# National ESMOE guidelines for district and regional hospitals

## GUIDELINES TO APPROPRIATE LEVELS OF CARE FOR ANAESTHESIA

### COMPETENCIES REQUIRED FOR ANAESTHESIA

All facilities offering anaesthesia should employ staff with the following competencies:

- A nurse trained as an anaesthetic assistant should be available at all times.
- All staff should understand the principles of informed consent, and ethical and legal aspects of surgery/anaesthesia.
- All staff involved in theatre should undertake regular emergency drills.
- Staff should organise regular team and mortality/morbidity meetings to optimise theatre functioning.
- The ability to use and maintain appropriate equipment required for obstetric anaesthesia and patient monitoring.
- An understanding of the provincial equipment and disposable items procurement system, and the ability to identify and assist in the procurement of the correct items, or established links with a knowledgeable individual.

<table>
<thead>
<tr>
<th>Competencies required L1</th>
<th>Competencies required L2</th>
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<tbody>
<tr>
<td><strong>General:</strong></td>
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<tr>
<td>One medical practitioner should have expertise in anaesthesia, ideally the Diploma in Anaesthesia (CMSA).</td>
<td>The service shall be led by a specialist anaesthesiologist Supported by competent MO’s (some with the DA or undertaking training towards the DA)</td>
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<td><strong>Training capability</strong></td>
<td><strong>Training capability (In a specialist-led facility)</strong></td>
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<td>- Nurse resuscitation skills</td>
<td>- Nurse resuscitation and anaesthetic nurse training</td>
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<td>- COSMO anaesthetics</td>
<td>- Intern, COSMO, and DA anaesthetists</td>
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<tr>
<td><strong>Medical staff should have the following specific competencies:</strong></td>
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<tr>
<td>- Recognise the patients who will require the oversight of a specialist and to refer these patients appropriately</td>
<td>- Pre-operative, intra-operative and post-operative care expected of a specialist anaesthesiologist.</td>
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<tr>
<td>- Provide safe general anaesthesia for elective and emergency surgery to adult patients with ASA class I and II.</td>
<td>- ASA (American Society of Anaesthesiologists) classes I - III for elective surgery</td>
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<td>- To refer all higher risk patients unless they require urgent, lifesaving surgery.</td>
<td>- Higher ASA classes may be cared for in emergency cases</td>
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<td>- Safely administer and reverse neuromuscular blockers</td>
<td><strong>Support services required:</strong></td>
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<tr>
<td>- Establish spinal anaesthesia, especially for Caesarean Section, and to manage the complications of spinal anaesthesia.</td>
<td>- ECG available</td>
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<td>- Provide safe single-agent conscious sedation</td>
<td>- Chest X-ray facility</td>
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<td>- Provide safe and adequate post-operative analgesia to patients.</td>
<td>- Post-operative high care</td>
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<td>- Monitor and manage the acute post-operative care of patients undergoing level-1 surgery and anaesthesia</td>
<td>- (Post-op ventilation lasting &lt; 48 hours expected)</td>
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<td>- Care for all aspects of a patient’s respiratory system including the recognition of problems, the use of supplemental oxygen devices, airway aids and ventilators appropriate to level-1 hospitals</td>
<td>- Labour epidural pain control</td>
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<tr>
<td>- Stabilise and support critically ill patients, and to arrange for their transportation to the nearest appropriate facility</td>
<td>- On-site haematology and chemistry laboratory</td>
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<td><strong>Support services required:</strong></td>
<td>- Rapidly accessible blood bank facility</td>
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<tr>
<td>- ECG available</td>
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<tr>
<td>- Chest X-ray facility</td>
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<tr>
<td>- Haemoglobin measurement</td>
<td></td>
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<tr>
<td>- On-site emergency blood supply</td>
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## CONDITIONS REQUIRING ANAESTHESIA

### Anaesthesia for:

**Caesarean Section (General and spinal anaesthesia)**
- Caesarean section for poor progress or foetal distress >35 weeks
- Elective caesarean section at term in uncomplicated (level 1) patient

**Postpartum surgery**
- Retained placenta
- Postpartum sterilisation and mini-laparotomy ligation.

**Ectopic pregnancy**
- Ruptured ectopic pregnancy not to be referred

**Termination of pregnancy, D&C and manual vacuum aspiration**

**Anaesthesia for patients with a booking BMI <40**

**Life-saving procedures**

### Specific cases that are NOT expected be performed at level-1 hospitals include:

- Patients with a predicted difficult airway
- Epidural anaesthesia/analgesia
- American Society of Anaesthesiologists (ASA) Class III or higher patient unless life-saving procedure

**Eclampsia**
- Stabilise and refer appropriately

**Abruptio placentae**
- If diagnosed at level 1 with live, viable baby and foetal distress, do Caesarean section under general anaesthesia (unless GA contraindicated) and refer postpartum for further management.
- Do not transfer a patient that is actively bleeding and haemodynamically unstable

**Stabilise and then refer before anaesthesia any**
- Comatose patient
- Status epilepticus

**Placenta praevia**
- Refer if haemodynamically stable

**Respiratory**
- Refer any maternal patient with respiratory distress (excluding terminal cases)

### Anaesthesia for:

**Patients with porphyria**

**Patients at risk of malignant hyperthermia**

**Patients with difficult airways**

**Epidural anaesthesia/analgesia**

**Patients requiring invasive haemodynamic monitoring**

**Eclampsics without organ failure**

**Uncomplicated abruptio placentae**

**Patients on anticoagulation for non-cardiac reasons (eg DVT)**

**Pregnant or puerperal patients with deep vein thrombosis (DVT) or pulmonary embolus**

**Extra-uterine pregnancy <24 weeks, if no complications expected**

**Placenta praevia**
- All anaesthetics for Caesarean sections for placenta praevia must be performed under specialist supervision

**Booking BMI 40-49**

**Stabilise and provide general anaesthesia for delivery if necessary. Then refer**
- Comatose patients
- Patients in status epilepticus

### Specific cases that are NOT expected be performed at level-2 hospitals include:

**Patients with any AHA/ACC major risk factors for myocardial ischaemia**

**Patients with more than 2 AHA/ACC intermediate risk factors for myocardial ischaemia**

**Unstable endocrine disorders other than diabetes**

**ASA IV/V patients**

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Compiled by the ESMOE Anaesthesia Working Group
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