

## Commentary

# Barriers and next steps to providing a spectrum of effective health care to companion animals

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Veterinary professionals work daily to prevent and relieve animal suffering and promote animal health and welfare. Accomplishing this means making safe, effective, and economic veterinary care available and accessible to as many animal owners as possible.

Cost is a barrier to access to care, and a pet owner's financial limitations may force decisions that are against the best interest of the pet's well-being. Between 1998 and 2011, a steady increase was observed in the proportion of owned pets in the United States that received no health care from a veterinary practice, from 32% to 45% for cats and 15% to 19% for dogs.<sup>1</sup> This finding coincided with costs of veterinary services rising more rapidly than inflation, suggesting that increasing prices contributed substantially to reduced veterinary services for dogs and cats.<sup>1</sup> In addition to rising costs, there is concern about the physical and geographic inaccessibility of veterinary care, with some locations in the United States having no veterinary services available or accessible to pet owners.

This connection between the rising costs of veterinary services and limited accessibility of health care for pets should be a major concern for the profession.<sup>2</sup>

A compelling and immediate need exists to evaluate the ability of veterinarians to provide effective health-care options for pets and direct further efforts toward solutions to overcome barriers preventing the delivery of those options. Recently, stakeholder groups have begun to investigate concerns over pet owners' access to veterinary care and possible solutions. This commentary is intended to further raise awareness of this issue and extend a dialogue around the concept of spectrum of care.

## Spectrum of Care

Veterinarians have a wide spectrum of diagnostic and treatment options they can provide for their patients. These options range from technologically advanced and expensive interventions to less advanced and less costly options. The specific care provided

along this spectrum for an individual patient will be influenced by many factors, including the knowledge and skills of the veterinarian; the current scientific evidence regarding the safety and efficacy of available treatments, recommendations, or best-practice guidelines; practice-specific goals, culture, and available resources; and the owner's goals, values, and resources. Standard of care may also influence this decision; however, it is important to recognize that the standard of care is not always clear and is distinctly different from the concepts of "best practices," "gold standard," or other paradigms of "ideal care."<sup>3</sup> Misconceptions and ambiguity in this area may lead veterinarians to encourage or solely offer advanced diagnostic tests or treatments out of fear of litigation or disciplinary action.

Navigating care options can be challenging for both veterinarians and their clients, particularly because many veterinarians may lack the skills to successfully accomplish this. For instance, given the highly sophisticated nature of procedures commonly taught and observed in veterinary colleges, veterinarians (most notably recent graduates) may be unaware of, and lack the knowledge and skills to offer, a wide spectrum of care options for a given condition and therefore may be unable to communicate to clients the relative effectiveness and costs of options along this spectrum.<sup>4,5</sup> Limited familiarity with existing practice guidelines and limited skills or exercising of skills in critical literature appraisal may be important contributors to this barrier for some veterinarians.

Other factors can further limit the range of care options offered to clients. For instance, the existing veterinary literature only rarely includes reports of studies with outcome measures important to the evaluation of clinical practice and interventions, such as couplings of quality-of-life measures, costs, and treatment effectiveness. Outcomes-based research has become an important tool for monitoring and improving the quality of human health care.<sup>6</sup> In contrast, given the lack of outcomes-based research, veterinarians are left to rely on guidelines that are often opinion based and may not provide a range of care options of various prices or comment on supporting evidence concerning effect on clinically relevant outcomes. In addition, there are often no resources or incentives to conduct scientifically valid studies of equivalence or noninferiority of alternatives to current expensive or technologically intensive treatment options, hindering the possibility of obtaining answers to questions of broad veterinary health importance that could improve access to veterinary care.

With limited information on available care options and associated outcomes, veterinary health-care providers and clients may associate more expensive and technology-intensive treatment with superior care. Both parties may spuriously perceive few available options, resulting in animals receiving no or limited care or being euthanized. Such actions or inactions not only diminish animal health and welfare,

but also adversely impact the health and well-being of animal owners and veterinary professionals (eg, stress or burnout).<sup>7</sup>

## Proposed Initiative for Accessible Veterinary Healthcare

Recognizing the urgency of addressing concerns regarding access to veterinary care, we have organized the Initiative for Accessible Veterinary Healthcare (IAVH). The objective of the IAVH is to facilitate discussion of access to care within the veterinary profession and to contribute information, ideas, and practical tools to promote the expansion of effective and affordable health care for companion animals. As a first step in this process, we have identified 4 key initiatives as priorities for improving access to affordable care. For each initiative, we highlight specific recommended next steps to address barriers, gaps, and needs.

### Development, evaluation, and refinement of clinical guidelines

Clinical guidelines are important to changing the approach to health care, improving outcomes for patients, and ensuring efficient use of health-care resources.<sup>8</sup> Such guidelines should provide information about health-care options and their anticipated outcomes.<sup>9</sup> They should also be based on the best evidence available, including expert consensus when necessary, and the strength of each recommendation and supporting evidence should be made clear.<sup>9</sup> Appraisal tools, such as the Appraisal of Guidelines for Research and Evaluation II (AGREE II),<sup>10</sup> that are well recognized and widely applied in human medicine, can be used to develop new guidelines as well as to appraise existing guidelines for quality.

Although some guidelines already exist in veterinary medicine, only rarely was an appraisal tool used during their development or after publication. The process by which these guidelines were developed is often unclear, the guidelines are generally based on expert opinion to a greater extent than evidence, and the people who developed the guidelines often have implicit biases. Incorporation of the AGREE II tool in the development process can improve the robustness of guidelines by monitoring their effectiveness and determining whether desired clinical outcomes are achieved. Use of this tool can also raise awareness of the strengths and weaknesses of the guidelines among those creating and using them.

We suggest the IAVH and relevant stakeholders undertake the following initiatives to encourage a more formal approach to the development and evaluation of guidelines in veterinary medicine:

- Promote the usefulness of a guidelines appraisal tool by having a well-respected stakeholder use it during guideline development.
- Approach groups responsible for many of the existing veterinary guidelines to promote

awareness and use of available guidelines appraisal tools.

- Critically review and audit current veterinary guidelines to assess their validity or identify flaws and gaps that might be improved by application of available guidelines appraisal tools and approaches.
- Solicit and document feedback from veterinarians regarding their perceptions, knowledge, and practices of topics addressed in existing guidelines and following changes to measure the impact of such guideline changes.

### **Promotion of effective, evidence-based practices (Choosing Wisely)**

One way to improve access to veterinary care and control related costs is to reduce the resources spent on unnecessary or ineffective tests and treatments. Evaluation of the evidence supporting current recommendations and clinical practices and raising awareness among veterinarians and pet owners about interventions that are medically ineffective or poorly cost-effective can free resources for needed care. The Choosing Wisely initiative is an international campaign to identify overused or ineffective diagnostic and therapeutic practices in human medicine<sup>11</sup> and encourage physicians and patients to think critically about the interventions they choose. This initiative is supported by a consortium of medical specialty societies, patient and consumer advocacy groups, physicians, and researchers that promotes critical, evidence-based, and shared decision-making. Stakeholders and experts identify specific interventions within their discipline that are of questionable value or cost-effectiveness or that could be more effectively used. Through journal articles, conference presentations, and online and print media outreach to patients, the initiative encourages discussion between physicians and patients about the value of specific interventions.

Although clear differences exist between human and veterinary medicine, many of the strategies and tools of the Choosing Wisely initiative can be adapted to promote critical evaluation and discussion of veterinary care options. The goal would be to encourage veterinarians and owners to consider the evidence for the value of recommended interventions and reduce the use of interventions that are unnecessary or ineffective. A large number of specialty groups and other domain experts are readily identifiable in veterinary medicine to spearhead such work, allowing for a large collective effort with high impact and low individual time and resource commitments. Achievable phases to promote effective, evidence-based practices are as follows:

1. With the assistance of members of AVMA-recognized veterinary specialty organizations, development of recommendations to reduce the use of interventions that are unnecessary or ineffective.
2. Development of tools to promote those recommendations (eg, fact sheets, websites, or presentations).

3. Continual review of the current evidence and solicitation of feedback from veterinarians and pet owners regarding their perceptions, knowledge, and practices related to the topics contained in the recommendations. Refinement of the recommendations on the basis of those findings.

### **Establishment of a veterinary practice research network**

Outcomes relevant to clinical practice are often not reported or evaluated in veterinary research. The relevance of veterinary research can be limited by data (and resulting conclusions) that are poorly generalizable to the primary care pet population, low patient numbers, and a lack of data on important patient and owner outcome measures. Although insufficiently used in veterinary research, private practice-derived data are important for evaluating cost-effectiveness of diagnostic testing and treatments along the spectrum of care and providing veterinarians and owners individualized guidance on approaches to care. Given existing challenges in the structure of veterinary practices (eg, different electronic medical records systems and fee structures, owner confidentiality requirements), an innovative data collection approach is needed.

To fill this need, we propose the creation of a consortium of evidence-generating companion animal practices and practitioners willing to evaluate the costs and effectiveness of veterinary care across a spectrum of health-care settings and services. We suggest the following approach to achieve this:

1. Identification of existing practice networks (eg, high-volume general practice and specialty groups or practices linked through management groups or electronic medical records systems) that are willing to share practice data and practices already effectively delivering a spectrum of care options.
2. Conduction of a proof-of-concept study to simultaneously assess key clinical outcomes such as mortality rates, total financial cost to owners, patient quality of life, disease recurrence rates, short- and long-term complications, and client compliance.

### **Communication and extension**

Integral to the success of the aforementioned initiatives and propositions is the need for a well-organized communication and extension plan. Such a plan should provide a platform for integrating the aforementioned initiatives and promoting communication among stakeholders (eg, pet owners, veterinary health-care providers, veterinary students, people in academia and industry, private veterinary-practice owners, and groups working on addressing access to care).

We suggest the following foci for development of this communication and extension initiative:

- Promotion of the IAVH mission.
- Sustainment and further promotion of interest

through a dedicated, multipurpose website (eg, functioning as a repository for developed resources, discussion forum, access to an affiliated newsletter, and highlights of ongoing and completed projects).

- Development of resources for education and outreach such as learning modules (eg, presentations or clinical scenarios for discussion) to teach veterinary professionals and students concepts aligned with providing a spectrum of care.

## Conclusions

Lack of affordable, accessible care poses a tremendous challenge for veterinarians attempting to provide health-care services to ensure the health and well-being of the pet population. Numerous barriers, gaps, and needs limit progress in promoting affordable veterinary care. We propose that directing resources toward the aforementioned key initiatives (development, evaluation, and refinement of clinical guidelines; promotion of effective evidence-based practices; establishment of a veterinary practice research network; and communication and extension) will provide important first steps and maximize the likelihood of identifying solutions in the shortest timeframe. Influencing veterinarians' attitudes and motivating behavioral change present perhaps the greatest challenge. Here we recommend a process that builds a collaborative approach to address the problem, taking care to build a proponent base through engagement and positive-language messaging that helps to inform and motivate. Paramount to success, a strong communication strategy is needed that highlights the importance of options along the spectrum of care, with the shared goal of positive pet and client outcomes. We are not suggesting that, to be successful in addressing this issue, all companion animal practices need to provide a wide spectrum of care options; rather, pet owners and veterinarians need to recognize that options exist and are available (even if elsewhere).

All stakeholders, including pet owners, veterinary health-care providers, veterinary students, people in academia and industry, regulatory agencies, and licensing boards, need to contribute to the discussion of the gap between the health care that pets need and the care they are receiving and need to work together to identify and achieve solutions. Acknowledgment that embracing a spectrum of care is a necessary part of providing effective treatment is

important to the future of the veterinary profession. It is equally important that the veterinary profession recognize and promote that acceptable outcomes can be achieved at many points along the spectrum of care. We hope that this commentary will serve as the starting point for a thoughtful and evidence-informed discussion of how to maximize the accessibility of effective veterinary health care.

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