



Australian Government

ACMVET510A Apply veterinary nursing pathophysiology

Release 1

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Modification History

| Release | TP Version | Comments |
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| 1 | ACM10v3 | Initial release. Based on Victorian accredited course unit VU20206 |

Unit Descriptor

This Unit of Competency describes the skills and knowledge necessary to apply veterinary pathophysiology in general veterinary practice. Pathophysiology involves the recognition of abnormal function caused by disease. Application of this knowledge supports veterinary diagnosis and treatment. This Unit covers the fundamentals of disease and common disease processes. It includes diagnostic tests, treatment options and nursing care. A practical understanding of veterinary pathophysiology enables nurses to better support veterinary recommendations, encourage owner compliance, and improve patient outcomes.

Application of the Unit

This Unit is intended for experienced veterinary nurses who are responsible for supporting veterinarians and implementing veterinary treatments in general practice. It is assumed that such nurses will have a leadership role in their practice and be involved in the co-ordination of diagnostic procedures, treatment regimes and follow up procedures.

In addition to legal and ethical responsibilities, all Units of Competency in the ACM10 Animal Care and Management Training Package have the requirement for animals to be handled gently and calmly. The individual is required to exhibit appropriate care for animals so that stress and discomfort is minimised.

Licensing/Regulatory Information

Licensing, legislative, regulatory or certification requirements may apply to this Unit. Therefore, it will be necessary to check with the relevant state or territory regulators for current licensing, legislative or regulatory requirements before undertaking this Unit.

Pre-Requisites

Nil

Employability Skills Information

This unit contains employability skills

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

| ELEMENT | PERFORMANCE CRITERIA |
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| 1. Interpret fundamentals of disease | <p>1.1 Detailed patient history is collected from owner or veterinarian in accordance with clinic policies and procedures.</p> <p>1.2 Detailed physical examination of the patient is performed to determine any abnormalities of the patient's body systems.</p> <p>1.3 Clinical signs consistent with basic disease processes are identified.</p> <p>1.4 Effective triage of patients is conducted.</p> <p>1.5 Patient history and clinical signs are communicated to the veterinarian in accordance with clinic policies and procedures.</p> |
| 2. Assist diagnosis of disease by a veterinarian | <p>2.1 Nursing support for veterinary examination is provided in accordance with relevant animal welfare and workplace health and safety legislation and clinic policies and procedure.</p> <p>2.2 Diagnostic tests are conducted as directed by a veterinarian and the results are reported in accordance with clinic policies and procedures.</p> <p>2.3 Causative agents or contributing factors are determined in support of veterinary diagnosis.</p> <p>2.4 Strategies to prevent zoonosis in companion animals are implemented.</p> |
| 3. Co-ordinate veterinary treatments for disease processes | <p>3.1 The benefits from and potential adverse responses to a range of veterinary medications used in general practice are identified.</p> <p>3.2 A range of veterinary medications are prepared and administered in accordance with state/territory legislation, animal welfare and workplace health and safety legislation, clinic policies and procedures and as instructed by a veterinarian.</p> <p>3.3 Appropriate treatment is implemented as directed by a veterinarian in accordance with relevant veterinary legislation, animal welfare and workplace health and safety legislation.</p> |
| 4. Manage outpatients under treatment for disease. | <p>4.1 Specific written or verbal instructions are provided to clients as directed by a veterinarian in accordance clinic policies and procedure.</p> <p>4.2 Environmental factors relevant to the management of common disease processes are identified.</p> <p>4.3 Follow up procedures are co-ordinated to encourage owner compliance and monitor patient progress in accordance with clinic policies and procedure.</p> |

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills Include:

Ability to:

- administer fluid therapy including blood products
- administer medications by intravenous means, including using fluid pumps
- apply oral communication skills/language competence to fulfil the job role as specified by the clinic, including negotiating and questioning techniques, active listening, asking for clarification from a veterinarian, acknowledging and responding to a range of views
- apply problem solving skills to use available resources and anticipate veterinarians' requirements
- collect fluid and tissue samples from animals
- co-ordinate patient admission and discharge
- demonstrate empathy with animals
- employ interpersonal skills to relate to people from a range of social, cultural and ethnic backgrounds and with a range of physical and mental abilities
- employ safe and environmentally responsible organisational systems and procedures when working with and handling animals
- identify body systems affected by common disease processes
- implement written and verbal instructions
- maintain highest standards of hygiene and infection control at all times to reduce the risk of infection and cross-infection
- perform a range of in house clinical pathology tests
- placing intravenous and urinary catheters
- recognising abnormal patient vital signs
- record use of chemicals and medicines according to prescribed legislative requirements
- record patient details accurately and legibly
- use numeracy skills to monitor patient vital signs and calculate drug doses
- use safe manual handling techniques and/or equipment
- use safe waste handling and disposal procedures.

Required knowledge includes:

Knowledge of:

- after care requirements including wound management, nutrition, exercise and environment
- anatomy and function of the eleven body systems
- animal nutrition and husbandry
- common infectious diseases and zoonosis
- internal and external parasitic controls
- normal range of patient vital signs

- pharmacology of veterinary medications
- prescription diets
- principles of animal welfare and ethics
- principles of triage
- principles of vaccination and common protocols
- relevant state or territory legislation and regulations relating to the practice of veterinary science, workplace health and safety and animal welfare
- relevant state or territory legislation covering the use of therapeutic and controlled substances
- signs of common disease processes in companion animals
- waste disposal.

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

Critical aspects for assessment and evidence required to demonstrate competency in this unit

The evidence required to demonstrate competence in this unit must be relevant to workplace operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit. Assessors should ensure that candidates can:

- collect a detailed patient history
- perform effective physical examination
- identify abnormal body function
- conduct effective triage of patients
- collect, store and process samples for a range of clinical pathology tests
- identify cause and clinical signs of common disease processes
- implement clinic protocols and procedures for the prevention of zoonosis in a range of companion animals
- comply with relevant infection control and workplace health and safety requirements
- identify benefits from and adverse responses to a range of veterinary medications used in general practice
- manage outpatients.

The skills and knowledge required to apply veterinary pathophysiology must be transferable to a range of work environments and contexts and include the ability to deal with unplanned events.

It is highly recommended that learners perform work placement in another approved veterinary practice or training workplace in order to gather further evidence of competence and demonstrate the transferability of skills and knowledge outcomes.

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| Context of and specific resources for assessment | <p>Assessment of this Unit is to be practical in nature and must be assessed in a veterinary practice in order to gain exposure to sufficient caseload.</p> <p>There must be access to a veterinary clinic or animal hospital, a range of companion animals as well as the appropriate equipment, resources and documentation to enable one to demonstrate competence.</p> |
| Method of assessment | <p>To ensure consistency of performance, competency should be demonstrated, to industry defined standards, on more than two occasions over an extended period of time, by collecting medical history, assessing patients, collecting samples, performing in-house laboratory tests, recognising common disease processes and co-ordinating the treatment of patients as directed by a veterinarian on a regular basis.</p> <p>The assessment strategy must include a practical skills assessment. Suggested strategies for this unit are:</p> <ul style="list-style-type: none">• written and/or oral assessment of candidate's required knowledge• observed, documented and first-hand testimonial evidence of candidate's application of practical tasks• case study analysis• role plays• third-party evidence• workplace documentation• portfolio. <p>This unit may be assessed in a holistic way with other units of competency relevant to the industry sector, workplace and job role.</p> |
| Guidance information for assessment | <p>Assessment methods should reflect workplace demands (e.g. literacy and numeracy demands) and the needs of particular target groups (e.g. people with disabilities, Aboriginal and Torres Strait Islander people, women, people with a language background other than English, youth and people from low socioeconomic backgrounds).</p> |

Range Statement

The range statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

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| <i>Detailed patient history</i> | <p>Detailed patient history means:</p> <ul style="list-style-type: none"> • patient name, species, breed, sex, age & reproductive status • lifestyle and environment • previous medical history • any recent or ongoing problems • patient behaviour and clinical signs. |
| <i>Detailed physical examination</i> | <p>Detailed physical examination includes:</p> <ul style="list-style-type: none"> • demeanour, stance and gait • full examination from nose to tail including all body systems • mucous membrane colour and capillary refill time • auscultation of the chest • palpation of the abdomen • rectal temperature • pulse and respiratory rates. |
| <i>Body systems</i> | <p>Body systems are:</p> <ul style="list-style-type: none"> • cardiovascular • digestive • endocrine • excretory • immune • integumentary • muscular • nervous • reproductive • respiratory • skeletal. |
| <i>Basic disease processes</i> | <p>Basic disease processes mean:</p> <ul style="list-style-type: none"> • inflammation • infection • neoplasia |

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| | <ul style="list-style-type: none">• heritable and congenital abnormalities• endocrine disorders• trauma• toxicity. |
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| <i>Nursing support</i> | <p>Nursing support may include:</p> <ul style="list-style-type: none">• recording patient history• safe handling and physical restraint of patient• sample collection and storage• admission procedures• administration• patient discharge• follow up and revisit procedures. |
| <i>Diagnostic tests</i> | <p>Diagnostic tests include:</p> <ul style="list-style-type: none">• antigen test• biochemistry• biopsy• blood cross match• cytology• haematology• faecal floatation• fluid analysis• fine needle aspirate• fungal assay• hormone assay• microbial culture and sensitivity (MC&S) preparation• sediment examination• serological tests, for example enzyme linked immunosorbent assay (ELISA) tests on blood serum to detect antigen or antibodies (evidence of infection)• smear• skin scrape• urinalysis. |
| <i>Causative agents</i> | <p>Causative agents include:</p> <ul style="list-style-type: none">• bacteria• fungi• internal and external parasites• prions• protozoa• toxins and poisons• viruses. |
| <i>Contributing factors</i> | <p>Contributing factors include:</p> <ul style="list-style-type: none">• diet |

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| | <ul style="list-style-type: none">• lifestyle• genetics• environment. |
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| <i>Strategies</i> | Strategies include: <ul style="list-style-type: none">• verbal and/or written protocols• policies and procedures• recommendations• treatment/prevention plans. |
| <i>Veterinary medications</i> | Veterinary medications may include but are not limited to: <ul style="list-style-type: none">• anaesthetic induction agents• analgesics• antibiotics• anticonvulsants• antiemetics• corticosteroids• cytotoxic drugs• emetics• hormones• non-steroidal anti-inflammatory drugs• sedatives• vitamins• other drugs as directed. |
| <i>Appropriate treatment</i> | Appropriate treatment includes but is not limited to: <ul style="list-style-type: none">• medical management• dietary restriction• physiotherapy• palliative care. |
| <i>Written or verbal instructions</i> | Written or verbal instructions may include but are not limited to: <ul style="list-style-type: none">• conversations either face-to-face or telephone• discharge notes• patient records• veterinary reports• client handouts and information brochures detailing recommended veterinary care. |
| <i>Environmental factors</i> | Environmental factors may include: <ul style="list-style-type: none">• diet• housing• lifestyle• other animals• owner compliance |

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| | <ul style="list-style-type: none">• people. |
| <i>Follow-up procedures</i> | <p>Follow-up procedures may include but are not limited to:</p> <ul style="list-style-type: none">• revisits• reminders• telephone calls• telephone reports• repeat tests and procedures• referrals. |

Unit Sector(s)

Veterinary nursing