The Spectrum of Care Education Model

AAVMC Spectrum of Care Initiative Task Force

Kevin Ashbran, Newport Harbor Animal Hospital

Jessica E. Brodsky, American Association of Veterinary Medical Colleges

Heidi E. Banse, Louisiana State University

Stacy L. Eckman, Texas A&M

Ryane E. Englar, University of Arizona

Heather N. Fedesco, American Association of Veterinary Medical Colleges

Roger B. Fingland, The Ohio State University

Michael Grguric, Mindful Vets & Pet Vet Urgent CareMichael Grguric, Mindful Vets & Pet Vet Urgent Care

Carla L. Huston, Mississippi State University

Deep K. Khosa, University of Guelph

Julie A. Noyes, Veterinary Education Consultant

Emma K. Read, The Ohio State University

Jason W. Stull, The Ohio State University & University of Prince Edward Island

Sheena M. Warman, University of Bristol

Dana N. Zimmel, University of Florida

Preparing graduates to practice across the spectrum of care (SOC) advances veterinary programs' mission to develop compassionate leaders equipped to navigate the complexities of evolving veterinary medical care, client relationships, and business sustainability.

The SOC Education Model was created to support veterinary medical programs and the broader veterinary education community in preparing graduates for SOC practice. In recognition that SOC is practiced across clinical contexts and areas, the model is intended to help facilitate and bolster collaboration among all clinicians engaged in this endeavor (Warman et al., 2023).

Upon graduation, an SOC-ready graduate can confidently and competently offer a range of evidence-based care options tailored to clients' and patients' unique circumstances (Fingland et al., 2021; Stull et al., 2018). This enhances their ability to meet the growing societal demand for accessible veterinary healthcare and build financially successful practices that benefit their communities without subsidizing care (Salois, 2023).

Below, we summarize the key information about SOC practice that informed the development of the SOC Education Model. We also briefly describe the structure of the model, how it was developed, and recommended uses.

Brief Background on SOC Practice

The term "spectrum of care" refers to the wide range of care options veterinarians can provide. Practicing across the spectrum of care involves tailoring care options based on contextual factors, such as client goals, abilities, and resources, as well as patient, veterinarian, and practice factors, while considering available evidence (Englar, 2023a; Fingland et al., 2021; Stull et al., 2018). The term "contextualized care" has also emerged to address similar pedagogic and professional concerns within the profession (Skipper et al., 2024; Skipper et al., 2021).

While SOC as a term is relatively new, practicing across the spectrum of care is not a novel approach to veterinary practice. Many veterinarians are experienced in offering a range of care options, working with clients to develop a care plan aligned with each case's unique circumstances, and iteratively adjusting the care plan based on the patient's response and client input. In addition to patient factors, influential contextual factors include client factors (e.g., goals, abilities, resources), veterinarian factors (e.g., skillset, biases and assumptions, adaptability), and veterinary practice factors (e.g., healthcare team, policies, resources; Englar, 2023a). In keeping with evidence-based medical practice, the range of appropriate care options is also informed by findings from outcome-based research whenever possible (Evason et al., 2023).

In SOC practice, multiple care options are considered appropriate and acceptable, and the care option that best meets the unique needs of each patient and client is not necessarily the "gold standard" option (Englar, 2023a; Skipper et al., 2021). The term "gold standard," particularly without consideration of context, can be problematic, creating unachievable expectations of care for both client and veterinarian. A care plan will often differ from the perceived "gold standard" while still meeting an acceptable standard of care, provided that client discussions and decisions are properly documented (Block, 2021; Englar, 2023b). SOC pedagogic approaches require a culture of humility and empathy from all interested parties when discussing care options.

Shifting from "gold standard" care to an SOC approach can help increase access to veterinary care and strengthen the health and welfare of humans, animals, and communities (Blackwell & O'Reilly, 2023; Brown et al., 2021; Roberts et al., 2023). Being able to provide care to more patients without subsidizing costs also maintains the profitability of veterinary practices, especially during periods of economic inflation when clients are not able to spend as much on veterinary care (Benson & Tincher, 2023; Salois, 2023). An SOC approach provides a framework to help navigate complex clinical decisions and contexts, while providing acceptable outcomes for patients and clients. This approach can support the development of veterinarians' professional identity (e.g., values and goals) in a way that helps them value the many and varied contextual challenges inherent to daily clinical practice (Armitage-Chan & May, 2018). As demand for accessible veterinary healthcare continues to grow, veterinary medical programs are striving to enhance the preparedness of their graduates for SOC practice.

The SOC Education Model

The SOC Education Model provides an outcomes-focused framework for helping veterinary medical programs prepare students to practice across the spectrum of care options. This approach aligns with the growing adoption of competency-based education in veterinary medicine (Banse et al., 2023). The desired competencies, or abilities, of all new veterinarians are described in the AAVMC Competency-Based Veterinary Education (CBVE) Framework (AAVMC Council on Outcomes-based Veterinary Education et al., 2024). While most healthcare tasks require veterinarians to use multiple competencies, the framework identifies these competencies individually to guide the design of veterinary curricula.

The SOC Education Model introduces eight competencies that describe the observable abilities of new veterinarians who are prepared specifically for SOC practice. These SOC competencies integrate into the AAVMC CBVE Framework as illustrative subcompetencies, which veterinary medical programs may choose to adopt to enhance curricular focus on SOC outcomes.

Each SOC subcompetency is accompanied by examples of course-level learning outcomes describing the skills, knowledge, and attributes/behaviors that students should develop to meet these competencies at graduation. These outcomes can also help guide the addition or revision of assessments and learning experiences to scaffold students' development of the subcompetencies across the curriculum. Ideally, curricula should include multiple increasingly complex opportunities for students to acquire, practice, and integrate the knowledge, skills, and attributes/behaviors that comprise the SOC subcompetencies (Fingland et al., 2021; Harden & Stamper, 1999; May & Silva-Fletcher, 2015).

The SOC subcompetencies and learning outcomes are intended to be applicable to patients across species. The term "care options" is used to refer to diagnostic and treatment options for preventative, therapeutic, and behavioral care. The term "client" is used in reference to the individual or organization that is the patient's primary caretaker.

In recognition of the diverse landscape of veterinary education, the SOC Education Model was designed to be applicable across curricular models and learning contexts. The model is intended to be evergreen and avoids mention of specific frameworks or jargon; it will continue to evolve as additional information and feedback becomes available.

Table 1 presents the SOC subcompetencies and course-level learning outcomes, and their alignment with the competencies and domains in the AAVMC CBVE Framework.

Alignment with the AAVMC CBVE Framework

The decision to align the SOC competencies as subcompetencies of the AAVMC CBVE Framework was made in recognition of veterinary medical programs' growing use of the framework to structure curricula (Banse et al., 2023). This alignment allows programs to seamlessly integrate the SOC competencies into their adoption of the AAVMC CBVE Framework. Additionally, to assess these subcompetencies, programs can leverage resources that have already been developed for the competencies and domains of the AAVMC CBVE Framework. These include entrustable professional activities, developmental milestones, and an assessment toolkit available on the AAVMC CBVE website (**www.cbve.org**).

How to Use the SOC Education Model

The SOC Education Model can be used by veterinary medical programs and the broader veterinary education community to guide the development of new veterinary curricula that prepare graduates to practice across the spectrum of care options.

The SOC Education Model can also be used to guide changes in existing curricula. Mapping courses or entire curricula to the SOC subcompetencies can provide evidence of strengths and areas of improvement in current SOC training (Harden, 2001). Integrating multiple increasingly complex opportunities for students to acquire, practice, and integrate the knowledge, skills, and attributes/behaviors that comprise the SOC subcompetencies provides a concrete strategy for addressing gaps identified through mapping.

Development of the SOC Education Model

The SOC Education Model was developed by the AAVMC Spectrum of Care Initiative (SOCI). With support from The Stanton Foundation, the SOCI was founded in 2021 to provide infrastructure, guidance, and assistance for an inclusive and collaborative approach to supporting and enhancing SOC training in veterinary education. The SOCI is spearheaded by the AAVMC SOCI team with the guidance of a task force representing a variety of key players in veterinary education, including national and international academic leaders, educators, and practitioners in both academia and private practice.

The SOC Education Model was developed using an evidence-based approach that drew on information gathered from international competency frameworks, peer-reviewed literature, and interviews and focus groups. This information was reviewed, synthesized, and refined via expert consensus. Feedback was also collected and integrated from the broader veterinary education community.

Table 1: Spectrum of Care (SOC) Subcompetencies and Learning Outcomes Aligned with the AAVMC CBVE Framework

This table presents the SOC subcompetencies (i.e., program-level outcomes), course-level learning outcomes (LOs), and their alignment with competencies and domains in the AAVMC CBVE Framework (AAVMC Council on Outcomes-based Veterinary Education et al., 2024).

SOC subcompetencies and LOs are in **orange**.

The SOC subcompetencies and LOs are intended to be applicable for caring for patients across species. The term "care options" is used to refer to diagnostic and treatment options for preventative, therapeutic, and behavioral care. The term "client" is used in reference to the individual or organization that is the primary caretaker for the patient(s).

In recognition of the diverse landscape of veterinary education, the SOC Education Model was designed to be applicable across curricular models and learning contexts. The model is intended to be evergreen and avoids mention of specific frameworks or jargon. The model will continue to evolve as additional information and feedback becomes available.

CBVE DOMAIN 1: CLINICAL REASONING AND DECISION-MAKING

CBVE Competency 1.1	Gathers and assimilates relevant information about animals
CBVE Subcompetency 1.1.1	Collects history
CBVE Subcompetency 1.1.2	Performs physical examination
CBVE Subcompetency 1.1.3	Interprets diagnostic test results
CBVE Subcompetency 1.1.4	Performs necropsy examination
CBVE Competency 1.2	Synthesizes and prioritizes problems to arrive at differential diagnoses
CBVE Subcompetency 1.2.1	Identifies problems
CBVE Subcompetency 1.2.2	Creates refined problem list
CBVE Subcompetency 1.2.3	Prioritizes differential diagnoses
CBVE Competency 1.3	Creates and adjusts a diagnostic and/or treatment plan based on available evidence
CBVE Subcompetency 1.3.1	Appraises available clinical information and acts accordingly despite uncertainty
CBVE Subcompetency 1.3.2	Explains justification for plan
CBVE Subcompetency 1.3.3	Re-evaluates animal or population in a timely manner to adjust plan
CBVE Subcompetency 1.3.4	Uses critical thinking to determine appropriate action when unexpected outcomes occur (e.g., complications, changed diagnosis)
❯ **SOC Subcompetency 1.3.5**	**Integrates information about the patient with client circumstances to identify a range of appropriate care options and to adjust the care plan** • Knowledge LO 1. Lists the client-specific factors (e.g., expectations, goals, resources, abilities, beliefs) that may impact the client's ability or desire to pursue care options for their animal. • Skill LO 1. Elicits information from the client about factors that may affect their ability or motivation to pursue care for their animal. • Skill LO 2. Explains the importance of a follow-up plan to the client. • Skill LO 3. Uses follow-up plan to determine treatment response and client perspectives and adapts as appropriate. • Attribute/Behavior LO 1. Demonstrates empathy and respect during discussions relating to client circumstances. • Attribute/Behavior LO 2. Demonstrates active listening to identify and clarify factors that may affect the client's ability or motivation to pursue care for their animal.
CBVE Competency 1.4	Incorporates animal welfare, client expectations, and economic considerations into the diagnostic or treatment plan
CBVE Subcompetency 1.4.1	Considers disease in context of the whole animal and client
CBVE Subcompetency 1.4.2	Presents a range of options to the client
CBVE Subcompetency 1.4.3	Considers euthanasia as a management option when appropriate
❯ **SOC Subcompetency 1.4.4**	**Offers a range of care options that are tailored to the unique circumstances of each patient and client** • Knowledge LO 1. Explains why offering a range of care options is appropriate and integral to veterinary practice. • Knowledge LO 2. Explains the terms "spectrum of care", "contextualized care", "standard of care", and "gold standard care". • Knowledge LO 3. Gives examples of how offering a range of care options can impact a client's ability to attain care for their animal. • Knowledge LO 4. Draws on scientific evidence to identify examples in which offering a range of care options improved patient outcomes and reduced euthanasia or surrender of animals. • Knowledge LO 5. Identifies and weighs the practitioner and practice factors that impact the range of care options for a patient. • Skill LO 1. Prioritizes and tailors care options to align with the client's circumstances and expectations. • Attribute/Behavior LO 1. Demonstrates patience and flexibility to identify multiple care options that align with patient needs and client factors, despite uncertainty.

SOC Subcompetency 1.4.5	**Facilitates client decision-making regarding care by presenting the costs, risks, benefits, and evidence-base of care options** • Knowledge LO 1. Defines the characteristics of "shared decision-making". • Knowledge LO 2. Explains the costs, benefits, limitations, uncertainties, and care-giving responsibilities associated with a range of care options, including not proceeding with further veterinary care. • Skill LO 1. Invites a discussion of which care options may best align with a client's expectations and capabilities. • Skill LO 2. Communicates aspects of care options that may have an uncertain outcome, steps that will be taken to reduce uncertainty, and that plans for care may change as new information becomes available. • Attribute/Behavior LO 1. Demonstrates confidence and empathy when responding to clients' requests regarding alternative options. • Attribute/Behavior LO 2. Demonstrates regard for client's autonomy with decision-making when choosing which care options align most closely with the client's capabilities. • Attribute/Behavior LO 3. Demonstrates willingness to execute additional care options beyond the initial recommended care plan.
CBVE Competency 1.5	Prioritizes situational urgency and allocates resources
CBVE Subcompetency 1.5.1	Triages cases to address most urgent and important problems first
CBVE Subcompetency 1.5.2	Recognizes emergent situation and directs action
CBVE Competency 1.6	Adapts knowledge to varied scenarios and contexts
CBVE Subcompetency 1.6.1	Extrapolates knowledge to novel species or situations
CBVE Subcompetency 1.6.2	Adjusts existing protocol or procedure when standard measures are unavailable
CBVE Competency 1.7	Recognizes limitations of knowledge, skill and resources and consults as needed
CBVE Subcompetency 1.7.1	Identifies situations in which referral is warranted
CBVE Subcompetency 1.7.2	Consults experts both within and outside the veterinary profession
CBVE DOMAIN 2: INDIVIDUAL ANIMAL CARE AND MANAGEMENT	
CBVE Competency 2.1	Performs veterinary procedures and post- procedural care
CBVE Subcompetency 2.1.1	Performs diagnostic procedures
CBVE Subcompetency 2.1.2	Performs routine therapeutic procedures (e.g., administer fluids)
CBVE Subcompetency 2.1.3	Performs elective procedures (e.g., castration)
CBVE Subcompetency 2.1.4	Performs emergency procedures (e.g., establish an airway; perform cardiopulmonary cerebral resuscitation [CPCR])
CBVE Subcompetency 2.1.5	Provides analgesia and postoperative care
CBVE Subcompetency 2.1.6	Anesthetizes and recovers patients
CBVE Subcompetency 2.1.7	Manages patient comfort
CBVE Competency 2.2	Promotes comprehensive wellness and preventive care
CBVE Subcompetency 2.2.1	Recommends disease prevention measures
CBVE Subcompetency 2.2.2	Provides nutritional counseling appropriate to life stage and health status
CBVE Subcompetency 2.2.3	Advises clients regarding routine dental care
CBVE Subcompetency 2.2.4	Educates clients on prevention of common behavioral problems
CBVE Subcompetency 2.2.5	Counsels clients about husbandry and welfare needs
CBVE DOMAIN 3: ANIMAL POPULATION CARE AND MANAGEMENT	
CBVE Competency 3.1	Applies population management principles in compliance with legal regulations and economic realities
CBVE Subcompetency 3.1.1	Recommends disease prevention measures

CBVE Subcompetency 3.1.2	Advises on nutritional management
CBVE Subcompetency 3.1.3	Recommends housing and husbandry protocols
CBVE Subcompetency 3.1.4	Designs therapeutic plans for disease management
SOC Subcompetency 3.1.5	**Provides a range of appropriate care options for animal populations that considers animal welfare, lifestyle, economics, societal interests (e.g. food animal industry, animal activism) and public and environmental health concerns** • Knowledge LO 1. Describes and prioritizes the factors (e.g., animal welfare, societal, economic, public health and environmental) that influence decisions regarding care for animal populations. • Knowledge LO 2. Lists the client-specific factors (e.g., expectations, goals, resources, abilities, beliefs) that may impact the client's ability or desire to pursue care options for their animals. • Skill LO 1. Identifies, assesses, and prioritizes factors that may impact the range of care options offered for an animal population. • Skill LO 2. Designs feasible care plans that integrate population and client-specific factors. • Attribute/Behavior LO 1. Demonstrates empathy and respect during discussions with colleagues and clients relating to care of animal populations, including food production animals.
CBVE Competency 3.2	Recommends and evaluates protocols for biosecurity
CBVE Subcompetency 3.2.1	Develops isolation protocols
CBVE Subcompetency 3.2.2	Selects disinfection protocols
CBVE Subcompetency 3.2.3	Recommends protocols for animal movement
CBVE Competency 3.3	Advises stakeholders on practices that promote animal welfare
CBVE Subcompetency 3.3.1	Advocates for animal welfare through communication of the physical, affective and natural needs of the animal
CBVE Subcompetency 3.3.2	Explains ethical and welfare-related aspects of production processes and slaughter
CBVE Subcompetency 3.3.3	Recognizes proper handling and/or adequate facilities by interpretation of appropriate animal behaviors
CBVE Subcompetency 3.3.4	Advises on animal husbandry and transport
CBVE DOMAIN 4: PUBLIC HEALTH	
CBVE Competency 4.1	Recognizes zoonotic, transboundary, and emerging diseases and responds accordingly
CBVE Subcompetency 4.1.1	Identifies the clinical signs, clinical course, transmission potential and pathogen(s) associated with zoonotic, transboundary, and emerging diseases
CBVE Subcompetency 4.1.2	Responds to disease diagnosis through owner education, reporting, quarantine, and disinfection
CBVE Competency 4.2	Promotes the health and safety of people and the environment
CBVE Subcompetency 4.2.1	Makes recommendations for management of animal waste, carcasses, and by-products
CBVE Subcompetency 4.2.2	Implements safety and infection control practices
CBVE Subcompetency 4.2.3	Advises on disaster/emergency preparedness and response
CBVE Subcompetency 4.2.4	Practices responsible use of antimicrobial agents
CBVE Subcompetency 4.2.5	Describes the role of the veterinarian in food safety
CBVE DOMAIN 5: COMMUNICATION	
CBVE Competency 5.1	Listens attentively and communicates professionally
CBVE Subcompetency 5.1.1	Uses appropriate terminology and approach for audience
CBVE Subcompetency 5.1.2	Utilizes a variety of communication platforms to ensure effective communication and accessibility (e.g., email, talk to text)
CBVE Competency 5.2	Adapts communication style to diverse audiences
CBVE Subcompetency 5.2.1	Demonstrates audience-centered communication

CBVE Subcompetency 5.2.2	Elicits goals, expectations, perspectives and constraints, considering the human-animal bond
CBVE Subcompetency 5.2.3	Engages in difficult conversations such as financial decisions and end-of-life care (e.g., palliative care and euthanasia)
CBVE Competency 5.3	Prepares documentation/forms appropriate for the intended audience
CBVE Subcompetency 5.3.1	Records patient care information and communication using professional terminology
CBVE Subcompetency 5.3.2	Ensures documentation fulfills professional and legal requirements
CBVE DOMAIN 6: COLLABORATION	
CBVE Competency 6.1	Solicits, respects and integrates contributions from others
CBVE Subcompetency 6.1.1	Invites input from others irrespective of role, hierarchy or background
CBVE Subcompetency 6.1.2	Acknowledges input and incorporates into ongoing plan of action
CBVE Subcompetency 6.1.3	Leverages own role and roles of others to achieve shared goals
CBVE Subcompetency 6.1.4	Engages colleagues to foster a culture of patient safety and error reduction
CBVE Competency 6.2	Functions as leader or team member based on experience, skills and context
CBVE Subcompetency 6.2.1	Applies principles of teamwork
CBVE Subcompetency 6.2.2	Bases action on collaborative input
CBVE Subcompetency 6.2.3	Manages conflict
CBVE Competency 6.3	Maintains ongoing relationships to provide continuity of collaborative effort
CBVE Subcompetency 6.3.1	Organizes documentation and communicates with collaborator in preparation for transfer or discharge
CBVE Subcompetency 6.3.2	Follows up with collaborator to ensure implementation of care plan
CBVE Subcompetency 6.3.3	Provides support through encouragement, education, or redirection to refine the plan of action
CBVE Competency 6.4	Demonstrates inclusivity and cultural competence
CBVE Subcompetency 6.4.1	Demonstrates respect for diversity
CBVE Subcompetency 6.4.2	Encourages diverse contributions within the workplace
CBVE DOMAIN 7: PROFESSIONALISM AND PROFESSIONAL IDENTITY	
CBVE Competency 7.1	Adopts an ethical approach to meeting professional obligations
CBVE Subcompetency 7.1.1	Applies an ethical approach to professional decision-making
CBVE Subcompetency 7.1.2	Recognizes and responds to evidence of neglect and abuse
CBVE Competency 7.2	Practices time management
CBVE Subcompetency 7.2.1	Recognizes impact of time management on stakeholders
CBVE Subcompetency 7.2.2	Prioritizes and completes tasks according to importance and urgency
CBVE Competency 7.3	Reflects on personal actions and uses feedback to plan improvement
CBVE Subcompetency 7.3.1	Practices self-reflection
CBVE Subcompetency 7.3.2	Invites and responds to constructive feedback on performance
CBVE Subcompetency 7.3.3	Critiques decision-making process and its outcomes

SOC Subcompetency 7.3.4	**Acknowledges and considers the context of previous care decisions made by colleagues and clients** • Knowledge LO 1. Identifies strategies to discuss client and patient factors that may have influenced decision-making. • Knowledge LO 2. Lists strategies for guiding client conversations around previous care decisions. • Skill LO 1. Elicits whether a client's expectations were met during previous care and if not, why. • Skill LO 2. Maintains appropriate verbal and non-verbal communication composure when reviewing previous care options. • Attribute/Behavior LO 1. Demonstrates humility and understanding regarding prior options given and decisions made.
SOC Subcompetency 7.3.5	**Reflects on one's own professional identity in relation to providing a spectrum of care** • Knowledge LO 1. Explains how a veterinarian's personal values, goals, and prior experiences can influence care decisions. • Skill LO 1. Reflects on own values, goals, and prior experiences in relation to care decisions.
CBVE Competency 7.4	Engages in self-directed learning
CBVE Subcompetency 7.4.1	Engages in self-directed learning as a foundation for life-long learning
CBVE Subcompetency 7.4.2	Identifies and undertakes professional development to meet learning needs
CBVE Subcompetency 7.4.3	Uses appropriate resources for learning and decision making (e.g., information technology, consultation with colleagues)
SOC Subcompetency 7.4.4	**Pursues opportunities to expand skill set to offer a broader range of care options** • Skill LO 1. Recognizes own limitations and next steps for development. • Skill LO 2. Identifies training opportunities to undertake next steps for development of new or unfamiliar skills (technical and non-technical) and procedures, with appropriate support.
CBVE Competency 7.5	Attends to wellbeing of self and others
CBVE Subcompetency 7.5.1	Recognizes sources of workplace stress and acts to remedy adverse situations
CBVE Subcompetency 7.5.2	Recognizes signs of stress in self and colleagues, engages in self-care and recognizes when professional support is appropriate for self or others
CBVE Subcompetency 7.5.3	Manages expectations of client and self
CBVE Competency 7.6	Engages in career planning
CBVE Subcompetency 7.6.1	Compares career paths and weighs professional and personal rewards (e.g., financial implications)
CBVE DOMAIN 8: FINANCIAL AND PRACTICE MANAGEMENT	
CBVE Competency 8.1	Weighs financial factors in personal and business decision-making
CBVE Subcompetency 8.1.1	Applies financial principles to personal and professional decisions (e.g., debt repayment plan)
CBVE Subcompetency 8.1.2	Explains work-related insurance (e.g., personal, professional, patient)
CBVE Subcompetency 8.1.3	Describes relationship between revenue generation, expense categories, and compensation including benefits
SOC Subcompetency 8.1.4	**Provides a range of care and payment options in a manner that fosters financial viability of the practice and a positive working environment** • Knowledge LO 1. Identifies components of the practice's profits and losses as they relate to providing care options. • Knowledge LO 2. Explains how providing a range of care and payment options can have a financial impact on the practice. • Knowledge LO 3. Explains how providing a range of care and payment options can have an impact on the practice team and management processes. • Knowledge LO 4. Explains the importance of optimizing the workload allocation among the practice team to ensure financial viability.
CBVE Competency 8.2	Delivers veterinary services compliant with legal and regulatory requirements
CBVE Subcompetency 8.2.1	Acts in accordance with codes of professional practice, veterinary practice acts and licensing board regulations (e.g., veterinarian-client-patient relationship)
CBVE Subcompetency 8.2.2	Acts in accordance with legal and regulatory requirements (e.g., reportable diseases, animal cruelty, waste disposal)

CBVE Subcompetency 8.2.3	Selects drugs in accordance with regulatory and legal requirements (e.g., controlled substances, extra-label drug use)
CBVE Competency 8.3	Advocates for the health and safety of patients, clients, and members of the team within the workplace
CBVE Subcompetency 8.3.1	Complies with workplace health and safety regulations (e.g., radiation safety, infection control)
CBVE Subcompetency 8.3.2	Applies safe practices for handling hazardous materials (e.g., administration of chemotherapeutic agents)
CBVE Subcompetency 8.3.3	Identifies and addresses sources of medical error/adverse events
CBVE DOMAIN 9: SCHOLARSHIP	
CBVE Competency 9.1	Practices evidence-based veterinary medicine (EBVM)
CBVE Subcompetency 9.1.1	Formulates questions and customizes solutions, drawing on personal experience and available evidence
CBVE Subcompetency 9.1.2	Retrieves, evaluates, and applies information to solve clinical or scientific problems
CBVE Subcompetency 9.1.3	Applies creativity to develop innovative solutions
CBVE Competency 9.2	Disseminates knowledge and practices to stakeholders
CBVE Subcompetency 9.3a.	Develops and disseminates educational material
CBVE Subcompetency 9.3b.	Explains evidence-based recommendations

RECOMMENDED CITATION

AAVMC Spectrum of Care Initiative Task Force, Ashbran, K., Brodsky, J. E., Banse, H. E., Eckman, S. L., Englar, R. E., Fedesco, H. N., Fingland, R. B., Grguric, M., Huston, C. L., Khosa, D. K., Noyes, J. A., Read, E. K., Stull, J. W., Warman, S. M., & Zimmel, D. N. (2025). The spectrum of care education model. In AAVMC Spectrum of Care Initiative Task Force, H. N. Fedesco, & J. E. Brodsky (Eds.), *Enhancing spectrum of care preparation in veterinary education programs: An implementation strategies guide* (pp. 18–27). American Association of Veterinary Medical Colleges. **https://doi.org/10.17605/OSF.IO/AHWQE**

REFERENCES

AAVMC Council on Outcomes-based Veterinary Education, Chaney, K.P., Hodgson, J.L., Banse, H.E., Danielson, J.A., Foreman, J.H., Kedrowicz, A.A., Meekins, J.M., Read, E.K., Salisbury, S.K., Taylor, R.M., Frost, J.S. (2024). *CBVE 2.0 Model*. American Association of Veterinary Medical Colleges. **https://www.doi.org/10.17605/OSF.IO/9NTV5**

Armitage-Chan, E., & May, S. A. (2018). Identity, environment and mental wellbeing in the veterinary profession. *Veterinary Record*, *183*(2), 68–68. **https://doi.org/10.1136/vr.104724**

Banse, H. E., Kedrowicz, A., Michel, K. E., Burton, E. N., Yvorchuk-St Jean, K., Anderson, J., Anderson, S., Barr, M. C., Boller, E., Chaney, K., Dyer Inzana, K., Matthew, S. M., Rollins, D., Salisbury, S. K., Schmidt, P., Smith, N., & Trace, C. (2023). Implementing competency-based veterinary education: A survey of AAVMC member institutions on opportunities, challenges, and strategies for success. *Journal of Veterinary Medical Education*, e20230012. **https://doi.org/10.3138/jvme-2023-0012**

Benson, J., & Tincher, E. M. (2023). Cost of care, access to care, and payment options in veterinary practice. *Veterinary clinics of North America: Small animal practice*, S0195561623001560. **https://doi.org/10.1016/j.cvsm.2023.10.007**

Blackwell, M. J., & O'Reilly, A. (2023). Access to veterinary care—a national family crisis and case for One Health. *Advances in Small Animal Care*, 4(1), 145−157. **https://doi.org/10.1016/j.yasa.2023.05.003**

Block, G. (2021). A different perspective on standard of care. In L. J. Ackerman (Ed.). *Pet-specific care for the veterinary teams* (pp. 715−717). John Wiley & Sons, Inc.

Brown, C. R., Garrett, L. D., Gilles, W. K., Houlihan, K. E., McCobb, E., Pailler, S., Putnam, H., Scarlett, J. L., Treglia, L., Watson, B., & Wietsma, H. T. (2021). Spectrum of care: More than treatment options. *Journal of the American Veterinary Medical Association*, 259(7), 712−717. **https://doi.org/10.2460/javma.259.7.712**

Englar, R. E. (2023a). Recasting the gold standard—part I of II: Delineating healthcare options across a continuum of care. *Journal of Feline Medicine and Surgery*, 25(12), 1098612X231209855. **https://doi.org/10.1177/1098612X231209855**

Englar, R. E. (2023b). Recasting the gold standard—part II of II: Communicating healthcare options along a continuum of care. *Journal of Feline Medicine and Surgery*, 25(12), 1098612X-231215639. **https://doi.org/10.1177/1098612X231215639**

Evason, M. D., Stein, M. R., & Stull, J. W. (2023). Impact of a spectrum of care elective course on third-year veterinary students' self-reported knowledge, attitudes, and competencies. *Journal of Veterinary Medical Education*, 50(5), 590−598. **https://doi.org/10.3138/jvme-2022-0010**

Fingland, R. B., Stone, L. R., Read, E. K., & Moore, R. M. (2021). Preparing veterinary students for excellence in general practice: Building confidence and competence by focusing on spectrum of care. *Journal of the American Veterinary Medical Association*, 259(5), 463−470. **https://doi.org/10.2460/javma.259.5.463**

Harden, R. M. (2001). AMEE Guide No. 21: Curriculum mapping: A tool for transparent and authentic teaching and learning. *Medical Teacher*, 23(2), 123−137. **https://doi.org/10.1080/01421590120036547**

Harden, R. M., & Stamper, N. (1999). What is a spiral curriculum? *Medical Teacher*, 21(2), 141−143. **https://doi.org/10.1080/01421599979752**

May, S. A., & Silva-Fletcher, A. (2015). Scaffolded active learning: Nine pedagogical principles for building a modern veterinary curriculum. *Journal of Veterinary Medical Education*, 42(4), 332−339. **https://doi.org/10.3138/jvme.0415-063R**

Roberts, C., Woodsworth, J., Carlson, K., Reeves, T., & Epp, T. (2023). Defining the term "underserved": A scoping review towards a standardized description of inadequate access to veterinary services. *The Canadian Veterinary Journal [La revue veterinaire canadienne]*, 64(10), 941−950.

Salois, M. (2023). The economics of small animal veterinary practice. *Veterinary Clinics of North America: Small Animal Practice*, S019556162300150X. **https://doi.org/10.1016/j.cvsm.2023.10.001**

Skipper, A., Gray, C., Serlin, R., O'Neill, D., Elwood, C., & Davidson, J. (2021). "Gold standard care" is an unhelpful term. *Veterinary Record*, 189(8), 331. **https://doi.org/10.1002/vetr.1113**

Skipper, A., O'Neill, D., Serlin, R., Davidson, J., Elwood, C., & Gray C. (2024) Contextualised care: Faddish or foundational? *Veterinary Record*, 195(3), 117. **https://doi.org/10.1002/vetr.4567**

Stull, J. W., Shelby, J. A., Bonnett, B. N., Block, G., Budsberg, S. C., Dean, R. S., Dicks, M. R., Forsgren, B. W., Golab, G. C., Hamil, J. A., Kass, P. H., King, L. J., Lund, E. M., Maddux, M. L., McFarland, J. M., McKenzie, B. A., Moyer, M. R., Olson, P. N., & Wittum, T. E. (2018). Barriers and next steps to providing a spectrum of effective health care to companion animals. *Journal of the American Veterinary Medical Association*, 253(11), 1386−1389. **https://doi.org/10.2460/javma.253.11.1386**

Warman, S. M., Armitage-Chan, E., Banse, H., Khosa, D. K., Noyes, J. A., & Read, E. K. (2023). Preparing veterinarians to practice across the spectrum of care. *Advances in Small Animal Care*, 4(1), 171−183. **https://doi.org/10.1016/j.yasa.2023.04.004**