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Staff Paper

**Small Animal Referring Veterinarian
Satisfaction with the Veterinary Teaching
Hospital, Michigan State University -
July 1, 1999 through June 30, 2000**

James Lloyd, Debra Donovan, Youssouf Camara,
Delta Leeper, Renee Gross

Staff Paper 2001-36

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MICHIGAN STATE UNIVERSITY
East Lansing, Michigan 48824

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Introduction

Understanding clients' wants and needs is vital to the sustained success of any service business, and veterinary medicine offers no exception. The Veterinary Teaching Hospital (VTH) at the Michigan State University College of Veterinary Medicine (MSU-CVM) has successfully maintained a position at the forefront of the veterinary profession throughout most of its history. The staff has consistently been composed of clinicians who have been chosen because of their excellence and expertise. However, the assumption that emphasis on clinical excellence will, by itself, provide the foundation for sustained success in the client flow and business at the hospital has been unchallenged to date. Additionally, there are many areas in veterinary medicine that are becoming increasingly popular (e.g. oncology). Addition of, or attention to, these services is crucial in retaining our leadership role within the veterinary community.

The results of a previous study¹ indicated that 67.7% of small animal clients chose MSU-VTH because they were referred by their primary veterinarian. One of the objectives of this study was to determine which factors influenced referring veterinarians in determining whether they refer their patients to MSU-VTH. Additionally, this study was designed to identify areas for possible expansion/contraction of our current service offerings in order to better serve the needs of our clients and referring veterinarians. The results of this study can be used as an outline for the development of a plan to maintain and improve referring veterinarian satisfaction and, ultimately, to sustain the teaching caseload and business of the hospital. In addition, this endeavor will serve to set a good example for our students by modeling the best management practices and establishing a critical blend of quality medicine/surgery and customer service.

¹ Lloyd, James, *et al*, Small Animal Client Satisfaction at the Veterinary Teaching Hospital, Michigan State University – July 1, 1999 through June 30, 2000, Department of Agricultural Economics, Staff Paper 2001-33, Michigan State University, East Lansing, August, 2001.

Methods

Survey Development

Three focus group meetings were held during 1998 and 1999 to determine key issues pertaining to client satisfaction for consideration by the small animal clinic. The first meeting involved officers and members of the board of directors of the Michigan Veterinary Medical Association (MVMA). The second focus group was composed of selected small animal practitioners who were among the top users of the VTH services. In addition, several leading practitioners outside this group were included who offered good insight into wants and needs of the veterinary profession. The third meeting involved the CVM alumni council.

Information obtained from the focus group meetings was used to identify a list of important survey topics. Based on this list, the small animal referral questionnaire was developed in June 2000 by CVM staff (see Appendix A).

Sample Selection

Fourteen hundred (1,400) small animal practitioners were mailed questionnaires on June 30, 2000. These comprised the entire population, as represented by all small animal and mixed animal veterinary practices, listed with the MVMA. Five questionnaires were undeliverable, resulting in a survey population of 1,395 veterinarians. To follow up, survey recipients were mailed post cards as reminders two weeks after the initial survey was sent.

Data

Data entry was completed for the returned surveys. Tables and graphs were constructed to display these results (see results section). Descriptive statistics were performed on all questions/responses and comparative statistics were completed for selected topics.

Results

Response Rates

Responses were received from 521 of the 1,395 small animal referral veterinarians surveyed, for a response rate of 37%.

Referring Veterinarian Information

Of the 502 respondents who provided information on their gender, 47.6% were female and 52.4% were male.

The referring veterinarians had their practices located throughout Michigan, including the upper peninsula. Veterinarians practicing in Oakland, Wayne, Kent, and Washtenaw counties were the most frequent respondents. Table 1 presents the distribution of respondents by county.

Table 1. Distribution of referring veterinarians* by county in which they practice.

County	Frequency	Percent	County	Frequency	Percent
Oakland	65	12.5	Cass	3	0.6
Wayne	56	10.8	Isabella	3	0.6
Kent	40	7.7	Mecosta	3	0.6
Washtenaw	33	6.4	Schoolcraft	3	0.6
Ingham	26	5.0	Antrim	2	0.4
Genesee	23	4.4	Barry	2	0.4
Macomb	22	4.2	Charlevoix	2	0.4
Saginaw	18	3.5	Cheboygan	2	0.4
Ottawa	17	3.3	Chippewa	2	0.4
Kalamazoo	15	2.9	Clare	2	0.4
Calhoun	11	2.1	Delta	2	0.4
Allegan	10	1.9	Hillsdale	2	0.4
Grand Traverse	10	1.9	Iosco	2	0.4
Jackson	10	1.9	Macinac	2	0.4
Livingston	10	1.9	Marquette	2	0.4
Midland	10	1.9	Oceana	2	0.4
Van Buren	8	1.5	Roscommon	2	0.4
Eaton	7	1.3	Shiawassee	2	0.4
Monroe	7	1.3	Tuscola	2	0.4
Bay	6	1.2	Alcona	1	0.2
Lenawee	6	1.2	Alpena	1	0.2
Sanilac	6	1.2	Arenac	1	0.2
Berrien	5	1.0	Crawford	1	0.2
Ionia	5	1.0	Emmet	1	0.2
Lapeer	5	1.0	Gogebic	1	0.2
Mason	5	1.0	Gratiot	1	0.2
Montcalm	5	1.0	Houghton	1	0.2
Muskegon	5	1.0	Huron	1	0.2
St. Clair	5	1.0	Montmorency	1	0.2
Clinton	4	0.8	Ontonagon	1	0.2
Manistee	4	0.8	St. Joseph	1	0.2
Newaygo	4	0.8	Wexford	1	0.2
Benzie	3	0.6			

* n = 519 respondents; 2 respondents reported working in more than one county.

The majority (89.4%) of referring veterinarians practicing in Michigan obtained their Doctor of Veterinary Medicine degrees from Michigan State University. These referring veterinarians graduated over six decades spanning 1942 – 2000. Table 2 summarizes these data.

Table 2. Graduation year of referring veterinarians* practicing in Michigan.

Year	Frequency	Percent	Year	Frequency	Percent
1942-1965	33	6.4	1981-1985	74	14.3
1966-1970	34	6.6	1986-1990	78	15.1
1971-1975	67	13.0	1991-1995	88	17.1
1976-1980	72	14.0	1996-2000	70	13.6

* n = 516 respondents

Only 24 of the 521 veterinarians surveyed reported that they were specialists. Dentistry was the most frequent specialty among those surveyed, followed by ophthalmology. Table 3 displays these data.

Table 3. Specialty* of referring veterinarians

Specialty	# of veterinarians	% of veterinarians
Dentistry	4	0.8
Ophthalmology	3	0.6
Alternative medicine & chiropractic	2	0.4
AVBP – canine & feline	2	0.4
Emergency care	2	0.4
AVBP – feline	1	0.2
Canine behavior & training	1	0.2
Dermatology	1	0.2
Holistic Medicine	1	0.2
Internal Medicine	1	0.2
Kinesiology & reflex analysis	1	0.2
Orthopedic surgery	1	0.2
Pathology	1	0.2
Virology	1	0.2
Veterinarians who were not specialists	497	95.4

*Two respondents indicated they were specialists, but did not provide a specialty area.

Veterinarians were asked to indicate all species for which their practice provides services. As expected, most provided services for cats and dogs; surprisingly, over half of respondents provided services for exotics. Additionally, almost 20% provided services for horses, food animals, and wildlife. The results are summarized in Table 4.

Table 4. Species for which practices provide service.

Species	Frequency	Percent
Cats	510	97.9
Dogs	508	97.5
Exotics	281	53.9
Food Animals	101	19.4
Horses	103	19.8
Wildlife	99	19.0

While the majority (88.7%) of veterinarians reported their practice was computerized, only 57.6% indicated they had Internet capability.

Table 5 displays the number of full time equivalent (FTE) veterinarians working in the practice. The mean was 2.51 FTE veterinarians per practice (median = 2); 55% of practices had two or fewer FTE veterinarians, while 8.3% had five or more.

Table 5. Number of Full Time Equivalent (FTE) veterinarians in practices* surveyed.

# of FTE vets	# of practices	% of practices	# of FTE vets	# of practices	% of practices
Less than 1	10	1.9	5 to 5.9	16	3.1
1 to 1.9	160	30.9	6 to 6.9	15	2.9
2 to 2.9	160	30.9	7 to 7.9	6	1.2
3 to 3.9	93	18.0	8 or more	6	1.2
4 to 4.9	51	9.9			

*n = 517

Descriptive Statistics Related to Use of MSU-VTH

Figure 1 depicts the number of small animal cases that veterinarians have referred to the MSU-VTH within the last year. As you can see, 16% of veterinarians had not referred any cases to MSU-VTH. The remaining 84% of veterinarians had referred between 1 and 100 cases to MSU-VTH. The mean number of cases referred was 6.78 (standard deviation = 9.57, median = 4). Only 16% of veterinarians surveyed referred more than 10 cases to the MSU-VTH.

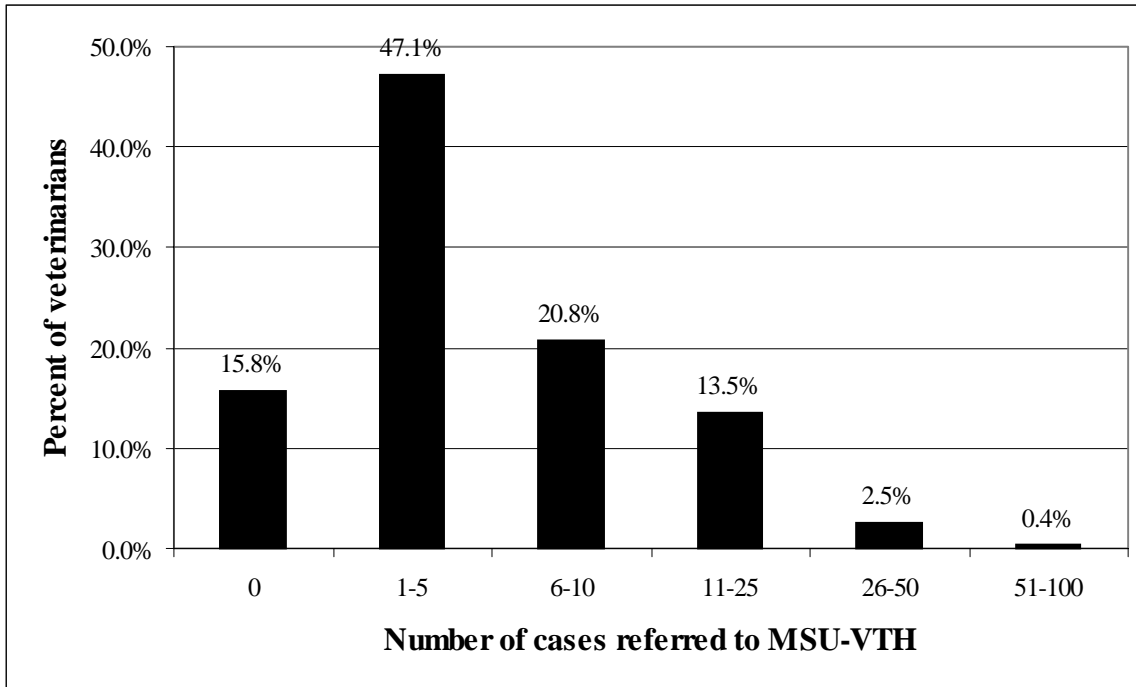


Figure 1. Number of cases small animal veterinarians have referred to the MSU-VTH during the past year. n = 520 veterinarians.

Sixty-two percent (62%) of veterinarians reported they had difficulty getting small animal cases scheduled with the MSU-VTH in the past five years. The areas that posed the greatest scheduling difficulty for these 305 respondents included orthopedics, dermatology, internal medicine and neurology. Table 6 summarizes these data. Some respondents indicated more than one area of scheduling difficulty.

Table 6. Scheduling difficulty by service according to referring veterinarians.

Service	# of scheduling problems	Percent*	Service	# of scheduling problems	Percent*
Orthopedics	219	71.8	Soft Tissue Surgery	23	7.5
Dermatology	121	39.7	Intensive Care	20	6.6
Internal Medicine	102	33.4	Dentistry	16	5.2
Neurology	100	32.8	General Medicine	12	3.9
Ophthalmology	47	15.4	Radiology	12	3.9
Emergency	37	12.1	Nutrition	1	0.3
Cardiology	26	8.5	Other	2	0.7

* n = 305 respondents who had some degree of scheduling difficulty

Veterinarians were asked to choose and rank according to frequency of use the top five service areas that they had used for small animal cases at the MSU-VTH during the last five years. Orthopedics was the most frequently used service, followed by internal medicine, then dermatology. Table 7 displays these results.

Table 7. Services used by referring veterinarians in the last five years

Service	% of veterinarians* who ranked it in their top 5	% of veterinarians* who ranked it as #1
Orthopedics	63.3	31.3
Internal Medicine	57.6	18.8
Dermatology	40.7	10.4
Ophthalmology	32.2	6.0
Cardiology	36.3	5.2
Neurology	35.9	5.2
Emergency	17.5	5.0
Radiology	17.1	4.2
Soft Tissue Surgery	28.2	1.5
General Medicine	7.1	1.3
Intensive Care	5.0	0.6
Dentistry	1.0	0.2
Nutrition	0.2	0.2

* Based on 521 surveys returned. Some respondents did not rank the service areas, but simply placed an “x” next to those they had used. These responses were not included.

Veterinarians were asked to rate on a scale from 1 to 5 (1 = poor, 5 = excellent) their overall experience with the top five service areas they had chosen (above). The results are presented in Table 8. Radiology had the highest mean score (4.4), followed by cardiology (4.2) and soft tissue surgery (4.2).

Table 8. How referring veterinarians scored the five services they used most frequently at the MSU-VTH. (1 = poor, 5 = excellent)

Service	Number of Respondents	Percent of respondents who rated service as					Mean Score
		1	2	3	4	5	
Radiology	88	0	3.4	6.8	37.5	52.3	4.4
Cardiology	186	1.6	2.7	10.2	45.2	40.3	4.2
Soft Tissue Surgery	143	2.1	2.8	11.9	43.4	39.9	4.2
Ophthalmology	164	2.4	3.0	14.6	45.1	34.8	4.1
Orthopedics	319	2.2	5.6	17.2	41.7	33.2	4.0
Dermatology	210	1.9	5.7	19.0	43.3	30.0	3.9
General Medicine	34	0	5.9	20.6	55.9	17.6	3.9
Intensive Care	23	0	17.4	8.7	43.5	30.4	3.9
Neurology	186	4.3	3.8	17.7	41.9	32.3	3.9
Internal Medicine	294	3.7	7.1	23.5	42.9	22.8	3.7
Emergency	93	4.3	14.0	25.8	32.3	23.7	3.6
Nutrition	5	0	20.0	40.0	0	40.0	3.6

Additional comments written in by respondents about the above listed service areas are as follows²:

- Getting appointment difficult (5.2%)
- Poor feedback/follow up (3.5%)
- Inconsistent quality between services (1.3%)
- Lack of respect for referring DVM (1.2%)
- Problem with emergency taking cases (1.2%).

The following services were specifically mentioned as providing great service: radiology, ultrasound, orthopedics, neurology, ophthalmology, and cardiology. Congratulations to the following clinicians who were specifically mentioned as providing exceptional service to clients: Dr. Perry, Dr. Flo, and Dr. David Ramsey.

² Percentages following an item are based on 521 surveys returned.

Veterinarians were asked an open-ended question regarding what new service area(s) they would like to see become available at the MSU-VTH in the future. Oncology was the most frequent choice, selected by 26.3% of respondents. One percent of respondents simply wanted to see more of existing services, while 1.2% wanted to see MSU-VTH add an animal behaviorist.

When asked how they saw their need for MSU-VTH services changing in the coming five years (based on volume of referral cases), almost half (46.1%) of respondents thought that the number of cases they referred to MSU-VTH would stay the same. These respondents referred a mean 6.2 cases to the MSU-VTH within the last year. Almost 33% saw their need for MSU-VTH services increasing, while 17% saw their need decreasing. Those with an increasing need for MSU-VTH services referred a mean 8.8 cases during the past year, compared to those with a decreasing need for services who referred a mean 5.1 cases. Five percent (5%) of veterinarians surveyed did not give a specific response to the question.

Respondents made the following comments in reference to their need for MSU-VTH service areas changing in the coming five years:

- Other good clinics are closer (8.4%)
- Difficulty obtaining appointments at MSU (6.5%)
- Poor communication with MSU-VTH (3.6%)
- MSU-VTH is too far away (2.5%)
- Lack of respect for referring vet (1.9%)
- Previous problems with MSU-VTH (1.7%)
- More clients are seeking specialty services (1.3%)
- Own case load increasing/expanding clinic (1.2%)

Veterinarians were asked to rate the likelihood on a scale of one to five (1 = not likely, 5 = very likely) that they would refer cases to the MSU-VTH if we offered any of the following new oncology services: general oncology, specific chemotherapeutic services, specific radiation

therapy services, and surgical excision services. Table 9 summarizes their responses. Specific radiation services were the most likely to be used with a mean score of 3.7; surgical excision services were least likely to be used with a mean score of 3.1.

Table 9. Likelihood that referring veterinarians would use oncology services if MSU-VTH made them available, where 1 = not likely, 5 = very likely.

Service	Number of respondents	Percent of respondents who rated likelihood as					Mean value
		1	2	3	4	5	
General oncology services	500	10.0	11.8	20.6	28.8	28.8	3.5
Specific chemotherapeutic services	490	11.0	10.8	21.8	26.7	29.6	3.5
Specific radiation therapy services	491	10.0	9.4	21.4	23.0	36.3	3.7
Surgical excision services	487	16.4	17.5	26.3	19.1	20.7	3.1

Referring veterinarians were asked to rate the quality and timeliness of telephone consultations, referral progress reports and referral discharge information received from MSU-VTH professional staff. Table 10 summarizes the results. A five point scale was used with 1 = poor and 5 = excellent. More than 20% of the responding veterinarians rated the following areas as excellent:

- quality of telephone consults
- quality of referral discharge information
- timeliness of telephone consults

More than 10% of the responding veterinarians rated the following areas as poor:

- quality of referral progress reports
- timeliness of referral progress reports
- timeliness of referral discharge information

Table 10. Quality and timeliness of telephone consultations, referral progress reports and referral discharge information received from MSU-VTH professional staff; 1 = poor and 5 = excellent.

Quality of information	Number of Respondents	Percent of respondents who rated it as					Mean Value
		1	2	3	4	5	
Telephone consults	449	5.8	7.1	13.4	40.3	33.4	3.9
Referral progress reports	444	10.6	14.4	25.7	34.0	15.3	3.3
Referral discharge information	460	5.9	11.5	27.6	35.0	20.0	3.5
Timeliness of information							
Telephone consults	443	9.3	13.8	24.2	32.3	20.5	3.4
Referral progress reports	438	16.0	22.1	28.5	23.1	10.3	2.9
Referral discharge information	452	10.6	16.6	31.6	27.0	14.2	3.2

Almost 20% of referring veterinarians considered eight hours to be a reasonable response time for telephone consultations, while 44% considered 24 hours to be reasonable. Figure 2 shows the distribution of responses.

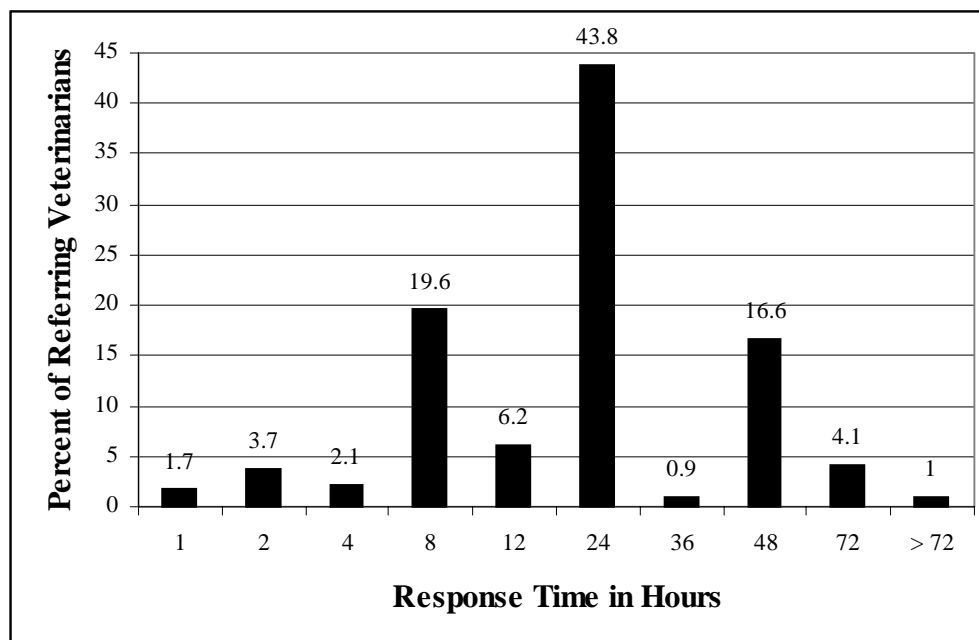


Figure 2. Reasonable response times for telephone consultations, according to referring veterinarians.

When a case has been referred to MSU-VTH that requires hospitalization, 44% of referring veterinarians prefer to receive updates on the patient's condition within 24 hours. Thirty two percent (32%) preferred an update in 48 hours and 16% wanted an update within 72 hours. When asked if it would be acceptable to have senior veterinary students provide updates on their referral cases, 87.5% said "yes" while 12.5% said "no".

Veterinarians were asked what they considered to be a reasonable response time for receiving discharge information on cases they have referred to the MSU-VTH. Almost one third (31.5%) of the respondents reported that seven days was a reasonable response time for receiving discharge information on a referred case; 17.6% reported three days as reasonable and 14.3% wanted the information within one day. Figure 3 displays the distribution of responses.

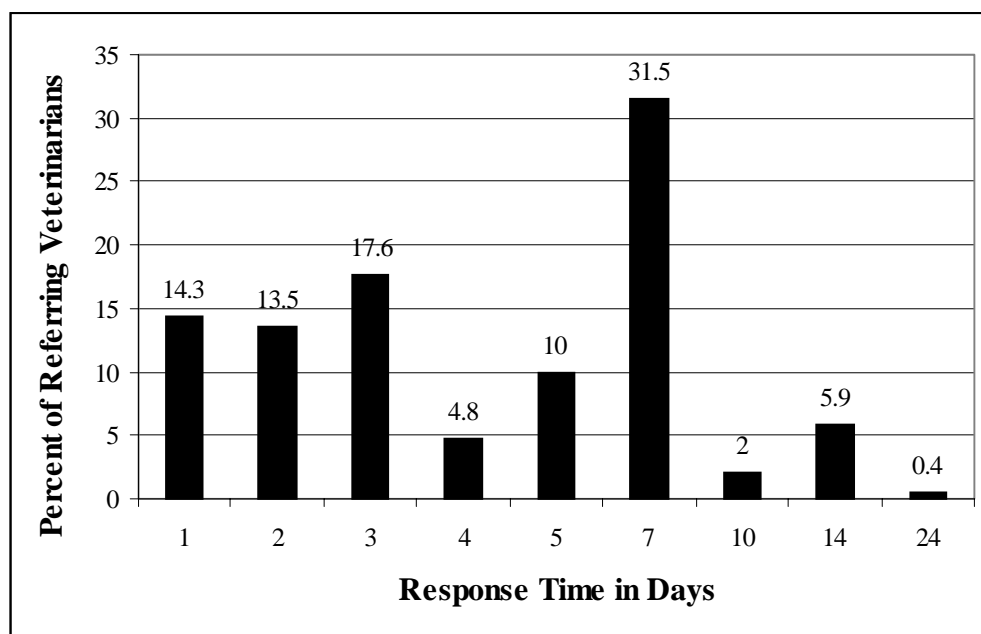


Figure 3. Reasonable response times for receiving discharge information on cases referred to the MSU-VTH, according to the referring veterinarians.

In an effort to improve communication between the MSU-VTH and referring veterinary practices, respondents were asked to rate the following on a scale from one to five with 1 = not helpful and 5 = very helpful: case update via the Internet, an e-mail newsletter, clinician

biographies available on the Internet, and a website for general information. Table 11 provides a summary of responses received.

Table 11. Referring veterinarians rate the helpfulness of MSU-VTH providing additional information to them via the Internet. (1 = not helpful, 5 = very helpful)

Area of Additional Information	Number of Respondents	Percent of respondents who rated it as					Mean Value
		1	2	3	4	5	
Electronic case update (via Internet)	467	23.1	6.2	13.9	24.0	32.8	3.4
E-mail newsletter	466	24.9	10.3	20.2	23.8	20.8	3.1
Faculty/clinician biographies (via Internet)	456	32.2	16.9	27.0	15.4	8.6	2.5
Website for general information	461	24.5	9.3	24.3	24.9	16.9	3.0

Almost one third (32.8%) of veterinarians reported that they thought an electronic case update via the Internet would be very helpful in improving the exchange of information between MSU-VTH and their practice. Additionally, 20.8% reported that an e-mail newsletter would be very helpful, 16.9% thought a website for general information would be very helpful, and 8.6% thought that having clinician biographies available on the Internet would be very helpful.

Respondents were asked to write in any additional comments regarding communication between the MSU-VTH and private practitioners. Responses ranged from “poor” (4.7%) to “needs improvement” (2.7%) to “better” (1.0%) to “good” (3.1%). Some respondents (1.3%) stated that the quality of communication depends on the service. Four percent (4.0%) of respondents went so far as to say there was a lack of respect for the referring veterinarian.

Additionally, referring veterinarians made the following specific suggestions for improving communication:

- Clinicians need to update referring veterinarian (6.1%)
- Use the fax machine (2.7%)
- Need to increase the staff, especially at the front desk (2.5%)

- New phone system needed (1.7%)
- Need to make appointment scheduling easier (1.7%)
- Use the Internet (1.5%)
- Set up voice mail/e-mail (1.2%)

Veterinarians were asked to compare their impressions of MSU-VTH fees with the fees charged in their practice as well as fees charged in other practices. For similar services, 63.9% of the veterinarians thought that MSU-VTH fees were, in general, higher than fees in their practice; 10.3% felt that MSU-VTH fees were lower and 25.9% thought that fees were the same. Compared to fees charged in other practices, 42.7% thought that MSU-VTH fees were higher, 24.6% thought the fees were lower and 32.7% thought that fees were the same.

When asked if MSU-VTH fees should be higher, lower, or the same as fees in private practices: 57.3% of respondents said they should be higher, 30.8% thought they should be the same and 11.9% felt they should be lower. Two hundred seventy (270) respondents who felt fees should be higher at the MSU-VTH cited the following reasons:

- expertise of the specialists at MSU-VTH (33.7%)
- clients expect to pay more for special services (19.6%)
- MSU has the latest technology (9.6%)
- MSU-VTH should play a leadership role – if MSU has higher prices, other veterinary clinics will follow (8.5%)
- MSU-VTH is a referral center (7.0%)
- MSU-VTH has larger overhead costs (5.6%)
- quality of service (5.2%)

Some respondents gave more than one reason, while 26.7% of respondents who felt fees should be higher did not specify a reason.

The one hundred forty-five (145) respondents who felt that fees should be the same at the MSU-VTH as in private practice gave the following explanations:

- equal fees for equal services (20.7%)
- incentive for clients to drive to MSU (11.0%)
- it is a teaching hospital (6.9%)
- keeps competition low between clinics (4.8%)
- cost should not be an obstacle to treatment (4.1%)

Some respondents cited more than one reason and almost half (46.2%) of respondents who felt fees should be the same as in private practice did not specify a reason.

The fifty-six (56) respondents who felt that fees should be lower at the MSU-VTH than in private practice gave the following reasons:

- MSU-VTH is a teaching hospital (42.9%)
- student vets are slower due to lack of experience (25.0%)
- MSU-VTH is a subsidized institution (17.9%)
- long wait to get an appointment (14.3%)
- to balance out people driving from a distance (12.5%)
- appointments take too long (10.7%)

Some respondents gave more than one reason, while 23.2% of respondents who felt fees should be lower than those of private practices did not specify any reason.

Referring veterinarians were asked to rate the overall value of MSU-VTH small animal services to their practice with 1 = low value and 5 = high value. Twenty-eight percent (28.0%) of the respondents rated the MSU-VTH small animal services as “high value” versus 3.9% that

reported “low value”. The mean score overall was 3.7. Figure 4 shows the distribution of responses.

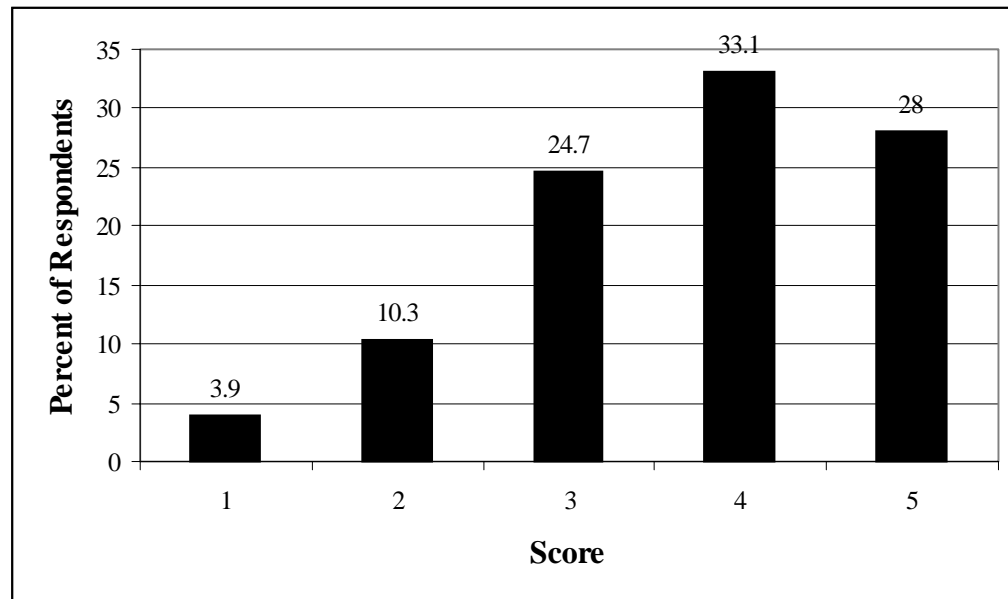


Figure 4. Overall value of the MSU-VTH small animal services to referring veterinary practices. 1 = low, 5 = high

When asked an open-ended question about which one thing they would change about the MSU-VTH, almost 25% of referring veterinarians reported that they would “make appointments easier to obtain.” “Improve communication” was reported by 11.6% and “new phone system” was reported by 9.7% of the respondents. Table 12 summarizes these responses.

Table 12. Areas that referring veterinarians would change about the MSU-VTH.

Change	Freq.	%	Change	Freq.	%
Make appointments easier	76	23.8	Add oncology department	8	2.5
Improve communication	37	11.6	Make vets spend time in “real practice”	7	2.2
Need new phone system	31	9.7	Need to improve Dr’s/Staff’s attitudes	6	1.9
Respect referring vets	21	6.6	Prices too high	6	1.9
Distance/Location	20	6.3	Improve efficiency	6	1.9
Consultations easier/more timely	20	6.3	Increase fees	5	1.6
Need to improve front desk staff	15	4.7	Have continuing education seminars	5	1.6
Follow up more timely	11	3.4	Make referral process easier	4	1.3
Increase staff	9	2.8	Make it easier to get orthopedic appointments	4	1.3
More accessible/expand services	9	2.8			

Veterinarians were asked an open-ended question regarding why they did or did not refer small animal cases to the MSU-VTH. The most frequent reasons reported for referring cases to MSU-VTH included³:

- ✓ Reputation: MSU-VTH staff’s level of expertise and professionalism (11.0%)
- ✓ Case is beyond the referring vet’s capabilities (10.3%)
- ✓ Quality of care and services (7.9%)
- ✓ Diagnostics and technology available at MSU-VTH (6.5%)
- ✓ Reasonable cost (5.2%)
- ✓ Location is close or clients are willing to travel (3.3%)
- ✓ Best available treatment (2.9%)
- ✓ Availability of specialty services (2.7%)
- ✓ Client request (2.7%)
- ✓ 2nd opinion (1.7%)
- ✓ 24 hour care/intensive care (1.6%)

- ✓ Familiar with clinicians (1.5%)
- ✓ Teaching experience (1.2%)

The reasons reported for not referring cases to MSU-VTH included:

- Distance / other good clinics are closer (28.2%)
- Takes too long to get an appointment (23.4%)
- Poor communication / slow or no feedback / poor experience with clinicians (7.7%)
- Too expensive (7.3%)
- Client preference (2.9%)
- Staff attitude / rude receptionists / poor client treatment (2.9%)
- Lack of respect for referring veterinarian (2.1%)
- Lack of oncology and other services (1.0%)

Veterinarians reported that the most important factors they consider in choosing where they refer cases include: quality of services, timeliness of appointment, location nearby, communication, and cost. Almost 74% of respondents cited quality of services as an important determining factor, while 49.3% chose timeliness of appointment, 36.9% chose location nearby, 27.3% chose communication and 14.7% chose cost. Other factors were important determinants 35% of the time. Note that this was an open-ended question and respondents may have cited more than one determining factor, so that percentages total more than 100%.

Other than MSU-VTH, the majority of veterinarians also refer their cases to private specialty practices. More than 50% of veterinarians surveyed referred their patients to each of two specific specialty practices. One-fourth (25%) of respondents also refer to one of twelve additional specialty practices, while 39% refer to one or more of 53 other non-specialty clinics. Somewhat surprisingly, another 10.9% refer to other universities.

³ Percentages following a statement are based on 521 surveys returned.

Discussion

The overall response rate for our survey was 37%. Due to the fact that all respondents did not respond to all questions on the survey, the response rate for specific questions varied. The geographic distribution of respondents roughly matches that of the general population in the State, and about half of the respondents were male and half were female. Considering both the response rate and the demographics of respondents, it appears that a representative sample of small animal veterinarians from across Michigan (including the Upper Peninsula) was obtained.

Almost 90% of veterinarians surveyed obtained their doctor of veterinary medicine degree from MSU-CVM and 60% of respondents graduated within the last 20 years. These crucial alumni will be practicing and, therefore, likely referring small animal cases somewhere for at least the next 20 years. This is something to bear in mind while interpreting the survey results and planning for the future, because referral alternatives to MSU-VTH are already being widely used by small animal practitioners in Michigan.

Only 4.6% of respondents were specialists, with dentistry being the most frequent specialty area. Almost 90% of veterinarians worked in a computerized practice and almost 60% claimed they were Internet capable. There were 2.51 full time equivalent (FTE) veterinarians per practice, with over one half of practices employing two or fewer FTE veterinarians. Considering this size distribution of small animal practices in Michigan, it should be kept in mind that referral patterns may change in the future if strong trends toward practice consolidation develop. In fact, the need for reliable referral services may actually drive practices toward consolidation so that added expertise can be achieved in-house.

Almost 50% of responding veterinarians had referred between one and five cases to the MSU-VTH within the last year while only 16% (85) had referred more than 10 cases. Of the 85

who had referred more than 10 cases, the most frequent reasons given for referring a case to MSU-VTH included “quality care / services” and “the case was beyond the referring veterinarian’s capabilities,” each being cited by 13 (15.3%) respondents. Other reasons given included:

- 14.1% referred because of MSU’s expertise
- 9.4% said MSU had the best treatment
- 9.4% referred based on diagnostics and technology available at MSU
- 4.7% stated that we had reasonable costs
- 4.7% referred based on our location
- 3.5% referred based on client requests
- 3.5% referred because they were familiar with clinicians
- 3.5% referred for the teaching experience a case would give to students

Eleven respondents (13%) who referred more than 10 cases to MSU-VTH last year did not give a reason for their referrals. Note that among those referring more than 10 cases to MSU-VTH, “quality of care and services” was the most frequent reason given, while among the entire survey population “reputation/expertise/professionalism” was the most frequent reason for referrals.

Of the 16% (82 veterinarians) who had not referred any cases to the MSU-VTH in the last year, almost 50% stated that it is due to distance and the fact that other referral veterinarians are closer. Other reasons listed among this group for not referring small animal cases to MSU-VTH included:

- 18.3% said it took too long to get an appointment
- 9.8% cited poor communication
- 7.3% thought it was too expensive

- 3.7% cited rude receptionists
- 2.4% cited staff attitude

Twenty-four percent (24%) of those who did not refer any cases to the MSU-VTH did not provide an explanation as to why.

Almost two-thirds of veterinarians reported that they had a problem scheduling appointments with one or more services at the MSU-VTH during the last five years. Orthopedics posed the greatest difficulty, with 72% of those with difficulty indicating a problem in this area, in spite of the fact that this is one of the most heavily staffed services in the VTH. At least one-third of respondents had difficulty obtaining an appointment in the dermatology (40%), neurology (33%), and internal medicine (33%) areas. Dermatology and neurology appointments were limited by the number of clinicians available in these areas, while the internal medicine service was the most heavily staffed in terms of the number of full-time-equivalent (FTE) veterinarians. Fewer than 10% of respondents reported difficulty obtaining an appointment in the following areas: nutrition, general medicine, radiology, dentistry, intensive care, soft tissue surgery, and cardiology.

The number of difficulties with scheduling appears to be directly related to the demand for cases to be seen. According to referring veterinarians, orthopedics, internal medicine, and dermatology were the MSU-VTH services that they used most. Not surprisingly, these were three of the four areas with the greatest difficulty in obtaining an appointment. The fourth area, neurology, ranked 6th in terms of the most-used MSU-VTH services.

The radiology service had the highest mean satisfaction score (4.4 out of 5.0), followed by cardiology (4.2), and soft tissue surgery (4.2). Note that less than 10% of referring veterinarians reported difficulty in obtaining an appointment in these three areas. Orthopedics

(4.0), dermatology (3.9), internal medicine (3.7) and neurology (3.9) scored quite high in spite of the fact that obtaining an appointment in these areas was difficult. When interpreting these scores, keep in mind that overall satisfaction with a particular service may be related to its frequency of use. High levels of satisfaction might logically lead to higher levels of use for a given level of demand. Low levels of satisfaction may limit caseload.

Oncology was the most frequent area that referring veterinarians wanted MSU-VTH to make available to them in the future, as it was requested by 26% of respondents. Specific radiation therapy ranked highest (3.7 out of 5.0; see Table 9 in Results section) in the likelihood that respondents would use it, if it were made available.

Roughly one-third of the veterinarians expected an increased need for the MSU-VTH services over the next five years. They cited their own expanding caseloads, better technology at MSU, clients seeking specialty services, and affordability as driving factors. However, they also indicated that they had difficulty scheduling appointments and that there was often poor communication between MSU clinicians and the referring veterinarian. Almost half of respondents thought that the number of referrals would stay approximately the same, while 16% thought that their referrals to MSU-VTH would decrease. Reasons included: difficulty obtaining appointments, poor communication, bad experience with MSU-VTH in the past, and closer specialty clinics.

Among those who thought their need for MSU-VTH services would increase, the mean number of cases they referred to MSU last year was 8.8. For those who expected their need to stay the same, the mean number of cases was 6.2 and for those who thought their need would decrease, the mean number of cases referred was 5.1. Based on this projection, it is likely that

MSU-VTH will be receiving an increased number of requests to handle small animal referrals over the next five years.

With regard to receiving case information from MSU, greater than 20% of respondents rated both the quality and timeliness of telephone consultations as excellent. Twenty-four hours was considered a reasonable response time by 44% of respondents; 20% wanted a telephone consultation within eight hours.

Fifteen percent (15%) of responding veterinarians rated the quality of referral progress reports as excellent and 10% rated the timeliness as excellent. However, greater than 10% also indicated that both quality and timeliness of referral progress reports were poor. Within 24 hours, 44% of referring veterinarians wanted to receive a progress report on their patient. Almost one-third (32%) of respondents indicated that 48 hours for a progress report was acceptable and 16% were willing to wait 72 hours. The majority of referring veterinarians had no problem with a senior veterinary student providing updates on their referral cases. This may be an opportunity for senior veterinary students to gain additional experience in the clinic while also improving communication with referring veterinarians.

While 20% of referring veterinarians rated the quality of referral discharge information as excellent, 14% indicated that the timeliness was poor. Almost one-third of respondents indicated that seven days was a reasonable response time for receiving discharge information on a case they had referred. Sixty percent (60%) of referring veterinarians wanted the information in five days or less.

In order to meet or exceed the expectations of nearly all referring veterinarians, the following guidelines for timeliness of communication should be considered:

- less than or equal to eight hours for a telephone consultation

- less than or equal to 24 hours for referral progress reports
- less than or equal to two days for discharge reports

If these guidelines are deemed overly ambitious, the expectations of a majority of referring veterinarians could be met or exceeded with the following goals for communication:

- less than or equal to 24 hours for a telephone consultation
- less than or equal to 48 hours for referral progress reports
- less than or equal to five days for discharge reports

Again, senior veterinary students may be an underutilized resource in these areas.

One-third of veterinarians surveyed thought that an electronic case update via the Internet would be very helpful in improving the exchange of information between MSU-VTH and their practice. Additionally, 21% reported that an e-mail newsletter would be very helpful. Recall that 57.6% of practices were Internet capable; MSU-VTH may want to examine these avenues further as an opportunity to enhance communication between referring veterinarians and the MSU-VTH. This may also provide an additional opportunity for senior veterinary students, as 87.5% of respondents stated that it would be acceptable to have senior veterinary students provide updates on their referral cases.

Written comments by respondents regarding communication with MSU-VTH ran the spectrum from poor to good. Respondents stated that it was difficult to contact clinicians and some indicated that a voice mail or e-mail system might help. Again, respondents commented that it was difficult to schedule appointments; some suggested a new phone system, and a few recommended having a separate telephone number for referring veterinarians to call.

Almost 60% of referring veterinarians thought that MSU-VTH fees were higher than fees in their practice. Additionally, one third reported that MSU-VTH fees were higher than fees in

other practices. Nine percent (9.0%) of surveyed veterinarians stated that MSU-VTH fees were lower than fees in their practice and 23.2% thought that fees were comparable. Overall, 80% of respondents felt that prices at MSU should be the same or higher than in private practice. Over one-half of the veterinarians surveyed felt that MSU-VTH fees should be higher - based on the expertise of the staff, the fact that we have the latest technology/diagnostics, and based on the quality of services provided. Twenty-eight percent (28%) thought fees should be the same and 10.9% felt they should be lower because MSU-VTH is a teaching hospital and student vets are slower due to lack of experience. In light of these results, the VTH should not hesitate to implement appropriate fee increases as they are deemed necessary to maintain quality service.

Most referring veterinarians felt that the MSU-VTH small animal service was valuable to their practice. Looking at Figure 4 (see Results section), 28.0% of the respondents rated the value as high, while only 3.9% reported the value as low. Twenty-five percent (25%) of respondents indicated that MSU-VTH was of intermediate value to their practice (score = 3) and one third rated the value as being between intermediate and high (score = 4). Respondents, however, would make the following improvements to the MSU-VTH: make appointments easier to obtain, improve communication, and install a new user-friendly telephone system.

When choosing a hospital to refer small animal cases to, respondents reported that the quality of services, timeliness of appointment, location of the hospital, communication, and cost were the most important factors. Because we cannot change our location, we need to focus our efforts on the quality of our customer service, including communication between clinicians and referring veterinarians and making sure that clients are seen in a timely manner.

The reasons given by survey respondents for referring their small animal cases to MSU-VTH included the staff's level of expertise, the availability of advanced diagnostics, and the

quality of services provided. Conversely, reasons reported for not referring cases to MSU-VTH included: distance, inability to get an appointment in a timely manner, poor communication, the fact that other good clinics were closer to the client, and cost.

Besides MSU-VTH, the majority of veterinarians also refer small animal cases to private specialty practices. A significant portion (39%) refer to other non-specialty private practitioners, while a smaller number (10.9%) refer to other universities. These all appear to be viable alternatives to MSU-VTH when location, availability, or quality of customer service becomes an issue.

Summary

To maintain customer satisfaction in the future, this study indicates that MSU-VTH needs to emphasize both clinical expertise and customer service. Currently, our strongest areas include:

- ★ providing quality care / services to our patients
- ★ expertise of our clinicians
- ★ using the most current technology and treatments

The factors referring veterinarians deemed as being most important to them when choosing a small animal referral hospital also offer us our greatest opportunities to excel in the customer service area:

- ★ decrease the time it takes to obtain an appointment, especially in orthopedics, internal medicine, dermatology and neurology
- ★ improve communication between clinicians and referring veterinarians

- ★ increase the quality of customer service provided, including telephone consultations and progress reports; remember that quality of service includes both medical outcome and the client's/referring veterinarian's experience with the clinic.

Additionally, MSU-VTH may want to consider expanding the small animal services we offer in order to meet the needs of clients/veterinarians and maintain our leadership role in the veterinary community. Along with providing more of existing services, referring veterinarians identified oncology services as something they would like MSU-VTH to offer in the future.

Appendix A

June 30, 2000

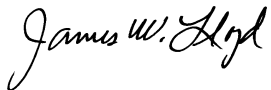
Dear Dr.

The Michigan State University College of Veterinary Medicine is conducting a survey of private veterinary practitioners regarding their experiences with the MSU Veterinary Teaching Hospital. The objectives of the survey are to gauge the level of satisfaction of referring small animal veterinarians, and to identify areas that need expansion or improvement.

Your input is essential as we begin to outline future goals and objectives for the Veterinary Teaching Hospital. It should take approximately 10 or 15 minutes to complete the enclosed questionnaire, and all responses will be held in strictest confidence. Please return the questionnaire in the stamped, self-addressed envelope provided by Friday, July 14th.

Thank you in advance for your assistance.

Sincerely,

A handwritten signature in cursive script that reads "James W. Lloyd".

James W. Lloyd, DVM, PhD
Assistant to the Dean for Practice Management

517/353-9559

Enclosure

Appendix A

Michigan State University Veterinary Teaching Hospital (MSU-VTH) Small Animal Referral Survey

1. In which Michigan County is your practice located? _____
2. What year did you graduate from veterinary school? _____ What school? _____
3. What is your gender? ☐ Female ☐ Male (optional)
4. Are you a specialist? ☐ Yes ☐ No If Yes, what is your specialty?

<input type="checkbox"/> Anesthesiology	<input type="checkbox"/> Laboratory Animal	<input type="checkbox"/> Pathology
<input type="checkbox"/> Behavior	<input type="checkbox"/> Microbiology	<input type="checkbox"/> Pharmacology
<input type="checkbox"/> Cardiology	<input type="checkbox"/> Neurology	<input type="checkbox"/> Preventive Medicine
<input type="checkbox"/> Dentistry	<input type="checkbox"/> Nutrition	<input type="checkbox"/> Theriogenology
<input type="checkbox"/> Dermatology	<input type="checkbox"/> Oncology	<input type="checkbox"/> Radiology
<input type="checkbox"/> Emergency Care	<input type="checkbox"/> Ophthalmology	<input type="checkbox"/> Surgery
<input type="checkbox"/> Internal Medicine	<input type="checkbox"/> Orthopedics	<input type="checkbox"/> Zoological Medicine
	<input type="checkbox"/> Other (please specify) _____	
5. For which species does your veterinary practice provide services? Please check all that apply:

<input type="checkbox"/> Cats	<input type="checkbox"/> Exotics	<input type="checkbox"/> Horses
<input type="checkbox"/> Dogs	<input type="checkbox"/> Food Animals	<input type="checkbox"/> Wildlife
6. Is your practice computerized? ☐ Yes ☐ No Are you Internet capable? ☐ Yes ☐ No
7. How many full-time-equivalent (FTE) veterinarians work in your small animal practice? _____

(One FTE is equivalent to one veterinarian working full-time exclusively in small animals, or a combination of veterinarians that add up to one full-time. For example, 3 veterinarians, each working half-time on small animals, equals 1.5 FTEs in small animals. ***If you have no veterinarians engaged in small animal practice, please stop here and return the survey in the enclosed envelope. Thank you.***)
8. Approximately how many small animal cases have you personally referred to the MSU-VTH within the last year? _____
(If none, please skip to question #12.)
9. Have you had difficulty getting cases scheduled with the MSU-VTH in the past five years?
☐ Yes ☐ No If Yes, what service areas were involved?

<input type="checkbox"/> Cardiology	<input type="checkbox"/> Intensive Care	<input type="checkbox"/> Orthopedics
<input type="checkbox"/> Dentistry	<input type="checkbox"/> Internal Medicine	<input type="checkbox"/> Radiology
<input type="checkbox"/> Dermatology	<input type="checkbox"/> Neurology	<input type="checkbox"/> Soft Tissue Surgery
<input type="checkbox"/> Emergency	<input type="checkbox"/> Nutrition	<input type="checkbox"/> Other (please specify) _____
<input type="checkbox"/> General Medicine	<input type="checkbox"/> Ophthalmology	

Appendix A

10. What are the top five service areas you have used at the MSU-VTH during the last five years?
(Please number from 1 to 5, with 1 as the most used service)

<input type="checkbox"/> Cardiology	<input type="checkbox"/> Intensive Care	<input type="checkbox"/> Orthopedics
<input type="checkbox"/> Dentistry	<input type="checkbox"/> Internal Medicine	<input type="checkbox"/> Radiology
<input type="checkbox"/> Dermatology	<input type="checkbox"/> Neurology	<input type="checkbox"/> Soft Tissue Surgery
<input type="checkbox"/> Emergency	<input type="checkbox"/> Nutrition	<input type="checkbox"/> Other (please specify)
<input type="checkbox"/> General Medicine	<input type="checkbox"/> Ophthalmology	<input type="text"/>

11. How would you rate your overall experience with the top five service areas from question #10.

<u>Specific Service Area</u>	<u>Poor</u>					<u>Excellent</u>
1. <input type="text"/>	1	2	3	4	5	
2. <input type="text"/>	1	2	3	4	5	
3. <input type="text"/>	1	2	3	4	5	
4. <input type="text"/>	1	2	3	4	5	
5. <input type="text"/>	1	2	3	4	5	

Additional comments on above service areas:

1.
2.
3.
4.
5.

12. What new service area(s) would you like to see become available at the MSU-VTH in the future? (If more than one, please prioritize.)

13. How do you see your need for MSU-VTH service areas changing in the coming five years?

Volume of referral cases: ☐ Decreasing ☐ Increasing ☐ Same

Other comments:

Appendix A

14. If the MSU-VTH offered a new oncology service, what is the likelihood that you would refer cases?

	<u>Not Likely</u>				<u>Very Likely</u>
General oncological services	1	2	3	4	5
Specific chemotherapeutic services	1	2	3	4	5
Specific radiation therapy services	1	2	3	4	5
Surgical excision services	1	2	3	4	5

15. How would you rate the following information you have received from the MSU-VTH professional staff?

	<u>Poor</u>				<u>Excellent</u>	<u>Not Applicable</u>
<u>Quality of information</u>						
Telephone consultations	1	2	3	4	5	<input type="checkbox"/>
Referral progress reports/updates	1	2	3	4	5	<input type="checkbox"/>
Referral discharge information	1	2	3	4	5	<input type="checkbox"/>
<u>Timeliness of information</u>						
Telephone consultations	1	2	3	4	5	<input type="checkbox"/>
Referral progress reports/updates	1	2	3	4	5	<input type="checkbox"/>
Referral discharge information	1	2	3	4	5	<input type="checkbox"/>

16. What do you consider to be a reasonable response time for telephone consultations?

17. When a case that you have referred to MSU-VTH requires hospitalization, how frequently do you prefer to receive updates on the patient's condition?

18. Would it be acceptable to have senior veterinary students provide updates on your referral cases?

☐ Yes ☐ No

19. What do you consider to be a reasonable response time for receiving discharge information on cases you have referred to MSU-VTH?

20. Would the following improve the exchange of information between MSU-VTH and your practice?

	<u>Not Helpful</u>				<u>Very Helpful</u>
Electronic case update (via internet)	1	2	3	4	5
E-mail newsletter	1	2	3	4	5
Faculty/clinician biographies (via internet)	1	2	3	4	5
Website for general information	1	2	3	4	5

21. Do you have further comments regarding communication between the MSU-VTH and private practitioners?

Appendix A

22. For similar services, MSU-VTH fees are, in general:

a. ☐ lower ☐ the same ☐ higher than your practice (choose only one)

b. ☐ lower ☐ the same ☐ higher than other practices (choose only one)

23. For similar services, MSU-VTH fees should be, in general:

☐ lower ☐ the same ☐ higher than private practices (choose only one)

Please explain why.

24. How would you rate the overall value of MSU-VTH services to your practice?

Low Value

1

2

3

4

High Value

5

Not Applicable

☐

25. If you could change just one thing about the MSU-VTH, what would it be?

26. Why do you or don't you refer cases to the MSU Veterinary Teaching Hospital?

27. What are the most important factors in your choice of where you refer cases? (Please prioritize)

28. Where else, other than the MSU-VTH, do you refer cases?

Thank you for taking the time to complete this survey. Your assistance will help us improve the service provided by the MSU Veterinary Teaching Hospital, and enhance our educational programs.

If you have any questions, please contact Dr. James Lloyd at (517) 353-9559 or lloydj@cvm.msu.edu.