
<td>• Intravenous access</td>
<td>• External jugular venous cannulation</td>
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<td>• Assess vital signs</td>
<td>• Intravenous drug administration</td>
<td>• Gastric decompression</td>
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<td>• Breech delivery</td>
<td>• Intravenous access</td>
<td>• Intraosseous access</td>
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<td>• BVM ventilation</td>
<td>• Laryngoscopy with Magill forceps</td>
<td>• Intravenous infusions</td>
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<td>• Cardiac monitoring</td>
<td>• Manual coronary care</td>
<td>• Procedural sedation</td>
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<td>• Glucometry</td>
<td>• Thoracic decompression (consultation)</td>
<td>• Synchronised cardioversion</td>
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<td>• Intramuscular injections</td>
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<td>• Thrombolysis/cardiac reperfusion</td>
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<td>• Intranasal drug administration</td>
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<td>• Transcutaneous pacing</td>
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<td>• Laryngeal mask airway insertion</td>
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<td>• Nasopharyngeal airway</td>
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<td>• Nebulised medications</td>
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<td>• Normal cephalic delivery</td>
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<td>• Oropharyngeal airway</td>
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<td>• Primary and secondary assessments</td>
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<td>• Semi automatic defibrillation</td>
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<td>• Use of cervical collar</td>
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<td>• Use of pelvic binder</td>
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<td>• Use of spinal movement restriction techniques</td>
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<td>• Use of traction splints</td>
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<td>• Use of vacuum splints</td>
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<tr>
<td><strong>Pharmacology</strong></td>
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<td><strong>Pharmacology</strong></td>
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<tr>
<td>Acetylsalicylic acid</td>
<td>Glucose 10%</td>
<td>Amiodarone</td>
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<tr>
<td>Adrenaline</td>
<td>Hydrocortisone</td>
<td>Atropine</td>
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<td>Box Jellyfish antivenom</td>
<td>Hydroxocobalamin</td>
<td>Benztrapine</td>
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<tr>
<td>Ceftriaxone</td>
<td>Ipratropium bromide</td>
<td>Calcium gluconate 10%</td>
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<tr>
<td>Fentanyl</td>
<td>Magnesium sulfate (envenomation only)</td>
<td>Clopidogrel</td>
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<tr>
<td>Glucagon</td>
<td>Metoclopramide</td>
<td>Enoxaparin</td>
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<td>Glucose gel</td>
<td>Naloxone</td>
<td>Haloperidol</td>
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<td>Glyceryl Trinitrate</td>
<td>Oseeltamivir</td>
<td>Heparin</td>
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<td>Methoxyflurane</td>
<td>Sodium chloride 0.9%</td>
<td>Ketamine</td>
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<td>Midazolam</td>
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<td>Lignocaine 2%</td>
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<td>Morphine</td>
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<td>Magnesium sulfate</td>
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<td>Oxygen</td>
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<td>Promethazine</td>
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<td>Ondansetron</td>
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<td>Sodium bicarbonate 8.4%</td>
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<td>Paracetamol</td>
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<td>Tenecteplase</td>
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<td>Salbutamol</td>
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<td>Water for injection</td>
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<td><strong>ESoR</strong></td>
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<td>Controlled mechanical ventilation</td>
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<td>Insertion of an arterial line</td>
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<td>Frusemide</td>
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<td>Glucose 5%</td>
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<td>Hypertonic saline 7.5%</td>
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<td></td>
<td>Insulin (Actrapid®)</td>
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<td>Isoprenaline</td>
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<td>Metoprolol</td>
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<td>Noradrenaline</td>
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<td>Packed red blood cells</td>
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<td>Phenytoin</td>
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* Includes QAS Graduate induction program