

Comparison of veterinarian and standardized client perceptions of communication during euthanasia discussions

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OBJECTIVE

To describe client and veterinarian perceptions of client-centeredness during euthanasia discussions and assess agreement between measures of these perceptions.

DESIGN

Descriptive study.

SAMPLE

Stratified random sample of 32 companion animal veterinarians in southern Ontario.

PROCEDURES

2 case scenarios (a geriatric dog with worsening arthritis and a cat with inappropriate urination) designed to initiate euthanasia discussions were presented by 2 different undisclosed standardized clients (USCs) to study veterinarian communication during clinical visits. At the end of appointments, the USC's identity was disclosed, and questionnaires to measure veterinarian and client perceptions of client-centeredness were completed. Agreement was assessed by statistical methods.

RESULTS

Data were analyzed from 60 appointments (30/scenario). Of 10 questions, significant agreement was found between veterinarians and USCs for only 1 (extent to which relevant personal and family issues were discussed; $\kappa = 0.43$) for the dog scenario and 3 (extent of discussion of respective roles [$\kappa = 0.43$], better preparedness of the USC to make a euthanasia decision [$\kappa = 0.42$], and discussion of relevant personal and family issues [$\kappa = 0.25$]) for the cat scenario. When the USC and veterinarian disagreed, the veterinarian perceived that the client-centeredness components were addressed more thoroughly than did the USC.

CONCLUSIONS AND CLINICAL RELEVANCE

Lack of agreement was found between USC and veterinarian perceptions, with USCs perceiving less client-centeredness in euthanasia discussions. This communication gap suggested the need for training of veterinarians in eliciting client perspectives and assessing lifestyle-social information, including client social support systems. (*J Am Vet Med Assoc* 2019;254:1073–1085)

People's perceptions of animals and the human-animal bond transformed the veterinary profession over the past century.¹ For many families, pets are ascribed child-like status,² which impacts the nature of veterinarian-client interactions.³ With increased attachment to animals comes the need for effective veterinarian-client communication. Critical components of such communication are to elicit and clarify client perceptions, relate to client concerns, and customize recommendations to individual clients. Appreciating client perspectives is relevant to achieving important outcomes including solicitation

of client concerns,⁴ client adherence to recommendations,⁵ and client^{6,7} and veterinarian satisfaction⁸ and reduces the incidence of malpractice claims.⁹

This shift in clinical interview methods entails reframing the veterinarian-client-patient relationship from the traditional veterinarian-centered approach to a client-centered approach. In a veterinarian-centered approach, the dialogue is predominantly biomedical, focused on the patient, and directed by the veterinarian,¹⁰ whereas a client-centered approach is characterized by time spent building rapport and establishing a partnership with the client, encouraging client questions, inviting clients to share their perspectives throughout the appointment, and exploring lifestyle-social topics in the discussion.¹⁰

In veterinary medicine, eliciting the client's perspective is a relatively new content area to be explored during history gathering and integrated into

ABBREVIATIONS

CPCC	Client perception of client-centeredness
PPPC	Patient perception of patient-centeredness
USC	Undisclosed standardized client
VPCC	Veterinarian perception of client-centeredness

tailoring a treatment plan for the patient that takes the client's perspective and needs into account.¹¹⁻¹⁵ The client's perspective is complex and multifaceted, and it represents the individual's thoughts, ideas, feelings, values, opinions, and beliefs. For example, individual clients' perceptions of veterinarians and veterinary medicine, their animal or animals (eg, intended function or short- and long-term goals), and the disease or problem as well as family and personal issues, profession, and lifestyle differ.¹⁶ Eliciting client perspectives is particularly important in conducting end-of-life conversations because it guides discussions and enables the veterinarian to integrate information and adapt recommendations with the clients' thoughts, feelings, and expectations in mind.

In human medicine, patient and family perceptions of end-of-life care frequently affect assessment of the quality of care provided. Families want to be involved in decisions regarding their loved one's care¹⁷ and stress the importance of receiving timely and accurate information on end-of-life care options.^{18,19} In pediatric medical settings, parents identified doctor-patient communication as the principal determinant of high quality end-of-life care,²⁰ and families reported a lack of compassionate communication and a desire for more support.²¹ These results suggest that physician and patient perspectives are often not aligned. In a study²² of patients with breast cancer, there was limited concordance between patient and physician perceptions of how treatment decisions were made. Only 37 of 98 [38%] patients agreed with the physician's perception, and physicians reported a higher rate of shared decision-making than did patients.²²

In veterinary medicine, identifying client and family perspectives is important to meeting their needs in a sensitive situation. In a study¹⁵ of veterinarian-client communication during euthanasia decisions, veterinarians missed verbal cues that clients gave about what they wanted to discuss, potentially damaging shared decision-making. During in-depth interviews,²³ clients identified veterinarians as the experts to provide support around end-of-life care. Clients did not expect veterinarians to be counselors; they wanted their veterinarian to show sensitivity, answer questions and discuss next steps, reduce embarrassment related to grieving over a pet, and to normalize their feelings of guilt, grief, or neutrality associated with the euthanasia decision. In a study²⁴ that examined client expectations during cancer treatment of a pet, clients preferred sharing information and having open discussions in which clients actively participate and veterinarians respect clients' knowledge, needs, and wants.

The manner in which euthanasia discussions are conducted impacts professional fulfillment and wellness of veterinarians. Many veterinarians lack training in communication about euthanasia and death and may not feel comfortable or competent conducting these conversations.²⁵⁻²⁷ Lack of training may worsen the emotional effects of euthanasia on veteri-

narians,²⁸⁻³⁰ and performing euthanasia is reported as a primary cause of veterinarian and staff burnout.³¹⁻³³

To the best of the authors' knowledge, no study has investigated client and veterinarian perceptions of the client-centeredness of euthanasia discussions. The study reported here was part of a larger investigation¹⁵ to assess veterinarian-client communication during euthanasia discussions and veterinary application of the patient-centered clinical method developed in human medicine. Two communication assessment tools are used for evaluating physician-patient communication with the patient-centered method: behavioral analysis of physician-patient communication and questionnaires to measure physician and patient perceptions of patient-centeredness.¹⁵ In our previously published study,¹⁵ audio recordings of euthanasia discussions between veterinarians and USCs (individuals trained to accurately and consistently portray a veterinary client to veterinarians) were coded and analyzed with the measure of patient-centered communication^{34,35} adapted for use in a veterinary setting.¹⁵ The objectives of the study reported here were to evaluate CPCC and VPCC during the same euthanasia discussions and to assess agreement of perceptions by evaluating questionnaire responses of USCs and veterinarians after appointments.

Materials and Methods

The larger study design, methods, and limitations are detailed elsewhere.^{15,36} In brief, 2 clinical scenarios designed to initiate euthanasia discussions were presented by different USCs to veterinarians who consented to participate in the study and were unaware of the USC's identity during the appointments. The original study design was to use 1 USC and 1 animal for all visits related to each case scenario; however, 1 USC and the animals involved in both scenarios were replaced once during the study.¹⁵ The research protocol was approved by the University of Guelph Research Ethics Board, and the use of animals in the study was approved by the University of Guelph Animal Care committee. Animals in the study were privately owned and were included in appointments with consent of their owners.

Sample

The sampling methodology was previously described.¹⁵ Briefly, a randomized stratified sample size of 32 participants (16 male and 16 female) was selected a priori from among companion animal veterinarians included in the College of Veterinarians of Ontario database. Veterinarians with mobile or feline-only practices, veterinarians working in regions outside an approximately 100-km radius around the University of Guelph, individuals known to the study USCs, and individuals involved with the Ontario Veterinary College communication laboratories were excluded.¹⁵

Written consent to participate in the study was obtained from the veterinarians; these individuals

were informed that 2 USCs would visit their practice within a 9-month period and that conversations between the practitioner and client would be audio-recorded during the visit. The reason for the visit and the type of pet involved were not revealed to the veterinarians. The study took place between October 29, 2005, and April 19, 2006. Participating veterinarians were reimbursed \$60/appointment in accordance with 2005 recommendations for examination and consultation fees.³⁷

Demographic data

A brief demographic questionnaire was administered to participating veterinarians at the start of the study before any appointments were scheduled. Information collected included the number of veterinarians in the practice, typical appointment duration for various appointment types (ie, wellness, problem, new client, and euthanasia appointments), practice type (ie, exclusively small animal or mixed-animal practice), and whether the practice was located in a rural or urban setting.

Clinical case scenarios

Each veterinarian was visited by each USC once; the order of these visits was randomly assigned. One scenario involved a geriatric dog with worsening arthritis; the USC represented a woman in her early 30s who had small children at home and was concerned about the dog's quality of life as well as her ability to meet its increasing needs. The other scenario concerned a young adult cat with inappropriate urination (diagnosed as having a behavioral cause) and a man in his late 50s frustrated by a lack of treatment response and damage to the home. The USCs were trained in the portrayal of their case scenarios,¹⁵ and the only other guidance provided was to complete the CPCC questionnaire from their viewpoint. During the visit, each USC was accompanied by an animal that fit the general description of the patient in the clinical scenario (a geriatric castrated male dog with mild to moderate osteoarthritis or a healthy young adult spayed female cat).

Appointment duration

Appointment duration was measured from the audio recordings, starting from first greeting between the USC and veterinarian. Timing ended when the appointment concluded, and it was revealed that the client was a USC. Discussion that occurred after this disclosure was not included in these calculations.

CPCC and VPCC questionnaires

After the appointment and disclosure of the USC's identity, the veterinarian and USC completed the VPCC and CPCC questionnaires, respectively. These questionnaires were modifications of the PPPC questionnaire, which is used to evaluate patient and physician perceptions of physician-patient communication during an appointment.³⁵ The 9-item (rather than 14-item) version of the questionnaire was chosen for use in the

study on the basis of ease of use in clinical practice with minimal disruption to veterinarians' busy schedules. The questionnaires were slightly modified to reflect the triadic veterinarian-client-patient relationship by, for example, changing the wording from doctor to veterinarian, from patient to USC, and to substitute the pet as patient where applicable.

Responses to 9 of the questions measured 3 components of client-centeredness. Exploring the biomedical content of the patient's disease and illness (component 1) included questions about the extent to which the main problem was discussed and how well the veterinarian understood the USC. Understanding the whole person (component 2) was addressed with a question exploring the extent to which personal or family issues potentially affecting the pet's health or wellbeing were discussed. Finding common ground (component 3) was investigated with questions related to the level of satisfaction with discussion of the problem; extent to which the veterinarian explained the problem, explained treatment options, and explored manageability of the pet's treatment for the USC; and extent to which roles of the veterinarian and USC had been discussed. One question that investigated the extent to which the veterinarian listened to what the USC had to say was used as a global assessment of client-centered communication applicable to all 3 components. A tenth question was added that addressed the degree to which the USC was better prepared to make a decision regarding euthanasia. The euthanasia preparedness item was added to assess the outcome of the euthanasia discussions. Each item on the questionnaire was scored on a Likert-type scale from 1 (not at all) to 4 (completely), with higher scores indicative of more positive perceptions.³⁵

Validity and reliability for the 9-item PPPC questionnaire is well-established in human medicine.³⁵ The Cronbach α (a measure of scale reliability [ie, internal consistency, which indicates how closely related items are as a group]) for the patient questionnaire is 0.80, and that for the physician questionnaire is 0.79; a value ≥ 0.70 is considered acceptable.³⁸ Face validity (an indicator of how well the questionnaire measures its desired outcome) of the modified questionnaires was assessed at multiple levels in a pilot evaluation. Modifications were made by the lead investigators and collaborators, followed by a pretest USC portrayal and questionnaire administration with a veterinarian at the Hill's Pet Nutrition Primary Healthcare Center of Ontario Veterinary College, which resulted in slight modifications to wording. A final pretest was performed by a USC visit to a local veterinary practitioner, and the results revealed that the questionnaire items were clear, and the time required to complete the survey was feasible during a day with a busy appointment schedule.

Statistical analysis

Questionnaire data were analyzed at the appointment level with commercially available software.³ Previ-

ous analyses revealed significant differences in patient-centeredness scores for the audio-recorded communication between the 2 clinical scenarios¹⁵; therefore, questionnaire responses were stratified by case in the present study. Descriptive statistics were calculated for the CPCC and VPCC questionnaires, and responses were compared with the Wilcoxon signed rank test. Interrater agreement between the USC and veterinarian for each question was calculated with a weighted κ statistic (a measure of the difference between observed agreement and agreement that would be expected to be present by chance alone). The interpretive scale for κ described by Dohoo et al³⁹ was used. The κ statistic is standardized to a scale of -1 to 1, where 1 is perfect agreement, 0 is what is expected by chance, and -1 is perfect disagreement. The McNemar-Bowker test of symmetry (which tests the null hypothesis that contingency table cell proportions are symmetric) was also performed. When significant asymmetry was found, the 4 X 4 tables were visually assessed to determine the direction of the bias. Simple associations between demographic variables and USC and veterinarian questionnaire responses were explored by Spearman rank correlation analysis or the Fisher permutation test.⁴⁰ Simple associations between appointment duration and questionnaire responses were investigated with Spearman rank correlation analysis. The effect of having > 1 USC or animal patient participate in a given case scenario (ie, use of replacements) on questionnaire responses was examined with the Fisher permutation test. Exact *P* values were computed when possible; otherwise, the Monte Carlo method of estimation was used. Values of *P* < 0.05 were considered significant.

Results

General information related to the study population and analyzed visits were reported elsewhere.¹⁵ This included demographic information, replacement of 1 USC and both animals representing patients, and appointment durations.

USCs and patients

The USC involved in the scenario of the cat with inappropriate urination and the cat representing the patient were replaced at the same time; therefore, the effects of these changes on outcomes of interest could not be evaluated separately. The cats were physically and behaviorally similar, and differences in questionnaire results were deemed more likely attributable to the change in USC rather than replacement of the patient. Of the 30 analyzable appointments, the original USC participated in 7 and the replacement USC participated in 23.

For the scenario of the geriatric dog with arthritis, a different dog was used to portray the patient after 19 appointments were conducted. The second dog, included in the remaining 11 analyzable appointments, was of similar age and breed and had a similar arthritic condition. However, clinical signs of arthritis and geriatric behaviors of this dog were considered milder

than those of the original dog. The same individual acted as the USC for this scenario throughout the study.

Study population

Of 86 veterinarians contacted about the study, 27 (31%) were excluded. Thirty-two of the remaining 59 (54%) veterinarians (16 males and 16 females) enrolled in the study. One veterinarian withdrew from participation after the start of the study, and data from 2 of the remaining 62 appointments were excluded for technical reasons. In total, 30 appointments/scenario were analyzed.

Sixteen male and 15 female veterinarians were included in the final analysis. The mean \pm SD age of the study population was 43 \pm 9.96 years; most (26 [84%]) veterinarians obtained their veterinary degrees in Canada, and 10 (32%) reported having previous communication skills training. The mean \pm SD number of veterinarians per practice was 3 \pm 1.70; practices of 24 and 7 participants were located in urban and rural regions, respectively. Most were exclusively small animal practices (*n* = 25), and the remainder (6) were mixed-animal practices. The reported duration of euthanasia appointments was approximately a half hour (mean \pm SD, 275 \pm 10.37 minutes).

CPCC

The CPCC questionnaire scores for each case scenario were summarized by client-centeredness components (**Table 1**) and by question (**Table 2**). Overall,

Table 1—Mean \pm SD client-centeredness component scores for CPCC and VPCC questionnaires completed at the end of appointments involving 2 clinical case scenarios designed to facilitate euthanasia discussions (a geriatric dog with worsening arthritis and a young adult cat with inappropriate urination).

Questionnaire	Component*	Dog	Cat	<i>P</i> value
CPCC	C1	2.83 \pm 0.74	3.48 \pm 0.68	< 0.001
	C2	1.80 \pm 0.81	1.93 \pm 0.87	0.37
	C3	2.31 \pm 0.62	3.25 \pm 0.59	< 0.001
	All	2.47 \pm 0.63	3.18 \pm 0.56	< 0.001
VPCC	C1	3.25 \pm 0.43	3.55 \pm 0.38	0.005
	C2	2.40 \pm 0.81	2.83 \pm 0.87	0.03
	C3	3.09 \pm 0.38	3.17 \pm 0.40	0.32
	All	3.09 \pm 0.34	3.28 \pm 0.37	0.02

Veterinarians (*n* = 32 at enrollment) were visited once by a USC with a companion animal that fit the general description of the client and patient in the clinical scenario. One veterinarian withdrew from the study, and 2 other appointments were excluded for technical reasons; data from 30 appointments/scenario were analyzed. One USC and 1 animal were intended to be used for all visits related to each case scenario; however, 1 USC and both animals were replaced once during the study. At the end of the appointment, USC identity was disclosed, and the participants completed the assigned questionnaires. Ten questions (9 related to the 3 components of client-centeredness and 1 related to USC readiness to make a decision about euthanasia) were rated on a Likert-type scale from 1 (not at all) to 4 (completely), with higher scores reflecting greater client-centeredness. Values of *P* < 0.05 were considered significant.

*C1 = Exploring the patient's disease or illness (2 questions), C2 = Understanding the whole person (1 question), and C3 = Finding common ground (5 questions); 1 question was used as a global assessment of client-centered communication.

The category of "all" represents the overall result for the 3 components combined. Additional information from this dataset was reported elsewhere.¹⁵

Table 2—Results of analysis for CPCC questionnaires completed by USCs following appointments (30/scenario) with veterinarians involving the same scenarios as in Table 1.

Question No. (component*)	Question and scenario	Frequency				Mean ± SD	P value
		4	3	2	1		
1 (C1)	To what extent was your main problem(s) discussed today?						0.002
	Dog	6	17	7	0	2.97 ± 0.67	
	Cat	16	12	2	0	3.47 ± 0.63	
2 (C3)	How satisfied were you with the discussion of your problem?						< 0.001
	Dog	7	14	6	3	2.83 ± 0.91	
	Cat	17	10	2	1	3.43 ± 0.77	
3 (C1, C2, C3)	To what extent did the veterinarian listen to what you had to say?						0.09
	Dog	14	8	8	0	3.20 ± 0.85	
	Cat	14	15	1	0	3.43 ± 0.57	
4 (C3)	To what extent did the veterinarian explain this problem (presenting complaint) to you?						0.003
	Dog	6	16	8	0	2.93 ± 0.69	
	Cat	14	15	1	0	3.43 ± 0.57	
5 (C3)	To what extent did you and the veterinarian discuss your respective roles?						< 0.001
	Dog	0	2	6	22	1.33 ± 0.61	
	Cat	13	10	6	1	3.17 ± 0.87	
6 (C3)	To what extent did the veterinarian explain treatment?						< 0.001
	Dog	6	10	13	1	2.70 ± 0.84	
	Cat	15	10	5	0	3.33 ± 0.76	
7 (C3)	To what extent did the veterinarian explore how manageable this (treatment) would be for you?						< 0.001
	Dog	0	7	8	15	1.73 ± 0.83	
	Cat	5	18	6	1	2.90 ± 0.71	
8 (C1)	How well do you think your veterinarian understood you today?						< 0.001
	Dog	6	11	11	2	2.70 ± 0.88	
	Cat	19	8	2	1	3.50 ± 0.78	
9 (C2)	To what extent did the veterinarian discuss personal or family issues that might affect your pet's health or well-being?						0.37
	Dog	0	7	10	13	1.80 ± 0.81	
	Cat	1	7	11	11	1.93 ± 0.87	
10 (NA)	To what extent do you feel better prepared to make a decision regarding euthanasia?						< 0.001
	Dog	4	8	15	3	2.43 ± 0.86	
	Cat	13	11	4	2	3.17 ± 0.91	

Questions 1 through 9 adapted from Stewart M, Meredith L, Ryan BL, et al. The patient perception of patient-centeredness questionnaire (PPPC). *Working paper series 2004. 04-1*. London, ON, Canada: The University of Western Ontario, 2004. Reprinted with permission.

NA = Not applicable.

See Table 1 for remainder of key.

CPCC scores were significantly ($P < 0.001$) greater for the scenario of the cat with inappropriate urination than for that of the geriatric dog with arthritis (mean scores, 3.18 and 2.47 on the scale of 1 to 4, respectively). The USCs provided highest scores for exploring the disease or illness (component 1) and lowest scores for understanding the whole person (component 2) in both scenarios, with results for finding common ground (component 3) falling between these.

There were significant differences in CPCC scores between the 2 scenarios for 8 of the 10 items on the questionnaire (Table 2). For each of these measures, scores were higher in appointments for the cat scenario than in those for the dog scenario. The exceptions included the extent to which the veterinarian listened to what the USC had to say and the extent to which relevant personal or family issues were discussed. In the dog scenario, USCs perceived topics to be completely or mostly discussed in > 21 of 30 (70%) appointments for 4 of the 10 questions. In the cat scenario, USCs rat-

ed topics to be completely or mostly discussed in > 21 of 30 (70%) appointments for 9 of the 10 questions.

VPCC

Overall, VPCC scores were significantly ($P = 0.02$) greater for the scenario of the cat with inappropriate urination than for the scenario of the geriatric dog with arthritis (mean scores, 3.28 and 3.09, respectively; Table 1). Veterinarians provided highest scores for exploring the disease or illness, followed by finding common ground; the lowest scores were given for understanding the whole person.

There were significant VPCC score differences between scenarios for 3 items: these included how well veterinarians thought they understood the USC, the extent to which relevant personal or family issues were discussed, and the extent to which the veterinarian thought the USC was better prepared to make a decision about euthanasia (Table 3). For each of these measures, scores were higher in appointments for the cat than in those for the dog.

Table 3—Results of analysis for VPCC questionnaires completed by veterinarians following appointments (30/scenario) with USCs for the same 2 scenarios as in Table 1.

Question No. (component*)	Question and scenario	Frequency				Mean ± SD	P value
		4	3	2	1		
1 (C1)	To what extent was your USC's main problem(s) discussed today?						
	Dog	8	22	0	0	3.27 ± 0.45	0.09
	Cat	16	14	0	0	3.53 ± 0.51	
2 (C3)	How satisfied were you with the discussion of your USC's problem?						
	Dog	8	18	4	0	3.13 ± 0.63	0.53
	Cat	10	18	2	0	3.27 ± 0.58	
3 (C1, C2, and C3)	To what extent did you listen to what your USC had to say?						
	Dog	15	15	0	0	3.50 ± 0.51	0.18
	Cat†	21	8	0	0	3.72 ± 0.45	
4 (C3)	To what extent did you explain this problem (presenting complaint) to the USC?						
	Dog	6	23	1	0	3.17 ± 0.46	0.18
	Cat	11	17	2	0	3.30 ± 0.60	
5 (C3)	To what extent did you and the USC discuss your respective roles?						
	Dog	8	14	8	0	3.00 ± 0.74	0.77
	Cat	9	15	3	3	3.00 ± 0.91	
6 (C3)	To what extent did you explain treatment?						
	Dog	8	20	2	0	3.20 ± 0.55	1.00
	Cat	10	16	4	0	3.20 ± 0.66	
7 (C3)	To what extent did you and the USC explore how manageable this (treatment) would be for the USC?						
	Dog	3	22	5	0	2.93 ± 0.52	0.27
	Cat	6	21	3	0	3.10 ± 0.55	
8 (C1)	How well do you think you understood the USC today?						
	Dog	10	17	3	0	3.23 ± 0.63	0.03
	Cat	17	13	0	0	3.57 ± 0.50	
9 (C2)	Regarding today's problem, to what extent did you discuss personal or family issues that might be affecting the pet's health or well-being?						
	Dog	1	15	9	5	2.40 ± 0.81	0.03
	Cat	7	13	8	2	2.83 ± 0.87	
10 (NA)	To what extent do you think the USC is better prepared to make a decision regarding euthanasia?						
	Dog†	2	14	9	4	2.48 ± 0.83	< 0.001
	Cat	8	20	2	0	3.20 ± 0.55	

Questions 1 through 9 adapted from Stewart M, Meredith L, Ryan BL, et al. The patient perception of patient-centeredness questionnaire (PPPC). Working paper series 2004. 04-1. London, ON, Canada: The University of Western Ontario, 2004. Reprinted with permission.

†Data from 1 visit in this category were excluded because of a missing data point for this specific question.

See Tables 1 and 2 for remainder of key.

The VPCC scores were positively skewed; for the dog scenario, scores ≥ 3 of 4 were assigned in $> 70\%$ of appointments for 8 of 10 questions, and for the cat scenario, scores in this range were assigned for 9 of 10 questions. The extent to which relevant personal or family issues were discussed (a measure of understanding the whole person) was an exception for both scenarios (little or not at all in 14/30 [47%] appointments with the dog and 10/30 [33%] appointments with the cat). The second exception for the dog scenario was the extent to which the veterinarian thought the USC was better prepared to make a decision about euthanasia (a little or not at all in 13/29 [45%] appointments, with 1 excluded because of a missing data point for this specific question).

Veterinarian-USC agreement

Agreement and symmetry between USC and veterinarian scores on questionnaires were assessed (Table 4). Overall, there was minimal agreement between CPCC and VPCC scores. Veterinarian and USC agree-

ment was poor ($\kappa < 0.2$) for ≥ 6 of 10 questionnaire items in both scenarios. Agreement was achieved for the extent to which relevant personal and family issues were discussed in both scenarios, with slightly greater agreement for the geriatric dog with arthritis ($\kappa = 0.43$; $P = 0.001$) than for the cat with inappropriate urination ($\kappa = 0.25$; $P = 0.02$); in general, the scores from both participants indicated that discussion of this subject was lacking. In the cat scenario, agreement was also reached on the extent to which the USC and veterinarian had discussed their respective roles ($\kappa = 0.43$; $P = 0.01$) and extent to which the USC was better prepared to make a decision about euthanasia ($\kappa = 0.42$; $P = 0.006$). In general, both participants indicated that their respective roles had been discussed and that the USC was better prepared to make a euthanasia decision.

When the USC and veterinarian disagreed, the veterinarian perceived that the client-centeredness components were addressed more thoroughly than did the USC. Significant asymmetry was observed for 3 ques-

Table 4—Measures of agreement and symmetry between USC responses to the 10 questions in Table 2 and veterinarian responses to the 10 questions in Table 3 (CPCC and VPCC questionnaires, respectively).

Question No.	Dog			Cat		
	Agreement		Symmetry <i>P</i> value	Agreement		Symmetry <i>P</i> value
	κ	<i>P</i> value		κ	<i>P</i> value	
1	0.02	0.56	0.32	−0.05	0.51	0.89
2	0.14	0.25	0.61	−0.03	0.51	0.35
3	0.13	0.26	0.21	0.18	0.21	0.60
4	−0.06	0.46	0.22	0.21	0.19	0.98
5	−0.05	0.16	< 0.001	0.43	0.01	0.39
6	−0.01	0.55	0.11	0.07	0.43	0.77
7	0.04	0.34	0.002	0.02	0.54	0.83
8	0.10	0.30	0.26	0.04	0.49	0.36
9	0.43	0.001	0.05	0.25	0.02	0.01
10	0.04	0.48	0.26	0.42	0.006	0.34

A weighted κ statistic and exact 1-sided *P* values were computed to assess agreement. Symmetry was tested with the McNemar-Bowker test.

See Tables 1–3 for remainder of key.

Table 5—Results of Spearman rank correlation analysis between appointment duration and responses to the 10 questions in CPCC and VPCC questionnaires.

Question No.	CPCC				VPCC			
	Dog		Cat		Dog		Cat	
	<i>r</i>	<i>P</i> value	<i>r</i>	<i>P</i> value	<i>r</i>	<i>P</i> value	<i>r</i>	<i>P</i> value
1	0.57	< 0.001	0.72	< 0.001	0.05	0.78	0.16	0.40
2	0.47	0.01	0.67	< 0.001	0.02	0.92	0.03	0.88
3	0.54	0.002	0.54	0.002	0.17	0.36	0.13	0.50
4	0.46	0.01	0.42	0.02	0.16	0.40	0.24	0.21
5	0.46	0.01	0.40	0.03	0.06	0.76	0.26	0.17
6	0.32	0.08	0.20	0.28	0.05	0.79	−0.11	0.55
7	0.41	0.03	0.42	0.02	−0.12	0.52	0.26	0.17
8	0.44	0.01	0.65	< 0.001	0.20	0.28	0.35	0.06
9	0.60	< 0.001	0.56	0.001	0.40	0.03	0.33	0.07
10	0.44	0.02	0.52	0.003	−0.40	0.03	0.29	0.12

See Tables 1–3 for key.

tions in the dog scenario: discussion of respective roles ($P < 0.001$), manageability of the treatment ($P = 0.002$), and discussion of personal or family issues ($P = 0.05$). Asymmetry was also found for discussion of personal or family issues in the cat scenario ($P = 0.01$). In all instances, bias was in the direction of veterinarians perceiving that these items were explored more thoroughly than was perceived by the USCs. For example, in the dog scenario, USC and veterinarian responses related to manageability of treatment were in agreement for only 6 of 30 (20%) appointments. In 1 (3%) appointment, the USC gave discussion of this item a higher score than did the veterinarian, whereas in 23 (77%) appointments, the veterinarian assigned the higher score. Similarly, for the discussion of respective roles in the dog scenario, the USC assigned ratings of a little or not at all in 28 of 30 (93%) appointments, whereas the veterinarians responded this way for only 8 of 30 (27%) appointments.

Associations with demographic data

Relationships between demographic variables and USC and veterinarian perceptions were examined. In the scenario of the geriatric dog with arthritis, male veterinarians reported higher satisfaction with the ex-

tent to which the main problem was discussed than did female veterinarians (mean \pm SD score, 3.40 ± 0.74 vs 2.87 ± 0.35 ; $P = 0.04$). In the scenario of the cat with inappropriate urination, urban veterinarians reported that they discussed the USC's main problem to a greater extent than did rural veterinarians (mean \pm SD score, 3.65 ± 0.49 vs 3.14 ± 0.38 ; $P = 0.03$). Also, in this scenario, the USC's report of the extent to which relevant personal and family issues were discussed was positively correlated with the number of veterinarians employed in a practice ($r = 0.40$; $P = 0.03$). No other significant associations between questionnaire results and demographic variables were detected.

Appointment duration

The mean \pm SD appointment duration was 18 ± 6.81 minutes (range, 9.5 to 33.2 minutes) for the scenario of the geriatric dog with arthritis and 18 ± 5.51 minutes (range, 8.5 to 27.4 minutes) for that of the cat with inappropriate urination. Significant positive correlations were found between CPCC scores and appointment duration for 9 of 10 questions in both scenarios (**Table 5**). The USC perception regarding the extent to which the veterinarian explained treat-

ment was the only result that was not significantly correlated with appointment duration.

No significant correlations were found between VPCC scores and appointment duration in the cat scenario (Table 5). In the dog scenario, veterinarians' perception of discussion of relevant personal and family issues was positively correlated with appointment duration ($r = 0.40$; $P = 0.03$). Veterinarian perception of USC preparedness to make a decision regarding euthanasia was negatively correlated with appointment duration ($r = -0.40$; $P = 0.03$).

Effects of USC and animal replacement

On evaluation of CPCC data to determine whether perceptions differed between the original and replacement USCs, 1 difference was detected. In response to the question regarding the extent to which treatment had been explained, the replacement USC assigned significantly ($P = 0.02$) higher scores (mean \pm SD, 3.52 ± 0.67) than did the original USC (2.71 ± 0.76). No significant differences were noted in VPCC scores for appointments involving different USCs.

Assessment of whether veterinarian and USC perceptions of communication differed between appointments involving the original and substitute dogs revealed no significant difference in CPCC scores attributable to the change. However, veterinarian perceptions of USC preparedness to make a decision regarding euthanasia differed between appointments involving different dogs. Veterinarians perceived that the USC was better prepared to make a decision regarding euthanasia in appointments with the original dog (which had more obvious clinical signs) than in those with the replacement dog (mean \pm SD scores, 2.84 ± 0.69 and 1.80 ± 0.79 , respectively; $P = 0.001$).

Discussion

The present study was the second part of a larger investigation to understand veterinarian-client communication during euthanasia discussions through a controlled approach involving use of USCs and the patient-centered clinical method. To our knowledge, this was the first application of these methods in veterinary medicine, and adaptation of the questionnaires from human medicine was successful.

In human medicine, there is evidence that patient-centered communication encourages patients to provide input and participate actively in health-care decision-making, allowing physicians to provide care that is concordant with patients' needs, wants, and perspectives.⁴¹ Patient-centered communication is central to the provision of high-quality health care,⁴² including care at the end of life.^{17,19} Patient-centered health care impacts important clinical outcomes, including patient satisfaction, adherence to physician recommendations, and patient health, and it is associated with lower frequency of malpractice claims.^{43,44}

The client-centered approach is consistent with expert recommendations in veterinary medicine for conducting end-of-life and euthanasia discussions.⁴⁵⁻⁴⁸

Clients' ideas, beliefs, feelings, concerns, expectations, support systems, previous life experiences, and sense of what is practical influence their ability to make decisions and cope with the information provided by veterinarians^{16,49} Veterinarian communication style influences the level of client contribution, degree of client involvement, and the balance of veterinarian-client communication.^{5,7,10,13,15,50,51}

With increasing knowledge, empowerment, and expectations, clients seem to be seeking a more client-centered approach from their veterinarians.^{1,13,49,51,52} However, the findings of the present study suggested that veterinarian-client dialogue tends to concentrate more on the patient's disease and less so on the needs and perspectives of the client. The results of previous veterinary communication studies^{10,15} showed that veterinarians may not fully explore client's feelings, ideas, and expectations or the effect of the animal's illness on the client and the animal's lives. Anecdotal observations of the authors (CLA, JRS, and LJNB) who educate veterinary students and veterinarians support that eliciting the client's perspective is a challenging communication skill and is uncommonly achieved in client interactions today.

In the present study, we examined USC and veterinarian perspectives on 3 components of client-centeredness. Exploring the biomedical content of the patient's disease and illness is the traditional focus of a veterinarian-centered clinical interview. In contrast, understanding the whole person requires expanding data gathering to explore the broader lifestyle of the client and pet to acquire an understanding of how these might relate to the animal's illness and impact adherence to diagnostic and treatment recommendations.⁵ Finding common ground means integrating the biomedical data related to the patient and client lifestyle-social information to foster mutual understanding and shared decision-making, creating a mutual vision to move forward in caring for the animal.

Overall, VPCC was greater than CPCC in the 2 clinical case scenarios in this study (a geriatric dog with worsening arthritis and a young adult cat with inappropriate urination). The lack of agreement between perceptions is concerning, especially with the bias toward veterinarians perceiving that all of the components were more thoroughly addressed than were perceived by the USC. In human medicine, investigators report that patients' and physicians' perceptions of their interactions often differ significantly. A study²⁰ found no association between parent and physician assessments of the quality of end-of-life care for children with cancer. For parents, the principal determinant of high-quality care was good communication with the physician, whereas for doctors, quality was more dependent on biomedical aspects of patient care. In a veterinary focus group study,⁵¹ client and veterinarian expectations of cost discussions differed; clients wanted to focus on the impact to the health and well-being of their pet, and veterinarians emphasized time required and services provided. A collaborative partnership implies a mutual veterinarian-client rela-

tionship and requires that veterinarians facilitate balanced conversation and shared perspectives.

In the present study, there was significant agreement between the veterinarian and the USC that personal and family issues potentially affecting patient health, well-being, and care were discussed minimally or not at all in both scenarios. Biomedical information is useful when it is placed in the context of a human patient's environment, and ignoring context potentiates errors in clinical reasoning and treatment efficacy.⁵³ Contextual factors that affect a human patient's health or perception of health include family, finances, education, employment, social support, community, and culture.⁵³ Likewise, in veterinary medicine, the health and well-being of an animal is dependent on the setting in which it lives. In addition to the factors listed above, veterinarians may take into consideration the family structure, human-animal bond, client's profession, animal's primary caregiver, feasibility of caregiver duties, support system, and life events (eg, recent move, divorce, death of a family member, or birth of a child).^{12,16}

In both scenarios, the client's desire to discuss euthanasia was directly related to both the pet's disease and personal and family issues in the USC's script. For instance, in the scenario of the cat with inappropriate urination, the client had recently moved to town and into a fully carpeted new home with his partner, 2 children, and a Golden Retriever. In the scenario of the geriatric dog with arthritis, the client had promised to care for the dog when her father died and was wrought with guilt about euthanizing the dog. Because elicitation of the client's perspective was lacking, the veterinarians missed discovering these key details in appointments involving the cat (USC, 22/30 [73%]; veterinarian, 10/30 [33%]) and dog (USC, 23/30 [77%]; veterinarian, 14/30 [47%]). For veterinarians, understanding these personal and family issues aids in creating a customized plan that meets the client's needs and promotes client adherence to recommendations.⁵ A client's personal and family issues can promote or deter adherence, and when veterinarians are aware of barriers to adherence, they can appreciate the client's predicament, provide support, and tailor the treatment plan to the individual circumstances of the client to ensure success.

In the cat scenario, the USC and the veterinarian had generally positive perceptions that were in agreement for 2 questionnaire items: the extent to which their respective roles were discussed and the degree to which the USC was better prepared to make a euthanasia decision. A satisfactory dialogue between veterinarian and client establishes respective roles, clearly outlining the client's responsibility in caring for the animal and the role of the veterinarian. For example, in the USC's script for the dog scenario, the client's husband traveled for work, so she cared for 1-year-old twin children at home, which limited her time to care for the dog. In the USC's script for the cat scenario, the client lacked support or patience from his partner, and conflict was created by the

cat's continuing inappropriate urination. On the basis of CPCC data, the participants' respective roles had been discussed in most appointments for the cat scenario (23/30 [77%]); however, this discussion was lacking in the dog scenario (2/30 [7%], with none indicating the subject was completely discussed). By understanding caregiving roles, veterinarians can assess the feasibility for the client to follow through on recommendations and take an active role in their animal's care.

In addition to establishing respective roles, manageability of treatment is an aspect of finding common ground and a prerequisite to adherence. Manageability of treatment reflects the clients' capabilities to implement the treatment plan, which can include administering medications and treatments, affording costs of care, managing schedules and routines, attending recheck visits, and gathering a support team. For instance, in the dog scenario, the USC represented a stay-at-home mother in a 1-income family, so finances and time were limiting factors. In the cat scenario, the USC reflected an individual in the early stages of a relationship, and his partner was also frustrated with the cat's inappropriate urination in the carpeted new house. In both client households, the clients lacked support and resources in caring for the animals. From the USC perspective, manageability of treatment was discussed in most appointments for the cat scenario (23/30 [77%]), but this was infrequent in the dog scenario (7/30 [23%]). These factors could present substantial barriers to pursuing many of the treatment options for a dog with arthritis (eg, expense of NSAIDs and alternative therapeutic measures) or a cat with inappropriate urination (eg, the need for behavior modification, administration of medications, or both). By determining treatment manageability, veterinarians may be able to offer suggestions or support on how to overcome client constraints and foster animal health and well-being.

To enhance alignment between veterinarian and client perceptions, it is recommended that veterinarians actively encourage client involvement in appointments, particularly in the discussion of treatment and management goals. After veterinarians participated in a communication skills training program,⁵⁴ clients reported that they felt more involved in the appointment and that the veterinarian expressed greater interest in their opinions. Treating clients and patients as individuals and seeking to understand the reason for the clinical visit in the context of their unique life circumstances is essential for true achievement of common ground. Without eliciting the client's ideas, beliefs, thoughts, and opinions, it is difficult for veterinarians to make recommendations and formulate a treatment plan that is in the best interests of the client and patient, or for the client to be meaningfully involved in decision-making. Common ground is the foundation for joint understanding, shared decision-making, establishing a mutually agreed upon plan, and promoting adherence to the plan.⁵ Some questions that may be useful in eliciting the client's per-

spectives are: “What is it currently like at home for you and [your pet]?” “What is your biggest concern right now?” “What do you think about [your pet’s] quality of life?” “Would you mind sharing with me how you came to this decision?” and “As a family, how are you handling these discussions?”

Almost all of the USC responses on the CPCQ questionnaire were associated with appointment duration. The results of this analysis suggested that USCs perceived longer appointments as more client-centered. In our previous study,¹⁵ conversation analysis of euthanasia discussions by use of the measure of patient-centered communication revealed a positive correlation between appointment duration and client-centeredness of the consultation. In a study⁵ performed to investigate communication and client adherence to veterinary dental and surgical recommendations, a less hurried or rushed environment and longer appointment duration were positively associated with adherence.⁵ In a study⁵⁵ investigating cost discussions in clinical appointments, conversations about financial matters occurred in longer appointments. In contrast, a study of communication patterns in companion animal practice¹⁰ found that client-centered appointments (ie, a biolifestyle-social communication pattern) were shorter than traditional veterinarian-centered (ie, biomedical communication pattern) appointments (10.43 vs 11.98 minutes). During in-depth interviews, clients emphasized the importance of veterinarians taking the time to answer questions, repeat information, and listen attentively.^{13,49} This highlights the importance of striking a balance between quality and quantity of veterinary appointments, taking the time to be attentive to a client, soliciting all of the client’s concerns,⁴ and fully educating the client to enhance client satisfaction.^{6,7,52} To address this challenge, some practices use flexible appointment times to respond to client and patient needs instead of a set duration for all appointments. Flexible scheduling allows for variable bookings, such as a 1-hour appointment for a new puppy visit, 10 minutes for a recheck examination, and 45 minutes for a senior patient wellness examination.

The question about euthanasia preparedness was of particular interest in the present study. The proportion of visits that resulted in the USC feeling better prepared to make a decision about euthanasia was significantly greater in the cat scenario than in the dog scenario, from the perspectives of the USC (somewhat or completely better in 24/30 [80%] appointments involving the cat vs 12/30 [40%] for the dog; $P < 0.001$) and the veterinarian (somewhat or completely better in 28/30 [93.3%] appointments involving the cat vs 16/29 [55.2%] for the dog; $P < 0.001$). A decision about euthanasia may not be made in 1 appointment, or perhaps should not be made in 1 appointment, especially with a new client in a nonemergency situation. Likewise, discussing euthanasia and coming to a mutual decision does not necessarily mean agreeing to euthanize the animal at that appointment.

We anticipated that the veterinarians would discuss euthanasia on the basis of information provid-

ed by the USC and the animal’s clinical appearance and that USCs would leave feeling better prepared to make a euthanasia decision in the future. It is possible that the veterinarians discussed euthanasia, but the USCs still felt unprepared to make a euthanasia decision. In these situations, the USCs lacked readiness to make a decision; they felt confused, overwhelmed, or misunderstood or had key questions or issues that remained to be discussed. In both scenarios, euthanasia was not the sole management option and might have been considered an inappropriate recommendation by some veterinarians, so that the euthanasia option was not fully discussed. Another plausible explanation was a concern that clients could perceive veterinarians as uncaring, unfeeling, or judgmental for raising euthanasia as a topic for discussion, especially in a first-time visit, resulting in hesitation to explore the subject.

One factor potentially affecting USC preparedness to make a decision about euthanasia may have been the condition of the geriatric canine patient. There was evidence of differences in the veterinarians’ case assessment for the 2 dogs used in this scenario. Although the dogs were of similar breed and size and had clinical signs of arthritis, one of the dogs was older (14 vs 12 years old) and had more severe arthritis symptoms and geriatric behaviors. With the older dog, veterinarians generally thought the USC was better prepared to make a decision regarding euthanasia at the end of the appointment (mean scores, 2.84 [14-year-old dog] and 1.80 [12-year-old dog]; $P = 0.001$). It was possible that, for the older dog, veterinarians perceived euthanasia as a valid option and were more willing to discuss it. In both scenarios, the client’s desire to discuss euthanasia was considered realistic and justified for a combination of medical, personal, and family reasons. Therefore, client unpreparedness for euthanasia decisions could have negatively impacted patient quality of life, client satisfaction, and client retention.

Another factor that contributes to insufficient discussion of euthanasia is a lack of confidence or competence of the veterinarian owing to inefficient training in conducting euthanasia discussions.²⁵⁻²⁷ The lack of training likely impacts veterinarians’ willingness to enter into these difficult conversations. Performing euthanasia can be distressing for veterinarians.^{29-33,56} One survey of veterinary students and practitioners revealed that uncomfortable physical and emotional reactions to performing euthanasia were common, and 5 of 28 (18%) participants reported severe long-term emotional effects.²⁸ Therefore, it is understandable that veterinarians might not engage in these conversations, especially if they do not consider euthanasia to be an appropriate option.

An important reason to conduct euthanasia discussions is to manage client uncertainty and create a plan for the future. This may require a series of conversations over time, during which the content broadens and deepens according to the animal’s quality of life and the client’s stage of readiness. These dis-

cussions lay the groundwork for addressing when the time is right for euthanasia, preventing animal suffering, and providing client decision-making support. They prepare clients to think through key euthanasia decisions: who will perform the euthanasia, who will be present, where the procedure will take place, and what the procedure entails as well as body-care options. Experts advocate for an advanced planning approach to euthanasia for geriatric animals.⁴⁶ Appropriate nonverbal communication and demonstration of willingness to listen allows clients to ask and receive answers to important questions. This approach may help clients prepare for and cope with the eventual loss and reduce the risk of conflict between veterinarian and client in subsequent interactions.⁴⁷ In a study⁵⁷ of factors related to small animal euthanasia procedures at a veterinary teaching hospital, clients being informed and well-prepared for the procedure was ranked as important by clients and veterinarians.

In the authors' opinion, the results of this study supported the need for training veterinarians in end-of-life conversations and euthanasia decision-making. The USC and veterinarian questionnaires used in this study may be useful educational tools for assessing a client-centered approach, both in end-of-life discussions and in veterinarian-client communication in general. One use of the PPPC questionnaire is to provide feedback to practicing physicians and residents on their own perceptions as well as those of their patients and the degree of agreement between these perceptions.¹ These instruments seem appropriate for use in veterinary curricula and continuing education workshops or for continuous quality improvement in the practice setting. It is important to note that, although performed for the PPPC questionnaire in human medical settings,³⁶ psychometric testing (ie, reliability and validity analysis) has not been conducted for the modified versions (VPCC and CPCC questionnaires) in the veterinary setting. Although pertinent, validation of the questionnaire instrument was beyond the scope and resources of this project. Results of pilot testing indicated the face validity of the questionnaire items.

Measures of patient perceptions are often positively skewed toward high satisfaction and are prone to ceiling effects.^{58,59} With minimal variation, it can be difficult to detect differences in perceptions of the care provided. This was especially concerning for the veterinarian responses, which were highly positively skewed; however, there was good distribution in USC responses. The VPCC and CPCC questionnaires did not capture the role of the pet in the veterinarian-client-patient interaction. In the veterinary setting the interaction is triadic and it is likely that the client's satisfaction with communication is influenced by the veterinarian's interactions with the pet as well as with the client. Inclusion of a question that addresses the veterinarian's interaction with the animal patient may increase usefulness and validity of these instruments in the veterinary setting. Formal validation of these questionnaires in veterinary medical settings is recommended.

The response rate for this study (32/59 [54%]) was good, especially given the nature of the study design using USCs and audio recording of the appointments. This was a self-selected group of veterinarians who chose to participate, and the findings may be applicable to only a subset of veterinarians. Owing to the case-based study design with 2 clinical cases and the use of USCs, these discussions would not be representative of all euthanasia discussions. These were also first-time visits between the veterinarian and USC that were reflective of an early veterinarian-client-patient-relationship that could impact comfort in conducting a euthanasia discussion. More variability in approaches to euthanasia discussions might result from a greater number of veterinarians and clinical scenarios. However, results of the present study did highlight that in some euthanasia conversations, there may be important differences between CPCC and VPCC.

A controlled study design was used to investigate euthanasia discussions. Because of the sensitive nature and ethical aspects of the topic, it is challenging to identify a research methodology to study end-of-life discussions while respecting the privacy of clients. It is also challenging to predict when an end-of-life conversation will take place in the veterinary clinic to capture for audio or video analysis. Even with its limitations, the study provided a baseline understanding of client-centeredness during euthanasia discussions.

The use of USCs to evaluate client-centeredness in the present study mirrored the use of standardized clients as raters in objective structured clinical examinations in human and veterinary medical settings. During these examinations, standardized clients and patients portray clinical scenarios, and communication performance is evaluated during multiple interactions with veterinary or medical students. In a veterinary communication assessment,⁶⁰ standardized clients assessed communication skills with strong intrarater reliability (a measure of rater consistency), minimizing bias and ensuring rigorous assessment.

The present study was conducted during 2005 and 2006; however, on the basis of the authors' experiences in teaching communication to veterinary students and veterinarians (CLA, JRS, and IJNB), veterinarians predominantly employ the traditional veterinarian-centered approach to clinical interviewing and rarely fully elicit the client perspective. It is taking time for the paradigm to shift to a more client-centered approach in veterinary appointments. During this period, the most relevant change in the profession is the proliferation of hospice- and palliative-care veterinarians and at-home euthanasia services, reflecting clients' desires for personalized, compassionate, and dedicated care at the end of their pets' lives, including euthanasia. In 2016, the International Association for Animal Hospice and Palliative Care launched a certification program including a full-day communication workshop on conducting euthanasia discussions, including eliciting client perspectives.⁶¹

To enhance alignment between VPCC and CPCC, veterinarians can actively encourage client involvement in appointments, particularly in the discussion of treatment and management goals. The findings of the present study possess potential to positively influence the professional well-being of veterinary practitioners and the financial performance of veterinary practices. Training in euthanasia conversations and eliciting the client perspectives may promote confidence and competence, and reduce moral stress around client's decision for euthanasia, and thus foster veterinarian fulfillment and well-being.^{29-33,56} When veterinarians feel they did their very best to compassionately care for a patient and support a client through an emotional time, they are less likely to carry the emotional burden of the clinical case. Clients who perceive that their veterinarian fully understands their animal's problem, their personal and family issues, and their role and ability to care for the animal are more likely to be satisfied with their appointment^{6,7,54} and to adhere to veterinarian recommendations.⁵

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Footnotes

- a. SAS, Version 9.1, SAS Institute Inc, Cary, NC.

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