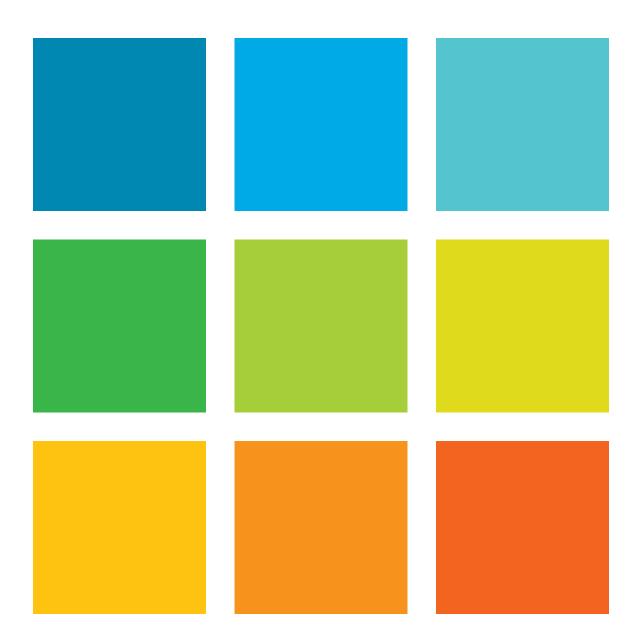




Competency-Based Veterinary Education - Nursing

CBVE-NURSING







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Welcome to CBVE-Nursing

Competency-Based Veterinary Education - Nursing (CBVE-N or CBVE-Nursing) is an approach modeled after Competency-Based Veterinary Education (CBVE) and is designed to prepare career-ready graduates to meet the needs of animals and the expectations of society. Like CBVE, this approach focuses on outcomes-based and learner-centered education and assessment. The AAVMC CBVE 2.0 Model (CBVE 2.0)¹ was utilized as a guide for the creation of the AAVMC CBVE-N Model to provide a consensus foundation for curricula in veterinary nursing or veterinary technology. The language throughout this document has been adapted from CBVE 2.0 to ensure consistency and alignment.

The CBVE-N Competency Framework consists of nine domains of competence, comprised of 33 competencies. All of these are considered core nursing competencies for veterinary technician education. Some competencies lend themselves to assessment in the clinical context, while others may be best assessed in a non-clinical setting.

To better describe/define each competency, illustrative subcompetencies are provided as common examples of content. The illustrative subcompetencies are not designed to be comprehensive; individual programs are encouraged to modify or add subcompetencies to align with their program mission. Subcompetencies are more granular

than competencies and can be used to develop educational objectives and assessments. Each veterinary nursing competency is accompanied by *suggested* alignment with AVMA Committee on Veterinary Technician Education and Activities (AVMA CVTEA) Essential and Recommended Skills to demonstrate how these skills can be developed in a competency-based curriculum. The AVMA CVTEA reviewed this alignment and did not identify any concerns or misalignment with the CVTEA essential skills.

To facilitate implementation of the CBVE-N Competency Framework it is accompanied by the following:

- Milestones to determine where learners fall on the developmental continuum for each competency.
- Entrustable Professional Activities describing workplace-based activities incorporating multiple competencies and skills.

Notable differences from CBVE 2.0 include:

- Additional competencies to cover the scope of veterinary technician education.
- Elimination of Pre-novice milestones due to the variability of both entry-level student experience and sequence of clinical training.

The AAVMC CBVE-N Model has been endorsed by the Association of Veterinary Technician Educators (AVTE).

^{1.} AAVMC Council on Outcomes-based Veterinary Education, Chaney, K.P., Hodgson, J.L., et al. (2024) CBVE 2.0 Model. Washington, DC: American Association of Veterinary Medical Colleges. doi: 10.17605/OSF.IO/9NTV5.





Key Definitions for CBVE-N

Nursing Plan

A nursing plan contains all of the relevant information about a patient's diagnoses, the goals of treatment, observations that are needed, actions that must be performed, and a plan for evaluation. Over the course of the patient's treatment, the plan is updated with any changes and new information as it presents itself.

Veterinary Technician

Used in this document to describe graduates of veterinary nursing, veterinary technology, and veterinary technician programs.

Competency-Based Veterinary Education - Nursing

An outcomes-based approach to the design, implementation, assessment, and evaluation of veterinary nursing/technology programs, using an organized framework of competencies. This could be applied to bachelor or associate degree programs. (As adapted from^{2,3})

^{2.} Frank, J.R., Snell, L.S., Ten Cate, O., et al. (2010) Competency-based medical education: Theory to practice. Medical Teacher, 32(8), 638-645.

^{3.} CBVE Terminology [Internet]. Washington, DC: American Association of Veterinary Medical Colleges; 2020 Dec [revised 2025 Mar, cited 2025 Mar 13]. Available from: https://cbve.org/terminology.

Key Definitions from CBVE 2.0

Competency

An observable ability of a health professional related to a specific activity that integrates knowledge, skills, values, and attitudes. Since competencies are observable, they can be measured and assessed to ensure their acquisition.¹

Domains of Competence (DOC)

Broad distinguishable areas of competence that in the aggregate constitute a general descriptive framework for a profession.⁴

Competency Framework

An organized and structured representation of a set of interrelated and purposeful competencies.⁵

Entrustable Professional Activity (EPA)

An essential task of a discipline that a learner can be trusted to perform with limited supervision in a given context and considering regulatory requirements, once sufficient competence has been demonstrated. (As adapted from⁶)

Milestone

A defined, observable marker of an individual's ability along a developmental continuum.⁶

Programmatic Assessment

An intentionally designed assessment system (formative and summative) in which the longitudinal development of learning is visible to the student as actionable feedback and which provides rich data for informed holistic decision making on progression.⁷

^{4.} Englander, R., Cameron, T., Ballard, A.J., et al. (2013) Toward a common taxonomy of competency domains for health professions and competencies for physicians. Academic Medicine, 88(8), 1-7.

^{5.} Willet T. (2012) Performance framework definitions [Internet]. [cited 2012 Dec 5]. Available from: http://groups.medbiq.org/medbiq/display/CWG/Performance+Framework+-+Definitions.

^{6.} Englander, R., Frank, J.R., Carracio, C., et al. (2017) Toward a shared language for competency-based education. Medical Teacher, 39(6), 582-587.

^{7.} Van der Vleuten, C., Lindemann I., and Schmidt L. (2018) Programmatic assessment: the process, rationale and evidence for modern evaluation approaches in medical education. Med J Aust. 2018 Nov 5;209(9):386-388.

Notes			





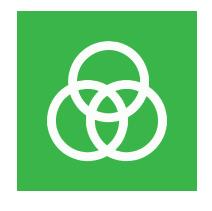
Competency-Based Veterinary Education - Nursing

Competency Framework



















CBVE-N: Competency Framework

The CBVE-N Competency Framework consists of nine domains of competence, each representing a group of related abilities necessary for veterinary technician/nursing graduates.

Associated with each domain is a list of competencies, all of which are considered core for veterinary technician/nursing graduates. The CBVE-N Competency Framework consists of 33 competencies. To better describe each competency, illustrative subcompetencies are provided, which may be modified or refined by individual programs. Subcompetencies are more granular than competencies and can be used to develop course or rotation objectives and assessments or used to highlight specific areas of focus that align with a program's mission, context, or culture.

Each veterinary nursing competency is accompanied by suggested alignment with AVMA Committee on Veterinary Technician Education and Activities (AVMA CVTEA) Essential and Recommended Skills to demonstrate how these skills can be developed in a competency-based curriculum. The AVMA CVTEA reviewed this alignment and did not identify any concerns or misalignment with the CVTEA essential skills.

The competency framework should be the scaffold on which the curriculum and assessments are built. Learners should be assessed longitudinally across the program for each competency to ensure that graduates have achieved the necessary outcomes by the time of graduation. The CBVE-N Competency Framework guides teaching and learning to prepare graduates for successful careers in the veterinary technician/nursing profession.

CBVE-N: Domains of Competence

1	A PARTY OF THE PAR	Clinical Reasoning and Decision-making
2	₩.	Individual Animal Care and Management
3		Animal Population Care and Management
4	8	Public Health
5		Communication
6		Collaboration
7	***	Professionalism and Professional Identity
8	\$1	Financial and Practice Management
9	Q	Scholarship





Clinical Reasoning and Decision-making

The graduate demonstrates critical thinking and problem solving to support evidence-based decisions that consider animal and client needs, available resources, and social context.

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS [†]
1.1	Gathers and assimilates relevant information about animals	 Collects history Performs physical examination Monitors patient status Identifies normal and abnormal diagnostic test results Performs necropsy examination 	SURGICAL NURSING Patient Management Properly identify patients and surgical procedures* Patient assessment: organize medical records/consent forms* review pre-operative evaluation* evaluate current patient status* Perform necropsy procedures: perform a postmortem examination or dissection on nonpreserved animal* [GROUP] NURSING Patient Assessment Recognize common domestic animal species and breeds* Describe and use common animal identification methods* Recognize and assess body language and behaviors (including pain assessment scales) for various animal species* Obtain a thorough patient history* Demonstrate the ability to obtain objective patient data: temperature (dog, cat, horse/pony/donkey/mule, cow)* pulse (dog, cat, horse/pony/donkey/mule, cow)* respiration (dog, cat, horse/pony/donkey/mule, cow)* auscultate heart/lungs (dog, cat, horse/pony/donkey/mule, cow)* auscultate heart/lungs (dog, cat, horse/pony/donkey/mule, cow)*
1.2	Prioritizes patient needs to achieve effective patient care	 Identifies patient needs Creates initial nursing plan Justifies initial nursing plan based on prioritized patient needs 	SURGICAL NURSING Patient Management Patient assessment: evaluate current patient status*
1.3	Adjusts a nursing plan based on available evidence	 Re-evaluates and identifies changes in patient or population status and acts accordingly Explains justification for changes in nursing plan 	

[†] Please see the AVMA CVTEA accreditation policies and procedures for additional information on skills designated with an asterisk (*), italics, and [GROUP].

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS†
1.4	Incorporates animal welfare, client expectations and needs into the nursing plan	 Considers patient care in context of the whole animal and client Presents a range of patient care options to the client Assess patient quality of life Recognizes quality of life as a key determinant on euthanasia decisions 	
1.5	Prioritizes situational urgency and allocates resources	 Triages cases to address most urgent and important problems first Recognizes emergency situations and responds accordingly Recognizes potential reportable, transboundary, epizootic, and emerging/ re-emerging diseases and responds accordingly 	HOSPITAL PROCEDURES COMMUNICATION • Apply crisis intervention/grief management skills with clients*
1.6	Adapts knowledge to varied scenarios and contexts	 Extrapolates knowledge to novel species or situations Adjusts existing protocol or procedure when standard measures are unavailable 	
1.7	Recognizes both capabilities and limitations of knowledge, skill and resources and consults as needed	 Identifies own capabilities as well as situations in which additional expertise and/or resources are needed Consults other professionals both within and outside the veterinary profession 	



Individual Animal Care and Management

The graduate performs preventive, diagnostic, and therapeutic procedures for the health, wellness and treatment of animals, as directed by a veterinarian.

ILLUSTRATIVE COMPETENCIES CVTEA SKILLS[†] **SUBCOMPETENCIES** 2.1 **Performs procedures** 1. Performs laboratory and OFFICE AND HOSPITAL PROCEDURES, CLIENT RELATIONS, AND COMMUNICATION diagnostic procedures (e.g. and post-Law and Ethics qualitative fecal, diagnostic procedural care imaging) · Demonstrate a commitment to high quality patient care* 2. Performs routine therapeutic procedures PHARMACY AND PHARMACOLOGY (e.g., administer fluids) Administration 3. Performs emergency · Recognize groups of drugs, their mechanisms, and clinically procedures (e.g., establish relevant side effects* Recognize the safe and effective manner in which vaccines must an airway) 4. Provides analgesia and be administered; recognize and explain common side effects* · Accurately perform appropriate calculations; use weights and postoperative care 5. Anesthetizes and recovers measures correctly* · Safely and effectively administer drugs by common parenteral 6. Manages patient comfort and enteral routes; explain appropriate routes and methods and 7. Perform humane when used* euthanasia procedures Dispensing Given a drug order, properly prepare medications for dispensing, including performing accurate calculations* NURSING **Patient Assessment** Demonstrate effective and appropriate humane restraint techniques to include efforts to reduce stress during handling for various animal species: · properly restrain dogs and cats for procedures* encage and remove dogs and cats from cages* · apply dog muzzle safelyr* · apply Elizabethan collar* use restraint pole and other restraint aids*[GROUP] · halter, tie, and lead horses/ponies/donkeys/mules* · restrain pocket pets and exotics · restrain cattle and horses/ponies/donkeys/mules* apply twitch (horses/ponies/donkeys/mules)*[GROUP] apply bovine tail restraint* · apply ruminant halter* · restrain sheep and pigs · load large animals safely operate cattle chute*[GROUP] · Properly collect diagnostic specimens for analysis (ex: urine, blood, feces, specimens for cytology)*

[†] Please see the AVMA CVTEA accreditation policies and procedures for additional information on skills designated with an asterisk (*), italics, and [GROUP].

COMPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS [†]
		Perform venipuncture: cephalic (dog, cat)* jugular (dog, cat, horse/pony/donkey/mule, ruminant)* saphenous (dog) ear (pig) coccygeal (cow) anterior vena cava (pig) Collect urine sample: catheterize female dog catheterize female dog catheterize female dog catheterize female dog catheterize male cat catheterize male cat catheterize male cat catheterize lemale cat catheterize lemale cat perform cystocentesis (dog or cat)*[GROUP] catheterize large animal Prepare diagnostic specimens for shipment* Therapeutics Administer parenteral medications: subcutaneous (dog, cat, ruminant)* intramuscular (dog, cat, horse/pony/donkey/mule)* intrammamary (mastitis therapy only) (ruminant) intravenous (dog, cat, ruminant, horse/pony/donkey/mule)* Administer enteral medications: balling gun (ruminant)* dose syringe (ruminant)* dose syringe (ruminant) hand pilling (dog, cat) hand pilling (dog, cat) dose syringe (ruminant) hand pilling (dog, cat) hand pilling (dog, cat) hand pilling (dog, cat) hand pilling (dog, cat) dose syringe (ruminant) hand pilling (dog, cat) han

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS [†]
2.1			 Apply established emergency protocols (simulation acceptable): maintain emergency medical supplies/crash cart* perform first aid and cardiopulmonary resuscitation* use resuscitation bag* apply emergency splints and bandages* Dentistry Perform Comprehensive Oral Health Assessment and Treatment (COHAT) (scaling and polishing) (manual and machine)* Understand client education regarding home care* Float teeth (horses/pony/donkey/mules) Trim teeth (rabbits, rodents, pigs) ANESTHESIA PATIENT MANAGEMENT Calculate dosages of appropriate anesthetic-related drugs* Administer anesthetic-related drugs (injection, endotracheal tube, mask)* Place endotracheal tubes in patients * Utilize clinical signs and appropriate equipment to monitor patient status during anesthetic procedures* (e.g., esophageal stethoscope, blood pressure monitor, capnometer, electrocardiogram, pulse oximeter)* Evaluate patient and implement pain management protocols as directed* Recognize and respond appropriately to patients in compromised states* Perform appropriate resuscitation procedures as needed (e.g., calculate and administer appropriate anesthetic antagonists and emergency drugs as directed)* Complete controlled substance log* (does not need to be official controlled substance log; mock logs may be utilized) SURGICAL NURSING Have knowledge of routine surgical procedures and related equipment, including surgeries in these categories: ovariohysterectomy – (dog, cat)* ecsarean section – all common species* othopyelic procedures* orchiectomy – (dog, cat)* laparotomies – all common species* dystocias in common species* dystocias in common species* otystocias in common species* otystocias in common species*

COMPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS [†]
		* provide aseptic surgical assistance with care of exposed tissues* demonstrate ability to aseptically don surgical gown and gloves* aseptically handle and pass instruments and supplies* operate and maintain suction and cautery machines* understand the principles of operation and maintenance of fiber optic equipment* Coordinate pain management with the anesthesia/surgical team* Provide post-operative care: pain management* fluid therapy* adequate nutrition* wound management* bandaging* discharge instructions* suture removal* Procedural Management Prepare gowns, masks, gloves, and drapes* Perform pre-surgical instruments and supplies* Prepare gowns, masks, gloves, and drapes* Perform pre-surgical set-up* Identify common suture materials, types, and sizes* Maintain proper operating room conduct and asepsis* LABORATORY PROCEDURES Specimen Management Implement quality control measures* [GROUP] Understand how to ensure safety of patients, clients and staff in the collection and handling of samples* Prepare, label, package, and store specimens for laboratory analysis* Specimen Analysis Perform urinalysis: determine physical properties (e.g., color, clarity, specific gravity)* test chemical properties* examine and identify sediment* Perform CBC to include: hemoglobin* packed cell volume* total protein* white cell count* red cell caluate exphrocyte morphology – normal vs abnormal* evaluate throuses be correct white blood cell counts for nucleated cells* Calculate hematologic indices* Coagulation tests – perform one of the following*: [GROUP] buccal mucosal bleeding time activated clot

COM	IPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS [†]
2.1			Perform blood chemistry tests (BUN, glucose, common enzymes)* Perform serologic test (ELISA, slide/card agglutinations)* I dentify blood parasites: Diofilaria sp/Acanthocheilonema sp (formerly Dipetalonema sp)* Perform parasitologic procedures for external parasites and identify: mites* lice* lices* lices* fleas* fleas* flies* Perform diagnostics procedures for parasites: Antigen kit*, direct*, Knotts* fecal flotation * fecal sedimentation * direct smear * centrifugation with flotation* ldentify common parasitic forms: mematodes* trematodes* protozoa* Perform microbiologic procedures/evaluations: collect representative samples* direct smear and perform sensitivity tests* directify common animal pathogens using commercially available media and reagents* [GROUP] collect milk samples and conduct mastitis testing (e.g., CMT, bacteria culture)* [GROUP] perform common biochemical tests* [GROUP] perform staining procedures* culture and identify common dermatophytes* Perform cytologic evaluation: collect, prepare, and evaluate ear cytology* collect, prepare, and evaluate canine vaginal smears* [GROUP] collect samples, store and ship according to laboratory protocols *[GROUP] collect samples, store and ship according to laboratory protocols *[GROUP] collect samples, store and ship according to laboratory protocols *[GROUP] collect samples, store and ship according to laboratory protocols *[GROUP] collect samples, store and ship according to laboratory protocols *[GROUP] collect samples, store and ship according to laboratory protocols *[GROUP] collect samples, store and ship according to laboratory protocols *[GROUP] collect samples, store and ship accord

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS†
2.1			 Perform radiographic contrast studies – perform one of the following*: [GROUP] GI Series Pneumocystogram Intravenous pyelogram Other Perform on a sedated canine radiographic techniques utilized in screening for canine hip dysplasia* [GROUP] LABORATORY ANIMAL PROCEDURES Mice or rats, and rabbits Recognize and restrain (mouse/rat, rabbit)* Determine sex and understand reproduction (mouse/rat, rabbit)* Perform methods of injection: subcutaneous (mouse/rat, rabbit)* intraperitoneal (mouse/rat*) [GROUP] Collect blood samples Intravenous (mice/rat, rabbit) [GROUP]* Perform oral dosing (mouse/rat)* [GROUP] Have working knowledge of anesthetic and recovery procedures* Identify and describe clinical signs of common diseases* AVIAN, EXOTIC, &SMALL MAMMALS PROCEDURES Recognize, understand, and perform restraint techniques of birds* Demonstrate the ability to perform a physical exam and accurately record results: birds*, reptiles, amphibians, and ferrets Perform nail trim (bird*, exotic, small mammal) [GROUP]
2.2	Promotes comprehensive wellness and preventive care	 Recommends disease prevention measures Provides nutritional counseling appropriate to life stage and health status Advises clients regarding routine dental care Educates clients on prevention of common behavioral problems Counsels clients about husbandry and welfare needs 	PHARMACY Administration Recognize the safe and effective manner in which vaccines must be administered; recognize and explain common side effects* Demonstrate the ability to monitor therapeutic responses* NURSING Patient Care HUSBANDRY Grooming: Demonstrate understanding of therapeutic bathing, basic grooming, and dipping of dogs or cats* trim nails (dog, cat)* trim hooves (ruminant, horse/pony/donkey/mule) apply equine tail and leg wraps* express canine anal sacs* clean and medicate ears (dog, cat)* clean sheath (horse/pony/donkey/mule) Perform microchip scanning and implantation Environmental conditions: implement sanitation procedures for animal holding and housing areas* Demonstrate understanding of permanent identification* Demonstrate understanding of breeding/reproduction techniques* Demonstrate understanding of care of orphan animals Demonstrate understanding of nursing care of newborns*

COMPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS [†]
2.2		NUTRITION • Understand life stage energy and nutrient requirements of well animals (dog, cat, horse/pony/donkey/mule, cow)* • Identify common grains and forages • Understand key nutritional factors in disease conditions* • be familiar with therapeutic foods* • Understand current developments in nutritional supplements and additives including benefits and potential toxicities* • Understand and identify substances that when ingested result in toxicity: • identify common poisonous plants* • be familiar with substances (organic and inorganic) that cause toxicity* • Develop and communicate hospital nutrition protocols* LABORATORY ANIMAL PROCEDURES Mice or rats, and rabbits • Perform and/or supervise basic care procedures: • handling (mouse/rat, rabbit)* • nutritional needs/diet* • provide food, water, and enrichment in a species-appropriate manner (mouse/rat, rabbit)* • identification* AVIAN, EXOTIC, & SMALL MAMMALS PROCEDURES • Understand unique husbandry issues for each species (birds, reptiles, amphibians, guinea pigs, hamsters, gerbils, and ferrets) and provide client education*: • nutritional needs/diet • watering • caging (temperature, humidity, light) • aquarium care • understand reproduction • basic grooming (beak, wing, and nail clipping) • appropriate transportation methods





Animal Population Care and Management

Under the direction of a veterinarian, the graduate implements programs in disease prevention and control to improve the health, welfare and productivity of animal populations

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS†
3.1	Applies population care and management principles in compliance with legal regulations and economic realities	 Recommends disease prevention measures Advises on nutritional management Recommends housing and husbandry protocols Implements therapeutic plans for disease management 	
3.2	Implements appropriate protocols for biosecurity	 Executes isolation protocols Selects disinfection protocols Recommends protocols for animal movement Recommends access protocols for personnel and visitors to animal populations and/or premises 	OFFICE AND HOSPITAL PROCEDURES, CLIENT RELATIONS AND COMMUNICATION Management • Establish and maintain appropriate sanitation and infection control protocols for a veterinary facility, including patient and laboratory area*
3.3	Advises stakeholders on practices that promote animal welfare	 Advocates for animal welfare through communication of the physical, affective and natural needs of the animal. Explains ethical and welfare-related aspects of production processes and slaughter Recognizes proper handling and/or adequate production facilities by interpretation of appropriate animal behaviors. Advises on animal husbandry and transport 	

[†] Please see the AVMA CVTEA accreditation policies and procedures for additional information on skills designated with an asterisk (*), italics, and [GROUP].





Public Health

The graduate responds to issues at the interface of animals, humans, and the environment, utilizing a global perspective and sensitivity to local cultures

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS†
4.1	Recognizes potential zoonotic diseases and responds accordingly	 Identifies the clinical signs, clinical course, transmission potential and pathogen(s) associated with zoonotic diseases Responds to zoonotic disease risk and diagnosis through owner education, reporting, quarantine, and disinfection 	
4.2	Promotes the health and safety of people and the environment	 Makes recommendations for management of animal waste, carcasses, and by- products Implements safety and infection control practices Advises on disaster/ emergency preparedness and response Promotes responsible use of antimicrobial agents Describes the role of veterinarians and veterinary nurses in food safety 	LABORATORY PROCEDURES Specimen Analysis Perform necropsy procedures: sexplain how to handle rabies suspects and samples safely*

[†] Please see the AVMA CVTEA accreditation policies and procedures for additional information on skills designated with an asterisk (*), italics, and [GROUP].





Communication

The graduate communicates effectively with diverse clients, colleagues, other healthcare professionals, and the public to promote animal, human and environmental health and wellbeing.

COMPETENCIES		ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS†	
5.1	Listens attentively and communicates professionally	 Communicates with diverse audiences (e.g., demonstrates empathy, uses terminology appropriate to listener) Utilizes a variety of communication platforms (e.g., email) Effectively employs active listening 	OFFICE AND HOSPITAL PROCEDURES, CLIENT RELATIONS AND COMMUNICATION Communication • Demonstrate telephone etiquette* (e.g. through role-playing, educational resources, etc.)	
5.2	Adapts communication style to diverse audiences including colleagues, coworkers, and clients	 Communicate effectively with clients, the public, professional colleagues, coworkers, and responsible authorities, using language appropriate to the audience concerned and utilize technology tools when needed, for example translation apps, sign language, interpreter, etc. Elicits client goals, expectations, perspectives and constraints, considering the humananimal bond Engages clients in difficult conversations such as financial decisions and end-of-life care (e.g., palliative care and euthanasia) 	OFFICE AND HOSPITAL PROCEDURES, CLIENT RELATIONS AND COMMUNICATION Communication Demonstrate an understanding of interpersonal skills and team dynamics* Utilize interpersonal and public relations skills* OFFICE AND HOSPITAL PROCEDURES, CLIENT RELATIONS AND COMMUNICATION Law and Ethics Interact professionally with clients and fellow staff members*	

[†] Please see the AVMA CVTEA accreditation policies and procedures for additional information on skills designated with an asterisk (*), italics, and [GROUP].



COMPETENCIES		ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS†
5.3	Prepares documentation appropriate for the intended audience	 Documents care and communication using terminology appropriate for intended audience Ensures documentation fulfills professional and legal requirements 	OFFICE AND HOSPITAL PROCEDURES, CLIENT RELATIONS AND COMMUNICATION Communication • Develop and provide client education in a clear and accurate manner at a level the client understands (i.e., oral and written form, including educational handouts) * • Demonstrate the ability to accurately record medical information* PHARMACY AND PHARMACOLOGY Administration • Demonstrate the ability to accurately record medical information* Dispensing • Relay drug information to clients (e.g., handling, storage, administration, side-effects, drug interactions, safety, reasons for use of drug)* ANESTHESIA Patient Management • Record and maintain anesthesia records*





Collaboration

The graduate collaborates with diverse colleagues, clients and other stakeholders and demonstrates skills as a leader and inter-professional team member to improve outcomes and reduce error.

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS†
6.1	Solicits, respects and integrates contributions from others	 Invites input from others irrespective of role, hierarchy or background Acknowledges input and incorporates into ongoing plan of action Leverages own role and roles of others to achieve shared goals 	
6.2	Functions as leader or team member based on experience, skills and context	 Applies principles of teamwork Bases action on collaborative input Manages conflict Provides effective feedback 	
6.3	Builds and maintains relationships to provide continuity of collaborative effort	 Organizes documentation with collaborator in preparation for transfer or discharge Follows up to determine if collaborator can implement the plan Provides support through encouragement, education, or redirection to refine the plan of action 	
6.4	Demonstrates cultural humility	 Values and supports diverse contributions within the workplace Mitigates unconscious bias Promotes an inclusive environment 	

[†] Please see the AVMA CVTEA accreditation policies and procedures for additional information on skills designated with an asterisk (*), italics, and [GROUP].







Professionalism and Professional Identity

The graduate demonstrates expected behaviors including ethical reasoning, reflective practice, self-regulation, self-advocacy, professional development, and personal wellbeing.

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS†
7.1	Adopts an ethical approach to meeting professional obligations	 Applies an ethical approach to professional decision-making Recognizes and responds to evidence of neglect and abuse and reports suspicion using the appropriate channels and protocols 	
7.2	Practices time management	 Recognizes impact of time management on stakeholders Prioritizes and completes tasks according to importance and urgency 	
7.3	Reflects on personal actions	 Invites and responds appropriately to constructive feedback Critiques their own decision-making process and its outcomes Recognizes how one's own culture impacts interactions with clients and colleagues and accepts responsibility 	

[†] Please see the AVMA CVTEA accreditation policies and procedures for additional information on skills designated with an asterisk (*), italics, and [GROUP].

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS [†]
7.4	Engages in self- directed learning	 Engages in self-directed learning as a foundation for life-long learning Identifies and undertakes professional development to meet learning needs Uses appropriate resources for learning and decision-making (e.g., information technology, consultation with colleagues) 	
7.5	Attends to wellbeing of self and others	 Recognizes sources of workplace stress and acts to remedy adverse situations Recognizes signs of stress in self and colleagues, engages in self-care and recognizes when professional support is appropriate for self or others Manages expectations of client, colleagues, and self Establishes and navigates boundaries to mitigate workplace stress Advocates for optimal utilization of team members based on level of education and abilities 	
7.6	Engages in career planning	Compares career paths and weighs professional and personal rewards (e.g., financial implications)	





Financial and Practice Management

The graduate utilizes business and financial acumen to manage professional and personal decisions, complies with legal and regulatory requirements, and promotes safety of the workplace while carrying out daily hospital operations.

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS†	
8.1	Weighs financial factors in personal and professional decision-making	 Applies financial principles to personal and professional decisions (e.g., debt repayment plan) Explains work-related insurance (e.g., personal, professional, patient) Describes relationship between revenue generation, expense categories, and compensation including benefits 	OFFICE AND HOSPITAL PROCEDURES, CLIENT RELATIONS AND COMMUNICATION Management • Schedule appointments, admit, discharge and triage according to client, patient and facility needs through phone and in-person contact* • Recognize and respond to veterinary medical emergencies* • Handle daily client-based financial transactions*	
8.2	Assures compliance with legal and regulatory requirements in the delivery of veterinary services	 Acts in accordance with codes of professional practice, veterinary practice acts and licensing board regulations (e.g., veterinarian-client-patient relationship) Acts in accordance with legal and regulatory requirements (e.g., reportable diseases, animal cruelty, waste disposal) Selects drugs in accordance with regulatory and legal requirements (e.g., controlled substances, extra-label drug use) 	OFFICE AND HOSPITAL PROCEDURES, CLIENT RELATIONS AND COMMUNICATION Communication Recognize the legality of the veterinary-client-patient relationship* OFFICE AND HOSPITAL PROCEDURES, CLIENT RELATIONS AND COMMUNICATION Law and Ethics Understand and observe legal boundaries of veterinary health care team members* Respect and protect the confidentiality of client and patient information*	

[†] Please see the AVMA CVTEA accreditation policies and procedures for additional information on skills designated with an asterisk (*), italics, and [GROUP].

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS [†]
8.2			HOSPITAL PROCEDURES Management Recognize roles of appropriate regulatory agencies* Maintain appropriate disposal protocols for hazardous materials PHARMACY AND PHARMACOLOGY Administration Read and follow veterinarian's pharmacy orders* Demonstrate understanding of controlled substance regulations* Demonstrate compliance with all federal and state regulatory guidelines for drug purchase, storage, administration, withdrawal, dispensing, disposal, and inventory control (e.g., biologics and therapeutic agents, pesticides, and hazardous wastes)* Dispensing Demonstrate compliance with regulations governing prescription drugs versus over-the-counter drugs* Demonstrate understanding of regulations governing maintenance of controlled substances log book*
8.3	Advocates for the health and safety of patients, clients, and members of the team within the workplace	 Complies with workplace health and safety regulations (e.g., radiation safety, infection control) Applies safe practices for handling hazardous materials (e.g., administration of chemotherapeutic agents) Identifies and addresses sources of medical error/adverse events 	OFFICE AND HOSPITAL PROCEDURES, CLIENT RELATIONS AND COMMUNICATION Management Create and maintain individual client records, vaccination certificates, and other appropriate forms*: develop computer skills* be able to utilize veterinary practice management software* be familiar with veterinary on-line services* (e.g. laboratory submissions, client financing plans, continuing education, discussion groups) Perform basic filing of medical records, radiographs, lab reports, etc.* Create and maintain all appropriate facility records and logs in compliance with regulatory guidelines (e.g., radiography, surgery, anesthesia, laboratory, controlled substance)*

COMPETENCIES		ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS†		
8.4	Manages and maintains workplace environment and equipment	 Manages and maintains hospital and therapeutic equipment Utilizes appropriate sterilization and aseptic techniques to maintain a sterile operating environment Manages Inventory 	ANESTHESIA Equipment and Facility Management Maintain and operate anesthetic delivery and monitoring equipment: pulse oximeter* ecapnometer* esophageal stethoscope* electrocardiograph (e.g., recognize abnormal rhythms/audible sounds, properly apply leads)* anesthetic machines, including rebreathing systems, nonrebreathing systems and masks* endotracheal tubes* resuscitation bag* scavenging systems* oxygen sources* blood pressure monitoring devices* laryngoscopes* ventilator defibrillator temperature monitoring device* (e.g. thermometer, etc.) SURGICAL NURSING Operate and maintain autoclaves* Sterilize instruments and supplies using appropriate methods* Provide operating room sanitation and care* Perform post-surgical clean-up (e.g., equipment, instruments, room, proper disposal of hazardous medical waste)* LABORATORY PROCEDURES Specimen Management Select and maintain laboratory equipment* IMAGING Implement and observe recommended radiation safety measures* Demonstrate proper maintenance of radiographic equipment, including recognition of faulty equipment operation*		



Scholarship

The graduate demonstrates the systematic identification, evaluation, integration and adaptation of evidence and experience to formulate questions and solutions, and educate others.

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	CVTEA SKILLS†
9.1	Practices evidence- based veterinary medicine (EBVM)	 Formulates questions and customizes solutions, drawing on personal experience and available evidence Retrieves and evaluates and applies information to solve clinical or scientific problems Applies creativity to develop innovative solutions Analyzes information for accuracy, reliability, validity and applicability 	
9.2	Disseminates knowledge and practices to stakeholders	 Develops and disseminates educational material Explains evidence-based recommendations 	

[†] Please see the AVMA CVTEA accreditation policies and procedures for additional information on skills designated with an asterisk (*), italics, and [GROUP].

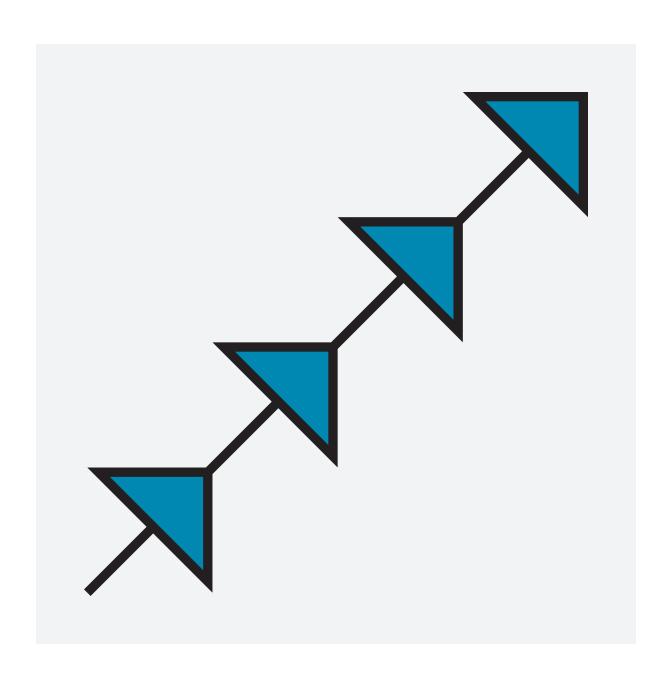
Notes			





Competency-Based Veterinary Education - Nursing

Milestones



CBVE-N: Milestones

A milestone is an observable marker of an individual's ability along a developmental continuum. Using milestones to monitor the longitudinal progress of learners helps ensure preparation for independent practice at graduation.

The CBVE-N Milestones are written at distinct levels to describe the expected performance along the trajectory of ability for each competency across the program. Veterinary technology/nursing education programs include pre-clinical instruction that provides the foundation to prepare students for patient management in the authentic workplace. Milestones for the pre-clinical curriculum are identified as Novice where learners are developing competence within controlled and simulated environments during the veterinary technician education program. The Advanced Beginner milestone describes the level of learner development expected at the time of entry into an authentic workplace where variability and ambiguity are expected. In this environment, learners may initially regress because of the complexity encountered. Since the Advanced Beginner milestone sets minimum expectations for a learner's entry into the authentic workplace, learners who have not yet reached the Advanced Beginner milestone for a particular competency may require remediation prior to entry into the clinical environment. Conversely, some learners may enter clinical training at a milestone level higher than Advanced Beginner. The Competent milestone describes the expected development of competence during clinical training and helps ensure an individual is on an appropriate trajectory towards graduation. The Competent milestone describes the expectation for a learner's entry into their professional career. If this level is not achieved, learners require remediation prior to graduation. Although some learners may achieve the Proficient milestone during the veterinary technician/nursing training program, for most learners, this milestone provides a roadmap for continued development after graduation.

In medical education literature, competence is considered a stratified concept that builds upon itself as a learner progresses along the developmental continuum. In the early phases of training, learners encounter simulated exercises within controlled learning environments. As the learner progresses to clinical training, the learning environment becomes contextdependent. In the clinical phase, the learner must consider many factors that are unique to a given case or set of circumstances (i.e., the authentic workplace). In the final phase following graduation, the professional develops personalized competence, or the art of practicing medicine, where they incorporate their own skills, interests, and habits into clinical practice. Here the achievement of proficiency corresponds with an aspirational goal usually achieved by a veterinary professional after some time in the professional work environment. Also critical to this final phase of development is the veterinary technician's ability to incorporate broader perspectives. Milestones are written such that each developmental level builds on the previous one, i.e., it is assumed that the Advanced Beginner milestone includes all the behaviors described for the Novice milestone as well as those for the Advanced Beginner milestone; behaviors are not described again at subsequent levels. The milestones are written in a broad context to support demonstration of individual competencies across multiple workplace-based activities.

Milestones create a shared mental model for learners and educators regarding the progressive development of competence. The CBVE-N Milestones may be used to:

- Guide the progression of competence throughout a learner's training;
- Enable learners to focus their learning activities more effectively;
- Assist instructors in providing feedback to learners;
- Provide clearly defined targets to guide authentic learning and assessment;
- Enable assessors to determine when a learner has achieved a given milestone or set of milestones and is ready to move to the next phase of training.

CBVE-N: Milestones

Narrative descriptions of expected learning progression for each CBVE-N Competency.

MILESTONES



Novice:

Learner development expected from entry into the veterinary nursing/ technician program and leading up to entry into the workplace environment



Advanced Beginner:

The minimum expectation for entry into the authentic workplace



Competent:

Expectation for entry into the professional career



Proficient:

Aspirational expectation after some time in the workplace

CBVE-N



DOMAIN 1

Clinical Reasoning and Decision-making

The graduate demonstrates critical thinking and problem solving to support evidence-based decisions that consider animal and client needs, available resources, and social context.

ILLUSTRATIVE COMPETENCIES MILESTONES SUBCOMPETENCIES 1.1 **Gathers and** 1. Collects history 2. Performs physical Performs handling and restraint techniques safely and effectively assimilates relevant examination sometimes with supervision. Poses historic questions from a information 3. Monitors patient status template. Gathers insufficient, exhaustive, or irrelevant information. about animals 4. Identifies normal and Performs physical examination that is sometimes disorganized and abnormal diagnostic test incomplete. results **ADVANCED BEGINNER:** 5. Performs necropsy Gathers most pertinent information. May omit details that support/ examination refute common differential diagnoses. Physical exam follows a pattern and major abnormalities are identified, described and documented, but may overlook key findings. Interprets laboratory tests correctly most of the time; struggles to interpret conflicting results. **COMPETENT:** Obtains pertinent history appropriate for the situation. Identifies and organizes historic elements consistent with common disorders.Performs thorough physical exam in a logical, fluid sequence. Identifies and documents most abnormal physical exam findings, including subtle findings. Interprets routine diagnostic tests appropriately. Ambiguous results are interpreted in the context of history and physical exam. Recognizes variability in disease presentation and associated physical exam findings. Identifies historic information pertinent to unusual disease conditions. Efficiently reviews results and recognizes unexpected findings. Understands the magnitude of abnormal findings and how they contribute to interpretation. Summarizes findings using semantic qualifiers (e.g., acute, subacute and chronic).

ILLUSTRATIVE COMPETENCIES MILESTONES SUBCOMPETENCIES 1.2 NOVICE: 1. Identifies patient needs **Prioritizes patient** 2. Creates initial nursing plan May not adequately recognize patient needs. Describes some needs to achieve 3. Justifies initial nursing components of nursing plan. May not consider unique patient data effective patient care plan based on prioritized when creating nursing plan. patient needs ADVANCED BEGINNER: Recognizes most patient needs, but is not able to prioritize needs when developing a nursing plan. Considers some unique patient data when creating a nursing plan with prompting. **COMPETENT:** Recognizes and prioritizes patient needs based on unique patient data when developing a nursing plan. Explains clinical reasoning for patient care decisions. PROFICIENT: Succinctly and accurately justifies all elements of the nursing plan. Able to anticipate patient needs based on available evidence including ambiguous data. NOVICE: 1.3 Adjusts a nursing 1. Re-evaluates and identifies Describes some components of the nursing plan, but may not changes in patient or plan based on population status and acts consider unique patient data to adjust plan. Does not reevaluate available evidence accordingly situation after implementation of plan. 2. Explains justification for ADVANCED BEGINNER: changes in nursing plan Understands most components of the nursing plan. Adjusts plan in a manner that is only partially tailored to animal(s). With prompting, reevaluates situation; may have difficulty applying new information. **COMPETENT:** Understands all components of the nursing plan. Adjusts plan in a manner that is tailored to the animal(s), reevaluates information, and updates plan. Explains clinical reasoning for management decisions. Initial conclusions may be inaccurate but self-corrects. PROFICIENT: Articulates succinct and accurate explanations for decisionmaking. Follows systematic procedures to effectively reconcile ambiguous data. Quickly adjusts nursing plan based on available evidence.

ILLUSTRATIVE COMPETENCIES MILESTONES SUBCOMPETENCIES 1.4 Incorporates animal 1. Considers patient care NOVICE: in context of the whole May not consider the impact of cost, logistics, welfare or quality welfare, client animal and client of life in the design of the nursing plan. May not recognize the expectations and 2. Presents a range of patient importance of owner input. needs into the care options to the client nursing plan ADVANCED BEGINNER: 3. Assess patient quality of Is unable to describe the advantages, logistics, and/or 4. Recognizes quality of life complications of each patient care option. Has difficulty explaining possible outcomes. Seeks owner input but may not fully as a key determinant on incorporate into nursing plan. euthanasia decisions COMPETENT: Recognizes a range of feasible nursing plans, including euthanasia, with consideration of the long-term health and welfare, and quality of life of the animal(s). Respects owner limitations and preferences. Provides clear explanations of the advantages, complications, and prognosis of each option. PROFICIENT: Empowers owners to participate in the implementation of a comprehensive customized nursing plan for their animal(s), including palliative care. Incorporates available evidence and accurately explains the expense and value of options. 1.5 NOVICE: **Prioritizes situational** 1. Triages cases to address most urgent and important Recognizes overt life-threatening situations but may not initiate urgency and problems first appropriate action or recognize decompensating animal(s). allocates resources 2. Recognizes emergency **ADVANCED BEGINNER:** situations and responds Recognizes urgent situations, alerts health care team, and accordingly prioritizes care. Inconsistently detects changes in patient status 3. Recognizes potential that require intervention. reportable, transboundary, epizootic, and emerging/ COMPETENT: re-emerging diseases and Recognizes change in status warranting escalating care or responds accordingly imminent danger. Calls for assistance and works with team members in a coordinated effort. PROFICIENT: Reevaluates patient or situation continuously, efficiently coordinates team activities and aligns available resources to address needs.

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	MILESTONES
1.6	Adapts knowledge to varied scenarios and contexts	 Extrapolates knowledge to novel species or situations Adjusts existing protocol or procedure when standard measures are unavailable 	NOVICE: Employs a standardized approach to patient care. Variation in circumstances presents a barrier. May not progress with incomplete information or situations that vary from routine. ADVANCED BEGINNER: Demonstrates basic problem-solving skills but inconsistently adapts nursing plan when situations vary from routine. COMPETENT: Consistently adapts nursing plan when situations vary from routine, and draws inferences across species and circumstances in most situations. PROFICIENT: Creates solutions for gaps in care. Transfers solutions routinely across species and situations. Functions well in resource-poor environment.
1.7	Recognizes both capabilities and limitations of knowledge, skill and resources and consults as needed	 Identifies own capabilities as well as situations in which additional expertise and/or resources are needed Consults other professionals both within and outside the veterinary profession 	NOVICE: Inaccurately estimates abilities and may lack awarness of resource limitations. Reluctant to reveal shortcomings or seek advice from others or is overly reliant on consultation with others. ADVANCED BEGINNER: Recognizes some skills and limitations but under- or overestimates other abilities. Frequently needs help identifying resources for consultation. COMPETENT: Accurately estimates abilities in most situations. Usually seeks guidance when warranted. Occasionally delays timely consultation or seeks unnecessary consultation. PROFICIENT: Recognizes own abilities and limitations. Anticipates the need for timely consultation with supervisor and pursues without delay.

SBC -N

DOMAIN 2

Individual Animal Care and Management

The graduate performs preventive, diagnostic, and therapeutic procedures for the health, wellness and treatment of animals, as directed by a veterinarian.

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	MILESTONES
2.1	Performs procedures and post-procedural care	 Performs laboratory and diagnostic procedures (e.g qualitative fecal, diagnostic imaging) Performs routine therapeutic procedures (e.g., administer fluids) Performs emergency procedures (e.g., establish an airway) Provides analgesia and postoperative care Anesthetizes and recovers patients Manages patient comfort Perform humane euthanasia procedures 	NOVICE: Describes common procedures. Requires step-by-step coaching during execution of pre and post-procedural care. Limited ability to anticipate next steps and patient needs. ADVANCED BEGINNER: Performs common procedures with intermittent assistance and appropriate supervision. Limited ability to take corrective action. Initiates limited pre- and post-procedural care. COMPETENT: Performs common procedures, including pre-and post-procedural management, without supervision but with support available, if needed. Takes corrective action as warranted. PROFICIENT: Performs procedures independently. Demonstrates fluidity and efficiency in procedural performance. Supervises others in performing procedures.
2.2	Promotes comprehensive wellness and preventive care	 Recommends disease prevention measures Provides nutritional counseling appropriate to life stage and health status Advises clients regarding routine dental care Educates clients on prevention of common behavioral problems Counsels clients about husbandry and welfare needs 	NOVICE: Presents some basic, yet incomplete, recommendations for wellness/ preventive care. May not be able to articulate rationale for recommendations. ADVANCED BEGINNER: Informs client of wellness/preventive care plan recommendations but may not explain benefits and importance unless asked. Readily ends wellness focused discussion if client disengages or expresses indifference. COMPETENT: Presents a comprehensive wellness/preventive care plan including justification for each component. Actively engages client, answers questions thoroughly and confidently, and promotes patient and client benefits. PROFICIENT: Engages the client in selecting a comprehensive wellness/ preventive care plan. Helps client prioritize healthcare options when resources are limited.





DOMAIN 3

Animal Population Care and Management

Under the direction of a veterinarian, the graduate implements programs in disease prevention and control to improve the health, welfare and productivity of animal populations

COMPETENCIES		ILLUSTRATIVE SUBCOMPETENCIES	MILESTONES
3.1	Applies population care and management principles in compliance with legal regulations and economic realities	 Recommends disease prevention measures Advises on nutritional management Recommends housing and husbandry protocols Implements therapeutic plans for disease management 	NOVICE: Inconsistent interpretation and implementation of population care and management plan. ADVANCED BEGINNER: Accurate interpretation of population care and management plan, however, implementation may not appropriately consider population, regulatory or client needs. COMPETENT: Accurate interpretation and implementation of population care and management plan including consideration of population, regulatory and client needs. PROFICIENT: Accurate interpretation and implementation of population care and management plan. Is able to recognize the need to adjust implementation based on population, regulatory and client needs
3.2	Implements appropriate protocols for biosecurity	 Executes isolation protocols Selects disinfection protocols Recommends protocols for animal movement Recommends access protocols for personnel and visitors to animal populations and/or premises 	NOVICE: Inconsistently selects appropriate biosecurity protocols or may not explain rationale for protocol accurately. ADVANCED BEGINNER: Consistently selects appropriate biosecurity protocol for common infectious diseases. May not recognize gaps in protocol implementation. COMPETENT: Implements appropriate isolation, disinfection and animal movement protocols for common diseases. Evaluates effectiveness of biosecurity protocols and suggests improvements. PROFICIENT: Evaluates and advises on biosecurity protocols in varied situations (e.g., less common diseases or wide geographic area).

ILLUSTRATIVE COMPETENCIES MILESTONES SUBCOMPETENCIES 3.3 1. Advocates for animal NOVICE: **Advises stakeholders** welfare through Recognizes animal welfare concerns inconsistently. on practices communication of the that promote ADVANCED BEGINNER: physical, affective and animal welfare Recognizes welfare concerns but may have difficulty promoting natural needs of the these strategies to stakeholders. animal. 2. Explains ethical and **COMPETENT:** welfare-related aspects of Advocates for animal welfare and advises stakeholders regarding production processes and best practices. slaughter 3. Recognizes proper PROFICIENT: handling and/or adequate Engages the local community and profession to advocate for production facilities animal health and welfare. Promotes best practices in the face of by interpretation of opposition. appropriate animal behaviors. 4. Advises on animal husbandry and transport

DOMAIN 4

Public Health

The graduate responds to issues at the interface of animals, humans, and the environment, utilizing a global perspective and sensitivity to local cultures

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	MILESTONES
4.1	Recognizes potential zoonotic diseases and responds accordingly	1. Identifies the clinical signs, clinical course, transmission potential and pathogen(s) associated with zoonotic diseases 2. Responds to zoonotic disease risk and diagnosis through owner education, reporting, quarantine, and disinfection	NOVICE: May not be able to describe clinical signs of common zoonotic diseases, recognize in an applied setting, or implement appropriate action plans. ADVANCED BEGINNER: Identifies clinical signs associated with common zoonotic diseases and takes appropriate barrier precautions. Seeks appropriate help to implement a plan. COMPETENT: Identifies common zoonotic diseases consistently. Develops and helps implement a plan for owner education, reporting, quarantine, and disinfection. Instructs others in barrier precautions. PROFICIENT: Coordinates control measures across a range of species in atypical presentations of zoonotic diseases.
4.2	Promotes the health and safety of people and the environment	 Makes recommendations for management of animal waste, carcasses, and by- products Implements safety and infection control practices Advises on disaster/ emergency preparedness and response Promotes responsible use of antimicrobial agents Describes the role of veterinarians and veterinary nurses in food safety 	NOVICE: Exhibits lapses in health and safety practices but follows posted regulations when prompted. ADVANCED BEGINNER: Follows health and safety practices most of the time. Describes the role of the veterinary professionals in protecting public/environmental health. COMPETENT: Consistently follows practices that support and protect the health and safety of people, the environment and the food supply, respecting cultural differences. PROFICIENT: Responds appropriately in unexpected situations including disasters and emergencies.

CBVE-N



DOMAIN 5

Communication

The graduate communicates effectively with diverse clients, colleagues, other healthcare professionals, and the public to promote animal, human and environmental health and wellbeing.

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	MILESTONES
5.1	Listens attentively and communicates professionally	 Communicates with diverse audiences (e.g., demonstrates empathy, uses terminology appropriate to listener) Utilizes a variety of communication platforms (e.g., email) Effectively employs active listening 	NOVICE: Communicates in a primarily unidirectional manner with limited active listening. May have difficulty conveying information clearly and professionally. ADVANCED BEGINNER: Communicates bidirectionally and professionally. May not always be clear and concise. COMPETENT: Practices active listening and fosters bidirectional communication. Consistently communicates professionally, clearly and concisely. PROFICIENT: Demonstrates confidence and ease even when discussing sensitive subjects.
5.2	Adapts communication style to diverse audiences including colleagues, coworkers, and clients	 Communicate effectively with clients, the public, professional colleagues, coworkers, and responsible authorities, using language appropriate to the audience concerned and utilize technology tools when needed, for example translation apps, sign language, interpreter, etc. Elicits client goals, expectations, perspectives and constraints, considering the humananimal bond Engages clients in difficult conversations such as financial decisions and end-of-life care (e.g., palliative care and euthanasia) 	NOVICE: Adheres to own communication style. May make assumptions rather than eliciting perspectives from others. May use inappropriate terminology. ADVANCED BEGINNER: Uses appropriate terminology most of the time and sometimes elicits others' perspectives. Attempts to adapt communication style to meet the needs of others but sometimes forgets to check for understanding. COMPETENT: Elicits perspectives of others, confirms understanding and concerns, and adapts communication to individual and situation. Establishes rapport and trust. PROFICIENT: Readily adapts the communication to the colleague's or client's unique needs including difficult conversations. Anticipates areas of concern and explains this information proactively.

ILLUSTRATIVE COMPETENCIES MILESTONES SUBCOMPETENCIES 5.3 1. Documents care and NOVICE: **Prepares** communication using Documents some relevant information but may not be timely, well documentation terminology appropriate organized, legible, accurate, complete or relevant. Terminology may appropriate for the for intended audience be inappropriate for the audience. Requires point-by-point direction intended audience 2. Ensures documentation to complete forms. fulfills professional and **ADVANCED BEGINNER:** legal requirements Documents most relevant information in a legible and timely manner but may not be organized or concise and may require revision to correct inaccuracies. Terminology is usually appropriate for the audience. Forms are usually completed correctly with some guidance. COMPETENT: Documents information that is accurate and organized using terminology appropriate for the target audience. Documentation is timely, legible and requires little revision. Forms are filled out completely according to directions. PROFICIENT: Documents information thoroughly and concisely with adaptation to the intended audience. Able to identify deficiencies in documentation





DOMAIN 6

Collaboration

The graduate collaborates with diverse colleagues, clients and other stakeholders and demonstrates skills as a leader and inter-professional team member to improve outcomes and reduce error.

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	MILESTONES
6.1	Solicits, respects and integrates contributions from others	 Invites input from others irrespective of role, hierarchy or background Acknowledges input and incorporates into ongoing plan of action Leverages own role and roles of others to achieve shared goals 	NOVICE: May not fully understand the roles of others or may overlook their contributions. ADVANCED BEGINNER: Understands the roles of others and demonstrates respect for their input. COMPETENT: Considers shared goals and solicits input from others. PROFICIENT: Prioritizes shared goals and implements input from colleagues, clients and other stakeholders when appropriate.
6.2	Functions as leader or team member based on experience, skills and context	 Applies principles of teamwork Bases action on collaborative input Manages conflict Provides effective feedback 	NOVICE: May function only as an observer of team activities and behaviors. ADVANCED BEGINNER: May often function as a passive team member and depend on others for direction. Challenged by team-based conflict COMPETENT: Functions as an active team member. Adapts own roles and responsibilities as needed to meet team goals. Draws on personal experience to be adaptive. Navigates conflict effectively. Provides feedback effectively and is receptive to constructive feedback. PROFICIENT: Functions as a team leader to manage roles and responsibilities of others to meet team goals. Leverages team member experience to adapt to new contexts. Mediates conflict effectively.

ILLUSTRATIVE COMPETENCIES MILESTONES SUBCOMPETENCIES NOVICE: 6.3 **Builds and maintains** 1. Organizes documentationwith May focus on own agenda without engaging or following up with relationships to collaborator in preparation others. provide continuity of fro transfer or discharge collaborative effort ADVANCED BEGINNER: 2. Follows up to determine Engages others to maintain relationships but follow-through may if collaborator can be inconsistent. implement the plan 3. Provides support through COMPETENT: encouragement, education, Supports new and existing relationships by actively coordinating or redirection to refine the activities, engaging others and providing follow-up. plan of action PROFICIENT: Creates new and advances ongoing relationships to improve outcomes and reduce errors. 1. Values and supports 6.4 **Demonstrates** NOVICE: diverse contributions Acknowledges the existence of diversity in all its dimensions. May cultural humility within the workplace not recognize own microaggressions, insensitive actions, or lack of 2. Mitigates unconscious inclusivity. bias ADVANCED BEGINNER: 3. Promotes an inclusive Acknowledges the importance of diversity and inclusivity, and environment sometimes incorporates in collaborations and communications. May not actively seek opinions but considers them if offered. COMPETENT: Consistently communicates with cultural awareness and sensitivity. Facilitates discussion that is respectful and non-judgmental. PROFICIENT: Encourages, acknowledges and accepts diverse contributions and promotes inclusivity within the workplace. Works towards understanding when views conflict with their own.

CBVE-N



DOMAIN 7

Professionalism and Professional Identity

The graduate demonstrates expected behaviors including ethical reasoning, reflective practice, self-regulation, self-advocacy, professional development, and personal wellbeing.

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	MILESTONES
7.1	Adopts an ethical approach to meeting professional obligations	 Applies an ethical approach to professional decision-making Recognizes and responds to evidence of neglect and abuse and reports suspicion using the appropriate channels and protocols 	NOVICE: May lack awareness of professional code of conduct and its application in decision-making. May not be able to articulate an accepted ethical position. ADVANCED BEGINNER: Generally acts within the professional code of conduct. Recognizes ethical dilemmas but may inconsistently apply an ethical decision-making framework. COMPETENT: Consistently acts within the professional code of conduct. Applies an ethical decision-making framework when addressing dilemmas. Demonstrates accountability by taking action on ethical issues. PROFICIENT: Models professional behavior in all situations and leads ethical discussions through engagement with others.
7.2	Practices time management	 Recognizes impact of time management on stakeholders Prioritizes and completes tasks according to importance and urgency 	NOVICE: May need assistance organizing and prioritizing tasks and responsibilities. ADVANCED BEGINNER: Functions well in a slow-paced setting. Organizes and prioritizes activities but may lack efficiency. COMPETENT: Organizes and prioritizes tasks and responsibilities according to importance and urgency. PROFICIENT: Focuses on planning ahead, being proactive, and optimizing productivity of self and others. Successfully manages interruptions.

ILLUSTRATIVE COMPETENCIES **MILESTONES** SUBCOMPETENCIES 7.3 Reflects on 1. Invites and responds **NOVICE:** appropriately to May demonstrate difficulty asking for or accepting feedback and personal actions constructive feedback conducting an accurate self-assessment. 2. Critiques their own ADVANCED BEGINNER: decision-making process May have difficulty applying reflective practice for selfand its outcomes improvement. Accepts constructive feedback but may not always 3. Recognizes how one's modify behavior. own culture impacts interactions with clients COMPETENT: and colleagues and Applies reflective practice regularly for self-improvement. accepts responsibility Invites feedback from others and modifies behavior accordingly. Understands the importance of emotional intelligence, cultural sensitivity, and self-awareness. Serves as a role model and encourages others to engage in reflective practice. Regularly demonstrates emotional intelligence, cultural sensitivity, and self-awareness. 7.4 **Engages in self-**1. Engages in self-directed learning as a foundation May demonstrate difficulty identifying gaps in knowledge and skills. directed learning for life-long learning 2. Identifies and undertakes **ADVANCED BEGINNER:** Recognizes gaps in knowledge and skills. Consults easily professional development to meet learning needs accessible resources but may require prompting to expand depth of investigation. 3. Uses appropriate resources for learning COMPETENT: and decision-making (e.g., Identifies most gaps in knowledge and skills easily. Self-corrects information technology, using reliable sources. consultation with colleagues) PROFICIENT: Remains current with literature and applies it professionally. NOVICE: 7.5 Attends to wellbeing 1. Recognizes sources of workplace stress and May not recognize signs or sources of stress in self and of self and others acts to remedy adverse colleagues. May occasionally neglect self-care and personal situations wellbeing. Not always able to establish boundaries to protect self 2. Recognizes signs of stress or recognize boundaries established by others. in self and colleagues, ADVANCED BEGINNER: engages in self-care Inconsistently recognizes signs or sources of stress in self and and recognizes when colleagues. Understands the importance of self-care. Inconsistently professional support is practices habits that promote wellbeing in self and others. appropriate for self or others **COMPETENT:** 3. Manages expectations of Utilizes a range of effective coping strategies to address workplace client, colleagues, and self stress. Practices habits that promote wellbeing in self and others. 4. Establishes and navigates Recognizes and normalizes the need for professional support. boundaries to mitigate Respects boundaries established by others. workplace stress 5. Advocates for optimal PROFICIENT: utilization of team Promotes a healthy workplace culture. Reaches out to others members based on level of exhibiting signs of stress and identifies resources for professional education and abilities help.

COI	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	MILESTONES
7.6	Engages in career planning	Compares career paths and weighs professional and personal rewards (e.g., financial implications)	NOVICE: Identifies a variety of career opportunities but may not investigate specifics. ADVANCED BEGINNER: Investigates career opportunities by consulting mentors and seeking experiences in interest areas. COMPETENT: Plans and completes experiences to strengthen qualifications for chosen career path. PROFICIENT: Identifies aspirational career goals.





DOMAIN 8

Financial and Practice Management

The graduate utilizes business and financial acumen to manage professional and personal decisions, complies with legal and regulatory requirements, and promotes safety of the workplace while carrying out daily hospital operations.

CON	MPETENCIES	ILLUSTRATIVE SUBCOMPETENCIES	MILESTONES
8.1	Weighs financial factors in personal and professional decision-making	 Applies financial principles to personal and professional decisions (e.g., debt repayment plan) Explains work-related insurance (e.g., personal, professional, patient) Describes relationship between revenue generation, expense categories, and compensation including benefits 	NOVICE: Describes financial principles but may not be able to apply them. ADVANCED BEGINNER: Develops personal and professional financial plans but inconsistently implements them. COMPETENT: Consistently implements personal and professional financial plans. Seeks professional counsel to refine financial plans and negotiate contracts. PROFICIENT: Strategically applies financial acumen when pursuing personal and professional goals.
8.2	Assures compliance with legal and regulatory requirements in the delivery of veterinary services	 Acts in accordance with codes of professional practice, veterinary practice acts and licensing board regulations (e.g., veterinarian-client-patient relationship) Acts in accordance with legal and regulatory requirements (e.g., reportable diseases, animal cruelty, waste disposal) Selects drugs in accordance with regulatory and legal requirements (e.g., controlled substances, extra-label drug use) 	NOVICE: May have difficulty explaining regulatory standards for veterinary practice. May suggest actions that contravene legal and regulatory requirements. ADVANCED BEGINNER: Explains most regulatory standards for veterinary practice. Consults regulatory standards when prompted. COMPETENT: Applies legal and regulatory standards consistently. Maintains appropriate legal records. PROFICIENT: Supervises colleagues to ensure compliance with legal and regulatory requirements. Identifies solutions to ensure operations remain compliant

ILLUSTRATIVE COMPETENCIES MILESTONES SUBCOMPETENCIES 8.3 Advocates for the 1. Complies with workplace **NOVICE:** health and safety May comply with posted protocols but could have difficulty health and safety of regulations (e.g., radiation explaining their rationale. patients, clients, and safety, infection control) members of the team ADVANCED BEGINNER: 2. Applies safe within the workplace Complies with posted protocols and explains rationale. practices for handling hazardous materials (e.g., administration of chemotherapeutic agents) Advocates for workplace safety by identifying unsafe practices and applying appropriate health and safety protocols. 3. Identifies and addresses sources of medical PROFICIENT: error/adverse events Provides direction to others to maintain health and safety and holds others accountable. 1. Complies with workplace 8.4 Manages and NOVICE: health and safety Incomplete knowledge of hospital procedures, inventory maintains workplace regulations (e.g., radiation management, and equipment. May have difficulty troubleshooting environment and safety, infection control) issues with equipment or recognizing inappropriate results. equipment 2. Applies safe Demonstrates understanding of asepsis but may not implement practices for handling sterile technique appropriately. hazardous materials ADVANCED BEGINNER: (e.g., administration of chemotherapeutic agents) Basic knowledge of hospital procedures, inventory management, and equipment. Capable of troubleshooting most issues 3. Identifies and addresses sources of medical with equipment and usually recognizes inappropriate results. Implements sterile technique in most environments. error/adverse events COMPETENT: Comprehensive understanding of hospital procedures, inventory management, and equipment. Ability to troubleshoot equipment issues and consistently recognizes inappropriate results. Consistently implements sterile techniques. PROFICIENT: Proactively maintains equipment minimizing failure and inappropriate results. Accurate forecasting of inventory trends. Leads team to efficiently and accurately apply knowledge of asepsis and sterile technique.



DOMAIN 9

Scholarship

The graduate demonstrates the systematic identification, evaluation, integration and adaptation of evidence and experience to formulate questions and solutions, and educate others.

COMPETENCIES		ILLUSTRATIVE SUBCOMPETENCIES	MILESTONES
9.1	Practices evidence- based veterinary medicine (EBVM)	 Formulates questions and customizes solutions, drawing on personal experience and available evidence Retrieves and evaluates and applies informationto solve clinical or scientific problems Applies creativity to develop innovative solutionsAnalyzes information for accuracy, reliability, validity and applicability 	NOVICE: Describes the importance of gathering and evaluating data. May demonstrate difficulty identifying resources and assessing credibility. May rely on anecdote rather than evidence-based data to solve problems. ADVANCED BEGINNER: Retrieves credible information, but may not accurately analyze and apply. Formulates relevant questions but may need assistance developing comprehensive solutions. COMPETENT: Accurately evaluates and prioritizes information for reliability and applicability. Incorporates evidence and experience to solve common problems. PROFICIENT: Seeks evidence-based recommendations and engages in an iterative process of adaptation and improvement. Recognizes novel problems and extrapolates from knowledge and experience to customize innovative solutions.
9.2	Disseminates knowledge and practices to stakeholders	 Develops and disseminates educational material Explains evidence-based recommendations 	NOVICE: May provide anecdotal information without verification from evidence-based sources. Educational resources may be poorly organized or lack a clear message. ADVANCED BEGINNER: Creates educational resources that are accurate, but may not address the needs of the stakeholders. COMPETENT: Creates and presents educational resources that advance knowledge for stakeholders. PROFICIENT: Engages stakeholders to determine needs. Disseminates tailored educational resources and assesses impact.

Notes			





Competency-Based Veterinary Education - Nursing

Entrustable Professional Activities (EPAs)





















CBVE-N: Entrustable Professional Activities (EPAs)

Entrustable Professional Activities are essential activities that veterinary technicians/nurses perform in the workplace. These activities are described at a high level so that they can be performed and observed in variable contexts (e.g., different species, clients, settings).

EPAs are:

- Complex activities that require integration of multiple competencies from multiple domains and are performed in the authentic workplace environment.
- · Observable activities with a defined beginning and end.
- Activities that require learners to take responsibility for their decisions where there are real consequences.
- Activities learners should be entrusted to perform independently at the time of graduation.

EPAs are not:

- Activities for which specialized training or experience beyond veterinary technician/nursing school is required in order to perform.
- · Activities that are performed in a simulated environment.
- · Simple skills or activities that require only one competency.

There are nine EPAs published within the CBVE-N Model. These EPAs are considered core for all veterinary technician/nursing graduates. Schools may create additional EPAs that are important to their local context, but the total number of EPAs should be limited (9-12) to ensure that each student can be assessed performing each EPA multiple times across clinical training.

EPAs can be used to provide formative and/or summative assessment opportunities for learners and often contribute to a program of assessment. Assessment of a learner's ability to perform an EPA represents a snapshot in time; EPAs are most effective when used across the clinical training experience in a variety of contexts and are useful in assessing longitudinal progression of an individual learner.

Entrustment-supervision (ES) scales are commonly used to assess a learner's ability to perform an EPA independently. ES scales can be employed retrospectively, where evaluators report the level of supervision required for the learner to perform the activity or prospectively, where evaluators report how much trust they would place in the learner if performing the same task again.

Guide to this section:

Each EPA is summarized and followed by a more detailed commentary about the activity to help readers understand the context. The relationship between each EPA and the domains of competence and competencies follows.

The most relevant domains of competence for each EPA are listed and depicted by large icons. The secondary domains are also listed and defined by smaller icons. Less relevant domains for a particular EPA are shown in gray.

Specific elements within the EPA are then listed along with the specific competencies that map to each element. This mapping is useful for developing assessment rubrics.

CBVE-N: Entrustable Professional Activities (EPAs)

1	Gathers a history, performs an examination, generates an initial problem list
2	Implement diagnostic plan and report results
3	Implement a management/treatment plan
4	Recognizes a patient requiring urgent or emergent care and initiates evaluation and management
5	Formulates relevant questions and retrieves evidence to advance care
6	Performs tasks associated with surgery
7	Performs general anesthesia and recovery of a stable patient including monitoring and support
8	Implements recommendations for preventive healthcare
9	Management of hospital systems including equipment, medical records, and inventory





















Gathers a history, performs an examination, generates an initial problem list

DESCRIPTION OF ACTIVITY

Performs a history and exam on an individual animal or group and assimilates a case summary to present to the veterinarian

COMMENTARY

The history and examination should be tailored to the clinical situation and specific patient encounter. This data gathering serves as the foundation for evaluation and management. Expectations include integration of the scientific foundations of medicine with clinical reasoning skills to guide information gathering.

MOST RELEVANT DOMAINS

- 1: Clinical Reasoning and Decision-making
- 5: Communication

SECONDARY DOMAINS

- 2: Individual Animal Care and Management
- 3: Animal Population Care and Management
- 6: Collaboration
- 8: Financial and Practice Management

• Obtains a

- Obtains a complete and accurate history in an organized fashion [1.1, 1.2, 5.1]
- Demonstrates client-centered interview skills (establish rapport, attentive to verbal and nonverbal cues, client culture, socioeconomic factors, demonstrate active listening skills) [1.1, 1.4, 5.1, 5.2, 6.1]
- Identifies the client's complaint [1.4, 1.5, 5.1]
- Identifies pertinent history elements associated with common conditions [1.1, 5.1]
- Demonstrates cultural competence in interactions with clients, recognizing the potential for bias [1.4, 5.2, 6.4]

ELEMENTS WITHIN ACTIVITY

xamination

- Performs exam (individual animal or group) [1.1]
- Communicates findings [5.1, 5.2]
- Attends to patient welfare and client safety and comfort [1.4, 2.2, 3.3, 8.3]

Assimilate a Case Summary

- · Creates a problem list [1.2]
- · Accurately summarizes findings and presents to the veterinarian [5.1, 5.2, 6.2]

Documentation

• Documents findings in the medical record [5.3, 8.2]





















Implement diagnostic plan and report results

DESCRIPTION OF ACTIVITY

Understands and executes diagnostic plan as recommended by the veterinarian, obtains consent for diagnostic testing, collects appropriate diagnostic data, records and reports results.

COMMENTARY

Implementing a diagnostic action plan is an iterative, reflective process that requires continuous evaluation to mitigate sample and/or procedural errors.

MOST RELEVANT DOMAINS

- 1: Clinical Reasoning and Decision-making
- 5: Communication

SECONDARY DOMAINS

- 2: Individual Animal Care and Management
- 6: Collaboration
- 8: Financial and Practice Management
- 9: Scholarship

ELEMENTS WITHIN ACTIVITY

- Uses clinical reasoning skills to understand the prioritized differential diagnosis list [1.2, 9.1]
- Explains working diagnosis and rationale for testing [1.2, 5.1, 5.2, 9.1]
- Develops a financial estimate and obtains and documents informed consent [5.3, 8.1, 8.2]
- Utilizing a team-based approach, delegates and executes the diagnostic tests/procedures and ensures quality standards are met [1.7, 2.1, 6.1, 6.2, 6.3, 8.4]
- · Records diagnostic test/procedure results in the medical record [5.3]
- Identifies and reports abnormal findings [1.1, 5.3, 9.1]
- Recognizes and troubleshoots aberrant results [1.1, 1.3, 8.4, 9.1]
- Communicates updates to clients, as appropriate [5.1, 5.2, 6.3, 6.4, 9.2]





















FPA 3

Implement a management/treatment plan

DESCRIPTION **OF ACTIVITY**

As recommended by the veterinarian, in the context of client considerations, implements the management/treatment plan for an individual animal or group (including referral or euthanasia when warranted) and monitors the response.

COMMENTARY

Implementation of the plan includes performance of procedures, patient monitoring, team collaboration and client education.

MOST RELEVANT DOMAINS

- 1: Clinical Reasoning
- 2: Individual Animal Care and Management
- 3: Animal Population Care and Management
- 5: Communication

SECONDARY **DOMAINS**

- 6: Collaboration
- 8: Financial and Practice Management
- 9: Scholarship

WITHIN ACTIVITY

ELEMENTS

- · Uses clinical reasoning skills to integrate medical, ethical, legal and economic factors, and client desires, when implementing a management/treatment plan [1.2, 1.4, 1.5, 3.1, 5.1, 8.1, 8.2, 9.1]
- Explains treatment options to client and responds to questions [5.1, 5.2, 9.2]
- Performs therapeutic interventions, including euthanasia when warranted [2.1]
- · Educates client or team to provide ongoing care for patients, and recognizes changes or concerns that trigger additional action [1.3, 2.2, 3.1, 5.1, 5.2, 6.1, 9.2]
- · Monitors patient's response and reports relevant information as it is available to enable updating of management/ treatment plan [1.3, 5.2, 9.1]
- · Recognizes personal limitations, gaps in available information, and/or lack of resources and takes appropriate action [1.5, 1.7, 8.1]
- Arranges for referral as directed by veterinarian [5.1, 5.2, 6.3]
- Follows-up with clients or team to obtain updates in patient status, and determines compliance with recommendations, and/or capability to implement treatment plan. [5.1, 5.2, 6.1, 6.3, 9.2]





















Recognizes a patient requiring urgent or emergent care and initiates evaluation and management

DESCRIPTION OF ACTIVITY

Recognizes a patient/situation that requires urgent or emergent care and triages based on severity. Initial emergency management should include procedures that support vital functions.

COMMENTARY

This activity requires both application of knowledge and psychomotor skills as well as the ability to function as part of a team, to know one's limitations, and to seek help when necessary. Initial evaluation of individual should include level of consciousness and adequacy of ventilation and circulation.

MOST RELEVANT

- 1: Clinical Reasoning and Decision-making
- 2: Individual Animal Care and Management
- 6: Collaboration

SECONDARY DOMAINS

ELEMENTS

WITHIN ACTIVITY

- 3: Animal Population Care and Management
- 5: Communication
- 7: Professionalism and Professional Identity
- 8: Financial and Practice Management

- Quickly assesses a situation to identify patient(s) that might require urgent or emergent treatment [1.1, 1.5, 3.2, 7.2]
- In the case of multiple patients, effectively triages patient care according to severity of condition [1.2, 1.5, 7.1, 7.2]
- Evaluates patient status to determine and triage urgent problems [1.2, 1.5, 7.2]
- Updates Veterinarian on emergent patient status and creates a nursing plan for emergency care [1.2, 5.1, 5.2, 7.2]
- Updates client on the urgency of the patient's status and immediate management plans as recommended by the veterinarian [3.3, 5.1, 5.2]
- As recommended by the veterinarian, initiates further emergency management to support vital functions such as: [1.3, 2.1, 6.1, 8.2]
 - Provide oxygen
 - Secure an airway and effective ventilation
 - Establish effective circulation
 - · Provide effective pain relief and sedation for safe patient handling
 - Correct life-threatening alterations (e.g. hypoglycemia, hypothermia)
 - Control hemorrhage
 - Stabilize fractures
- Under the direction of the veterinarian, performs appropriate diagnostics to identify underlying etiologies for the urgent or emergent patient status and implements initial management plan [1.1, 2.1]
- Discusses patient status and initial management plan (including euthanasia when warranted) with client and identifies client expectations[1.4, 3.3, 5.1, 5.2, 6.3, 6.4, 7.1]
- Optimizes patient care by engaging team members, determining when to function as a leader or team member and working within personal limitations [1.7, 5.2, 6.1, 6.2, 7.5]
- Documents initial patient assessment, interventions, diagnoses and management plan, and client communication in the medical record [5.3, 8.2]
- · Documents and monitors accruing charges and communicates to the veterinarian and client [5.1, 5.2, 5.3, 8.1]























Formulates relevant questions and retrieves evidence to advance care

Identifies questions and information resources. Critiques the quality of the evidence and assess the DESCRIPTION **OF ACTIVITY** applicability to the clinical situation The use of evidence-based practices and self-awareness are essential to identify and remedy/correct COMMENTARY knowledge gaps. Life-long learning is an essential professional practice to promote quality patient and population care. MOST RELEVANT DOMAINS 1: Clinical Reasoning and Decision-making 9: Scholarship SECONDARY 7: Professionalism and Professional Identity **DOMAINS** • Formulates focused pertinent questions based on situation evaluation [1.1, 9.1] • Appraises sources of information to evaluate the quality of the content [9.1] · Assesses applicability and generalizability of published studies to specific clinical situations [1.6, 9.1] **ELEMENTS** · Identifies resources and uses information technology to assess accurate and reliable online medical information and WITHIN ACTIVITY retrieve animal/group information [7.4, 9.1] · Evaluates animal/group response to interventions and uses available evidence to adjust the veterinary nursing care plan [1.3, 9.1]





















Performs tasks associated with surgery

DESCRIPTION OF ACTIVITY	Performs surgical preparation, intraoperative assistance and post-surgical duties
COMMENTARY	Attention to patient preparation to minimize contamination, knowledge of the procedure and regional anatomy, manual dexterity to competently and efficiently assist with the procedure, anticipate and respond to changes, and perform post-operative tasks.
MOST RELEVANT DOMAINS	1: Clinical Reasoning and Decision-making 2: Individual Animal Care 5: Communication 6: Collaboration
SECONDARY DOMAINS	4: Public Health 7: Professionalism and Professional Identity
ELEMENTS WITHIN ACTIVITY	 Formulates surgical nursing plan [1.2, 6.1] Leads nursing team in perioperative tasks when appropriate [1.7, 5.1, 6.1, 6.2, 7.5] Utilizes checklists to ensure essential perioperative tasks are performed [1.5, 2.1, 7.2] Prepares self and surgical site for procedure [2.1] Assures the availability and functionality of the appropriate surgical instrumentation and equipment [4.2, 6.3] Practices aseptic technique and surgical assistant skills including proper tissue handling and hemostasis [2.1] Disposes of all biohazard materials and supplies appropriately [4.2] Implements post-operative care plan [1.2, 2.1, 4.2, 5.1, 5.2, 6.1, 6.3] Recognizes and responds to changes in patient status [1.3,1.5, 6.3] Recognizes own limitations and asks for assistance when required [1.7, 5.1, 6.1, 7.1] Documents surgical procedure, anesthetic record, post-operative care plan, and client communication in the medical record [5.3, 6.2]





















Performs general anesthesia and recovery of a stable patient including monitoring and support

DESCRIPTION OF ACTIVITY

Induces, maintains and recovers a stable anesthetic patient (ASA 1 or 2), including monitoring vital functions and providing supportive care. Evaluates patient status, and coordinates a suitable anesthetic and analgesic protocol.

COMMENTARY

Applies knowledge of anatomy, physiology, pharmacology, and the procedure, and utilizes the psychomotor skills to execute the protocol safely. Recognizes and manages complications.

MOST RELEVANT DOMAINS

- 1: Clinical Reasoning and Decision-making
- 2: Individual Animal Care and management
- 5: Communication
- 6: Collaboration
- 8: Financial and Practice Management

SECONDARY DOMAINS

- 4: Public Health
- 7: Professionalism and Professional Identity
- 9: Scholarship

ELEMENTS WITHIN ACTIVITY

- Evaluates patient based on history, physical examination, results of diagnostic tests and procedures for suitability for anesthesia (ASA status 1 or 2 a normal, healthy patient or a patient with mild systemic disease that does not result in functional limitations) [1.1, 1.3, 7.1, 9.1]
- Safely Implements a general anesthetic and analgesic protocol including premedication, induction, maintenance and recovery. [1.3, 2.1, 4.2, 7.2, 8.2, 8.3, 9.1]
- Shares plan with team members and answers questions [5.1, 5.2, 6.1, 6.2, 6.4, 9.2]
- Selects and prepares anesthetic support and monitoring equipment[8.4]
- Recognizes own limitations and collaborates with others as needed [1.7, 6.1, 6.3, 7.5]
- Follows legal requirements for use of controlled substances [5.3, 8.2]
- Maintains an anesthetic record including drugs, doses, route and time of administration, vital signs, important
 anesthetic and procedure events and complications [5.3, 8.2]





















Implements recommendations for preventive healthcare

DESCRIPTION	
OF ACTIVITY	

Considering the animal/group needs, the client's capabilities, and the care setting, executes and explains a preventive healthcare plan to optimize health and welfare, and to prevent spread of disease.

COMMENTARY

Prevention of disease is a core veterinary activity that protects the health of animals and the public.

MOST RELEVANT DOMAINS

- 1: Clinical Reasoning and Decision-making
- 2: Individual Animal Care and Management
- 3: Animal Population Care and Management
- 5: Communication

SECONDARY DOMAINS

- 4: Public Health
- 6: Collaboration
- 8: Financial and Practice Management
- 9: Scholarship

ELEMENTS WITHIN ACTIVITY

- Considers age, health status, and exposure risk when implementing preventive healthcare programs [1.1, 1.6, 2.2, 3.1, 4.1, 8.1, 8.3, 9.1]
- Explains recommendations regarding disease screening [1.4, 2.2, 3.1, 4.2, 5.1, 5.2, 6.4, 8.1, 9.1]
- Educates clients and stakeholders on disease prevention measures [1.2, 1.4, 2.2, 3.1, 3.3, 4.1, 4.2, 5.1, 5.2, 6.3, 9.2]
- Performs preventive healthcare measures when legally permissible [1.7, 2.1, 3.1, 6.2, 8.2]
- Documents recommendations and procedures in the record [5.3, 8.2]





















Management of hospital systems including equipment, medical records, and inventory

DESCRIPTION OF ACTIVITY

Ensures compliance and quality control for medical records, inventory systems, medical equipment, and hospital protocols to enhance productivity.

COMMENTARY

Utilizes technical training and clinical knowledge to ensure the functionality of equipment, accuracy and completeness of medical records, appropriate inventory, and compliance with hospital protocols. These are required to achieve standardization of care, enhance patient outcomes, and sustain productivity.

MOST RELEVANT DOMAINS

- 5: Communication
- 6: Collaboration
- 7: Professionalism and Professional Identity
- 8: Financial and Practice Management

SECONDARY DOMAINS

- 1: Clinical Reasoning and Decision-making
- 4: Public Health
- 9: Scholarship

DOMAINS

ELEMENTS

WITHIN ACTIVITY

- Ensures appropriate utilization, function, and maintenance of medical equipment [1.5, 1.7, 7.2, 8.4, 9.1]
- Communicates effectively with clients [1.4, 5.1, 6.3, 6.4, 9.2]
- Performs financial transactions [5.3, 7.1, 8.1]
- · Manages Medical records [5.3, 8.2]
- Meets requirements of regulatory agencies [4.1, 5.3, 8.2]
- Manages Inventory [7.1, 8.4, 8.1]
- Utilizes veterinary practice management software [5.1, 7.1]
- · Manages Appointments [5.2, 7.2]
- Manages Controlled Substances [5.3, 7.1, 8.2]
- Establishes and maintains protocols for safety, sanitation, and infection control [1.6, 4.2, 8.2, 8.3, 9.1]
- Contribute effectively to and leadership of the Veterinary Health Care Team [1.7, 5.2, 6.1, 6.2, 6.3, 6.4, 7.5, 8.3]



















Notes			

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