Modification history

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| Release | Comments |
| Release 1 | This version released with ACM Animal Care and Management Training Package Version 5.0. |

| ACMEQD4X8 | Perform equine dental treatment and oral care using manual and/or motorised instrumentation |
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| Application | This unit of competency describes the skills and knowledge required to perform planned dental treatment and oral care using manual and or motorised instrumentation post-assessment.  The unit applies to individuals, working as equine dental practitioners, who use practical skills and knowledge to perform equine dental treatment and oral care across a range of industry sectors involving horses and other equines. They work autonomously and apply in depth, technical knowledge and skills to provide and communicate solutions for predictable and unpredictable problems.  Commonwealth and state/territory health and safety, and animal welfare legislation, regulations and codes of practice relevant to interacting with horses apply to workers in this industry. Requirements vary between industry sectors and jurisdictions.  State/territory veterinary practice legislation, restricted acts of veterinary science and poisons legislation apply to the scope of work of equine dental technicians. These vary according to jurisdictions. |
| Prerequisite Unit | Nil |
| Unit Sector | Equine Dentistry (EQD) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Identify and appraise instruments used in equine dentistry | 1.1 Assess manual and motorised dental instruments to determine whether appropriate for intended use and for cleaning and disinfection  1.2 Assess speculum types and demonstrate fitting techniques according to health and safety and animal welfare considerations  1.3 Assess safety features and horse welfare issues associated with use of manual and motorised instruments  1.4 Demonstrate safe and effective use of manual and motorised dental instruments |
| 2. Prepare for use of equine dental instruments | 2.1 Assess potential risks and safety considerations for equines and handlers in performing dental treatment and apply safety procedures and risk controls  2.2 Refer to treatment plan and oral inspection reports before commencing dental treatment  2.3 Implement appropriate infection control procedures  2.4 Select appropriate dental instruments for the nominated task  2.5 Position or restrain equine using safe handling techniques and instruct carer on their role in controlling the equine |
| 3. Prepare to perform dental treatment in line with treatment plan | 3.1 Reassess potential risks and safety considerations for equine, handler and practitioner  3.2 Carry out hygiene and infection controls in preparation for the treatment  3.3 Redetermine need for sedation to carry out a thorough and complete dental treatment considering health and safety requirements and equine welfare and comfort  3.4 Where sedation is determined to be necessary, refer to a registered veterinarian, or where relevant state/territory legislation allows seek authorisation to sedate, or advise client to source sedation from their veterinarian  3.5 Administer sedation safely, if required, according to registered veterinarian dispensing instructions and state/territory legislative requirements  3.6 Position, secure and support equine as required  3.7 Assist attending veterinarian during sedation administration, dental diagnostic imaging or dental surgeries, where required  3.8 Fit and remove a speculum according to health, safety and animal welfare considerations and treatment plan |
| 4. Perform planned dental treatment | 4.1 Use appropriate technique and instruments for treatment and minimise generation of heat from motorised handpieces if used  4.2 Address incisor length and angle to prevent interference with the lateral excursion or rostral-caudal movement of the mandible  4.3 Address canine teeth and minimally buff or round as required  4.4 Remove supragingival calculus (tartar) from teeth as necessary  4.5 Assess dentition for presence of digitally loose, retained deciduous or senile teeth and treat  4.6 Assess dentition for presence of wolf teeth (first premolars) and treat  4.7 Address cheek teeth and remove sharp points protuberant to soft tissue  4.8 Profile rostral aspect of the #6 cheek teeth (second premolars)  4.9 Rinse the oral cavity in line with industry standards  4.10 Inspect the oral cavity for evidence of injury caused during treatment and if present, evaluate, document and refer for treatment as required |
| 5. Reassess equine masticatory and oral function | 5.1 Evaluate dental treatment to confirm comfort and masticatory function by identifying rostral-caudal and lateral movement of mandible and functional occlusion of cheek teeth |
| 6. Provide post-dental treatment care | 6.1 Clean and disinfect work area, instruments and other equipment according to infection control procedures  6.2 Check instruments and equipment for wear and/or damage and implement workplace maintenance or repair procedures  6.3 Update records including dental charts and photographs, according to workplace requirements  6.4 Inform owner or carer about the scope of treatment provided and provide advice about immediate post-treatment care, need for follow-up treatment, or referral to a colleague including registered veterinarian or other appropriate service provider  6.5 Monitor equine behaviour and immediate environment for safe post procedure recovery |

| Foundation Skills  This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria. | |
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| Skill | Description |
| Reading | * Interpret and consolidate key information in equine charts, reports and records |
| Writing | * Enter data and observations into record keeping systems accurately using industry terminology and dental encoded systems |
| Numeracy | * Calculate ratios and volume relevant to mixing liquids and chemicals * Estimate, calculate and record routine measures relating to equine oral care and dental treatments |
| Oral communication | * Use listening and questioning techniques to convey and confirm information * Use terminology and concepts appropriate for the audience |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| ACMEQD4X8 Perform equine dental treatment and oral care using manual and/or motorised instrumentation | ACMEQD405 Perform routine dental correction and oral care using manual instruments | Title changed  Prerequisite removed and horse safety embedded in unit  Elements and performance criteria updated for clarity and industry currency  Foundation skills table and assessment requirements updated | Not equivalent |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet:  <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=b75f4b23-54c9-4cc9-a5db-d3502d154103> |

| TITLE | Assessment requirements for ACMEQD4X8 Perform equine dental treatment and oral care using manual and/or motorised instrumentation |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all the elements and performance criteria in this unit.  There must be evidence that the individual has:   * performed dental treatments and oral care using manual and/or motorised instrumentation on at least two occasions each, over a total of at least 10 different equines: * addressed incisor malocclusions * removed supragingival calculus (tartar) from teeth * buffed or rounded canine teeth * removed digitally loose retained deciduous teeth * removed wolf teeth (first premolars) * removed sharp points protuberant to soft tissue from the cheek teeth * profiled rostral aspect of #6 cheek teeth (second premolars).   In completing dental treatments and oral care above, the individual must have (for each equine):   * assessed risks and prepared a safe environment for dental treatment * implemented infection control and hygiene procedures * organised sedation, if required, according to relevant state/territory legislation and veterinarian dispensing instructions * safely handled, positioned and supported equine, particularly if horse is sedated * used appropriate techniques with manual and/or motorised instrumentation to maintain and or restore function to the dental arcades to an acceptable condition, considering masticatory function * explained treatment and post-treatment management to at least three owners or carers * updated dental and relevant records for each equine and client. | |

| Knowledge Evidence |
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| 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:   * principles and practices for performing dental treatment and oral care, including: * use of manual and motorised instrumentation * current industry terminology used to describe dental conditions, treatment, and oral features * charting systems used to record equine dental information * anatomy and physiology of equine head and oral structures, including: * function and structures of equine mouth * normal and abnormal features * industry accepted anatomical guidelines for equine dental treatment * key requirements of relevant legislation, regulations and codes of practice for: * veterinary practice and restricted dental practices * treatments requiring referral to a registered veterinarian or other appropriate service provider * supply, possession and use of restricted and controlled substances - Poisons Acts * administration of sedatives to animals * indicators of general equine health and signs of dental conditions, including: * common illness or injuries that may impact dental health * equine behavioural signs that may indicate dental problems * signs of infectious disease * techniques used to restrain equines for dental treatment, including: * physical restrains * chemical restraints * equine sedation (chemical restraint), including: * categories of drugs used for sedation of equines * clinical signs and effects of sedative drugs including indications of over sedation and appropriate response * safe techniques for administering sedative drugs to equines * selection of appropriate sedative and dose for examination or treatment procedure * consideration of equine patient status – breed, age, condition, pain, pregnancy, stallions * impact of adrenalin on dosage * time to take effect and duration period * equine behaviour and responses to sedation and recovery * safe techniques and routes of administration for different situations – intravenous (IV), intramuscular (IM), oral * administration devices, including pole-operated syringes * impact and limitations of sedatives and anaesthesia * sedation reversal and risks to equine and handlers * use and requirements relating to local anaesthetic and nerve blocks * techniques to safely assist attending veterinarians during sedation administration, dental diagnostic imaging or dental surgeries * manual and motorised equine dental instrumentation, including: * purpose, operation, quality, longevity, and cost * usefulness, life span, maintenance and indicators of wear or redundancy * importance of adherence to instrument manufacturer instructions and maintenance specifications * techniques for safe use * technique used to minimise generation of heat from motorised instruments * range of diagnostic, manual and motorised instrumentation and materials used in equine dentistry, including: * suspension/supporting systems * flushing and irrigation systems * speculums * mirrors, head lamps, cameras and associated equipment * manual instruments, including files, explores, probes, picks, scalers, elevators, forceps spreaders, extractors, floats and float inserts * motorised instruments, including GFI (ground fault interrupters) motors (240v and battery), drive shafts and sheaths, clutches, handpieces, burrs, discs, drills, adaptors, water-cooled instrumentation, vacuum systems * dental restoration and emergency materials, oral washes, impression materials, packing materials * post-dental treatment monitoring, management, and care * potential complications due to iatrogenic effects, including: * unskilled assessment, techniques and treatments * trauma, including thermal trauma to dentition * techniques used to: * rinse oral cavity to remove feed * examine oral cavity visually and manually * address incisors * address canines if present * remove supragingival calculus (tartar) from teeth as necessary * fit dental speculum * assess and remove digitally loose retained teeth and treat * assess and remove of wolf teeth (first premolars) and treat. * address cheek teeth * profile the rostral aspect of the #6 cheek teeth (second premolars) * inspect oral cavity for evidence of injury caused during treatment * determine rostral-caudal movement, lateral excursion and occlusion in relation to masticatory function * key requirements of health and safety regulations and guidelines relating to: * risk assessment and control * safe handling techniques for catching, handling, controlling and restraining equines * safe work practices including manual handling and use of personal protective equipment (PPE) * storage of chemicals and medicines * key requirements of hygiene and biosecurity procedures, relevant to: * personal hygiene and PPE * cleaning, disinfection or sterilisation of equipment and materials * safe biological and general waste disposal * equine infectious disease, notifiable diseases and quarantine procedures * zoonotic diseases * key animal welfare requirements relevant to safe, humane, and ethical care of horses or other equines. |

| Assessment Conditions |
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| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions: * an equine workplace or an environment that accurately reflects performance in a real workplace setting * resources, equipment and materials: * various live equines with a range of dental conditions and oral care needs specified in the performance evidence and assessed as suitable for the skill and experience of the individual * appropriate gear and equipment for handling and securing equines * manual and/or motorised dental instruments required to perform treatment and oral care * PPE correctly fitted and applicable for tasks * relationships: * owners or carers of horses or other equines * interactions with registered veterinarians.   The Companion Volume: User Guide: Equine Dentistry provides safety advice and detailed anatomical guidelines to be followed. These ensure current knowledge base and provide guidelines for assessment. They are provided to ensure the safety of all involved in the assessment and the welfare of equines.  Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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