## ACMVET5X28 Provide nursing support for critical care surgery

#### Application

This unit of competency describes the skills and knowledge required to prepare the theatre and equipment and stabilise the patient for surgery, provide intra-operative support to the veterinary surgeon including continuous monitoring, co-ordinate post-surgical intensive care unit (ICU) nursing, and discharge the patient, providing at-home care information to the client.

It is designed to advance the knowledge and skills of veterinary nurses who work in a veterinary hospital, or emergency/specialist veterinary practice where an extensive range of emergency and critical care procedures are performed, under the supervision of a registered or specialist veterinarian.

Critical care surgery involves procedures that require urgent, time-sensitive intervention to preserve life, prevent rapid deterioration or stabilise vital organ function. The critical care nursing routines typically require intensive monitoring, fluid therapy, oxygen supplementation, analgesia, and post-operative intensive care.

**Licensing, legislative, regulatory requirements**

Legislative and regulatory requirements relating to the scope of veterinary nursing practice vary according to state/territory jurisdictions. Users of this unit must confirm current requirements with the relevant regulatory authority before delivery

#### Pre-requisite unit

Nil

#### Unit sector

Veterinary Nursing (VET)

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| **Elements** *Elements describe the essential outcomes.* | **Performance criteria**  *Performance criteria describe the performance needed to demonstrate achievement of the element.* |
| 1. Prepare for a critical care surgical patient | 1.1 Identify the patient’s requirements and prepare patient for surgery following animal welfare and work health and safety practices including low stress handling protocols  1.2 Prepare theatre with required surgical equipment, instruments, and supplies, and monitoring equipment for specific procedure |
| 2. Monitor patient from induction to recovery | 2.1 Assist the veterinarian in the induction of anaesthesia  2.2 Identify patient anatomy and physiology as it relates to monitoring patient vital signs and response to anaesthetic agents  2.3 Monitor anaesthetic and vital signs continuously, record data and report identified variations to veterinarian  2.4 Provide specific surgical operating support in response to the veterinarian’s requirements  2.5 Administer analgesia as directed by veterinarian and monitor patient response  2.6 Monitor vital signs constantly and respond to abnormal signs  2.7 Apply specific emergency procedures as directed by the veterinarian |
| 3. Collect and administer blood and blood products | 3.1 Identify patient’s blood type  3.2 Source and obtain suitable donor blood and ensure its correct handling, storage and readiness for use  3.3 Prepare and administer blood and blood products following veterinarian instructions and established transfusion and aseptic procedures  3.4 Monitor the patient for indicators of adverse transfusion reaction and, under veterinary direction, implement appropriate responses to manage adverse events |
| 4. Provide critical care nursing | 4.1 Determine patient short-term positioning, environment, medication, nutrition, nursing care and physical therapy requirements in consultation with veterinarian  4.2 Develop nursing care plan using industry standard terminology and including all relevant aspects of treatment and care in conjunction with veterinarian  4.3 Provide intensive nursing care and monitor the patient according to the nursing care plan  4.4 Consult with the veterinarian regularly on the patient’s progress |
| 5. Discharge patient | 5.1 Organise transportation for the critical care patient according to practice policies and work health and safety (WHS) requirements  5.2 Prepare patient for transport within and from the practice  5.3 Provide the client with instructions concerning the patient’s care requirements in the home environment  5.4 Collate the patient’s history, records and veterinarian’s report and present to client  5.5 Advise client on the delivery of referral documentation to their regular practitioner |

#### Foundation skills

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| **Learning** | **Reading** | **Writing** | **Oral communication** | **Numeracy** |
| 4 | 4 | 4 | 5 | 4 |

**Assessment Requirements**

**Performance evidence**

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has:

* prepared for and assisted with critical care surgery for a minimum of three real patients
* provided nursing support, including discharge of patients, for a minimum of three real critical care patients.

There must be evidence of the individual undertaking the following procedures at least once on real animals in the course of the above, or in realistic clinical simulations with model animals:

* placement and care of catheters, chest and other drains and tracheostomy tubes
* fluid therapy, including monitoring urinary output
* oxygen therapy
* emergency procedure
* emergency anaesthesia
* artificial and assisted respiration
* administration of life support techniques, such as administering blood products or medications.

Performance must be demonstrated in a veterinary practice where critical care surgeries are performed and patients are supported by critical care nursing, or an environment that accurately reflects such a veterinary practice with real animals, unless specified above.

**Knowledge evidence**

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

* after care requirements including medication, wound management, nutrition, exercise, physical therapy and environment
* animal anatomy and physiology related to the monitoring of vital signs and the management of animals through critical care nursing and surgical procedures
* vital sign monitoring, including:

capillary refill time

central venous pressure

chest auscultation

blood pressure

femoral pulse

heart rate and rhythm

mucous membrane colour

pupillary light reflex

respiration

temperature

* blood gas analysis
* instruments for monitoring vital signs, including:

capnographs

electrocardiograph (ECG)

oesophageal stethoscopes

pulse oximeters

blood pressure monitoring device

* blood transfusion processes, including:

blood typing and cross-matching

blood supply sources and blood product transfusions

transfusion reactions

transfusion rates

donor blood collection and management

* anaesthesia equipment and procedures for critical care surgery
* clinical signs of shock
* critical care and intensive nursing routines, including:

patient nursing care plan requirements

placement and care of catheters, chest and other drains and tracheostomy tubes

fluid therapy

oxygen therapy

monitoring urinary output

emergency procedures

emergency anaesthetic procedures

artificial and assisted respiration

administration of life support techniques and medicines

* pre, intra and post-operative analgesics administered by the veterinarian or under veterinary supervision, including:

non-steroidal anti-inflammatory

narcotics

other analgesics and opiate antagonists

* emergency procedures, including:

response to anaesthesia complications during surgery

response to anaesthetic recovery/shock complications with particular attention to transportation to recovery ward

intravenous fluid therapy

* state or territory legislation and regulations relevant to the practice of veterinary science, WHS and animal welfare in relation to critical care surgery
* requirements for referral documentation
* transportation procedures.

**Assessment conditions**

Skills must be demonstrated in a veterinary practice where critical care surgeries are performed and patients are supported by critical care nursing, or an environment that accurately reflects such a veterinary practice with real animals, unless specified in the Performance Evidence.

Assessment must ensure access to:

* a range of real animals in need of emergency surgery and critical care nursing support
* animal models for clinical simulation, where necessary
* equipment, instruments and resources typically available in a veterinary practice to perform critical care surgical and nursing procedures
* organisational policies and procedures, current legislation, regulations and/or relevant codes of practice relating to veterinary acts of science/medicine, administration of medications and other drugs/poisons, animal welfare and WHS
* clients

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

#### Unit mapping information

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| **Code and title current version** | **Code and title previous version** | **Equivalence status** | **Comments** |
| ACMVET5X28 Provide nursing support for critical care surgery | ACMVET507 Provide nursing support for critical care surgery | Equivalent | Unit re-templated to 2025 template  Changes to wording of Application  Legislative and regulatory statement revised to more accurately reflect requirements.  PC1.1 reworded to add ‘following animal welfare and work health and safety practices including low stress handling protocols’ (from PC2.1)  PCs in Element 2 re-sequenced to flow from ‘surgical’ to recovery procedures  PC2.2 reworded from ‘Prepare surgical and monitoring equipment’ to ‘Prepare theatre with required surgical equipment, instruments, and supplies, and monitoring equipment for specific procedure’  PC2.1 reworded from ‘Provide assistance to the veterinarian for induction and apply safe work practices and animal welfare protocols’ to ‘Assist the veterinarian in the induction of anaesthesia’  PC2.3 and PC2.4 merged  PC2.5 reworded from ‘Administer analgesia and monitor response under veterinary supervision’ to ‘2.5 Administer analgesia as directed by veterinarian and monitor patient response’  PC3.1 split into PC3.1 and 3.2 and reworded  PC3.3 wording changed from ‘Prepare and administer blood and blood products under the supervision of a veterinarian’ to ‘Prepare and administer blood and blood products following veterinarian instructions and established transfusion and aseptic procedures’  PC3.4 reworded from ‘Recognise and treat adverse reactions to transfusions under the supervision and direction of a veterinarian’ to ‘Monitor the patient for indicators of adverse transfusion reaction and, under veterinary direction, implement appropriate responses to manage adverse events’  PE: change to wording of performance evidence for clarity.  Requirement for all activities to be performed in specified number of mandatory work place hours removed, whilst still requiring performance of some activities in a/the veterinary practice and allowing other activities which may not consistently or routinely present in practice to be demonstrated in clinical simulation using animal models.  KE: Bullet point re ‘blood’ reformatted and wording changed for clarification (blood typing and cross-matching added  Bullet point re ‘anaesthetics, [ ] including [analgesics]’ reworded as analgesics are not anaesthetic agents to ‘pre, intra and post-operative analgesics administered by the veterinarian or under veterinary supervision, including:’  ‘patient nursing care plan requirements’ moved to ‘critical care and intensive nursing routines’ and listed items removed.  ‘other emergency procedures’ reworded to ‘emergency procedures’ and ‘response to anaesthesia complications during surgery  response to anaesthesia complications during surgery’ added |

### Overview information

#### Modification History

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| **Release** | **Comments** |
| 1 | This unit of competency was first released in ACM Animal Care and Management Training Package Release 7.0. |

**Mandatory workplace requirements:**

Mandatory workplace requirements apply to this unit of competency and are specified in the Performance Evidence and Assessment Conditions of the Assessment Requirements.