

2015 SPECIALIST REFERRALS AMONG
COMPANION ANIMAL VETERINARY PRACTICES
LITERATURE REVIEW 09/02/2015

Running head: REFERRAL DYNAMICS WITHIN THE VETERINARY PROFESSION



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Abstract

The purpose of this literature review is to summarize existing information regarding referral dynamics in private companion animal veterinary clinics, and to compare this information to available information for the human health and human dentistry arenas. While this summary reflects current literature available, it does not comprise a primary research effort; therefore, it is not designed to speak to the current state of affairs nor function as a commentary of the marketplace.

This research effort includes a review of well over one hundred sources which are included in the supporting annotated bibliography.

Topics identified as exhibiting research gaps are identified as:

- Does a good referring practice equate to a healthier practice and in what ways? What is the value/return to the pcDVM of referral? What is the downside of not referring?
- What percent of companion animal health patients or cases are referred to a specialist?
- What drives referrals?
- What are the indications for referrals and why is there a difference between pcDVMs and specialists? How might the industry rectify these issues?
- What is the potential for the referral market?
- How do pcDVMs and companion animal owners evaluate the price versus value tradeoff with specialty services?
- How are successful relationships defined throughout the referral process and between all participants: specialists, pcDVMs, companion animal owners, practice staff, and the patients?
- Has progress been made in fine-tuning the referral communication process? What obstacles remain in the referral communication chain?
- Is there a gap between a DVM's opinion of the client's willingness to pay and the client's reality or willingness to pay?

This research effort describes the sources available to inform the topic of referral dynamics in the veterinary market and creates a summary of current writings, reporting and findings related to the following topics:

- Current State of the Referral Market
- Description of the Referral Process
- Characteristics of Referring DVMs
- Description of Referral Dynamics
- Pet Owners' Role
- Cost Issues
- Best Practices
- Comparisons with Human Health and Dentistry Referral Practices

Specialist Referrals Among Companion Animal¹ Veterinary Practices

“The veterinary profession has the responsibility to be aware of current and emerging trends in service, which enables it to assess and define itself and what it does, what it stands for, and equally important, where it is going and why. Likewise, veterinary practitioners have the responsibility to provide service through the lens of self-awareness given that health-care guidance and recommendations with implications for better or worse patient outcomes are provided each day.” (Stoewen D. , Coe, MacMartin, Stone, & Dewey, 2014)

This document reflects an intensive review of literature to determine where knowledge gaps exist. Topics covered include but are not limited to:

- Do pcDVMs view specialists as competitors or as partners?
- What is the impact of referring to specialists on the pcDVMs’ practice?
- How do general practice veterinarians determine when a specialist is needed?
- What is the pet owner’s awareness and perception of veterinary specialists?

While this summary reflects current literature available, it does not comprise a primary research effort; therefore, it is not designed to speak to the current state of affairs nor function as a commentary of today’s marketplace.

¹ Throughout this document the designation *Companion Animal* is inclusive of small animal and equine.

Knowledge Gaps and Next Steps

Given the changes in industry knowledge and expertise, it is important to understand how referral patterns are changing.

This literature review has determined the VetSOAP Board issues are **unique** to VetSOAP and its mission, “To achieve optimal health care for animals, advance the veterinary profession, and **evolve the relationship between primary care veterinarians and specialists.**” (VetSOAP Board of Directors) In addition, a fresh research effort is required to further VetSOAP’s strategic plan to “uncover a clear correlation between the health of companion animals and the frequency and timeliness of collaboration between primary care veterinarians and specialists.” (VetSOAP Board of Directors)

This literature review defines elements recommended for inclusion in future research efforts to be spearheaded by VetSOAP. The recommendation for careful development of longitudinal research enables the establishment of trends, the projection of future trends and the ability to address critical member issues in a proactive manner. The following summation includes topics to be appropriately explored and measured utilizing both qualitative and quantitative methods.

Specific VetSOAP Board questions addressed are referenced in headers.

A. **“Is a good referring practice a healthier practice? What percent of patients are referred?”**

(VetSOAP Board of Directors)

In the current research publically available, *referring practice* as an independent variable is not reported. In addition, measurements for the *percent of patients referred* are not defined nor reported in the major studies currently conducted.

ACTION: Define and provide these definitions (referring practice and percent of patients referred) for consistent use in the industry.

Discussion points: Determine what criteria to employ

- Is it of greater benefit to label by practice or by the individual pcDVM? Do you need both?
- How will “referrals” be defined? # of referrals per year, # of referrals made during a defined period of time? % of referrals per case load during a defined time period? % of gross income? % of referrals per specific presenting conditions? % of referrals per *active* patient roster (define “active”: consider using AAHA’s definition of “Active” patients)?

- Is there a need for multiple levels of referral designations based on frequency of referral? This would be determined based on the definitions to be determined.
- Discussions may include the development of a matrix that takes into consideration multiple elements such as type of cases referred and frequency of referrals during a specific time period.

VetSOAP FUTURE RESEARCH: Research and analysis to include correlation of referring practice to a *healthy practice*, (use current industry definition for healthy practice). Include measurement of percent of patients referred in research and analysis. Longitudinal research is crucial to the value of this research.

VetSOAP FUTURE RESEARCH: Part of understanding this topic is, understanding the pcDVMs' and specialists' perceptions of the impact of referring habits on the growth of their practice and where they see direct links between referring behavior and practice growth.

TEAMING OPPORTUNITIES: Consider teaming with the following organizations to have the referring identifier added to current research efforts. Ask for the dataset to include as an independent variable and request the data to be shared with VetSOAP.

AAHA State of the Industry: Yearly study. Data is collected by clinic. AAHA has differentiated top-growers: *Out growers*, *Growers* and *Decliners*. The array includes 16 key differentiating factors and a comprehensive veterinarian/client relationship assessment. Investigate to determine if referral attributes are included in the segmentation attribute lists.

ACVIM Member Engagement and Brand Assessment Survey: Last report 2013. Data is collected by individual.

AVMA Biennial Economic Survey: Data collected at the clinic level. Last report 2013.

Hill/CalPro Research, Net Promoter Database

- Net Promoter Score Benchmark studies: Industry reports are published to customers of CalPro Research and interested parties (on request). CalPro Research is continuing to develop a database of behavioral and attitudinal data that could prove to be beneficial for further study. This database was initially developed through collaboration between Zoetis and CalPro Research. Consider adding a question related to the client's feeling about being referred.

Zoetis

- The Zoetis Specialty Hospital 2008/2009 study encompassed specialty hospitals and their pcDVMs and pet owners. If this study is to be repeated, suggest inclusion of the referring clinic variable.

DVM State of the Profession Survey: Triennial (last report 2012), Data collected by clinic.

VetSOAP FUTURE RESEARCH: Qualitative interviews should be conducted to surface the multiplicity of factors relating to the value/return to the pcDVM of the referral. The qualitative effort would be followed by quantitative to measure the presence in the marketplace and importance of the factors assessing value and return. What is the pcDVMs' awareness of the downside of not referring? How do these factors play in the referral decision process?

B. “What is the potential for the referral market versus current referrals?”
(VetSOAP Board of Directors)

ACVIM's new study, 2013 *Member Engagement and Brand Assessment Survey*, was the only current resource for this topic. However, it is not precise enough to adequately address this issue for The Board and members. In addition, this report's study objective is to investigate ACVIM member engagement and brand assessment. As such there is no assurance the sections cited in this research will always be part of their research effort.

VetSOAP FUTURE RESEARCH: VetSOAP Research would create a matrix that would relate known industry size projections (from multiple sources, US Census, AVMA/CHWS, AVMA) with current behavior and future intention measurements collected on an annual basis. Longitudinal data is critical to this effort.

VetSOAP SECONDARY RESEARCH: Leverage the dental industry as a “bellwether” through consistent monitoring of current publications. While there are substantial differences between the dental and veterinary industries, there are many commonalities and the dental industry is a few steps along paths of change similar to those facing the veterinary industry. Of note is the dental industries' evolution and adjustment to changes in the source of periodontal services. As general dental practitioners take on more soft tissue care, how do the periodontists' roles change? What is the impact on patient outcome? What actions do professional organizations and educational institutions take? What message tactics are employed? What is the impact on the specialist/primary relationship?

C. “Why do veterinarians refer?—their own decision or request by owner?”
...and does it agree with Corona Insights/ACVIM data of 62% refer based on request of owner but only 1% said this is the most common reason to refer?” (VetSOAP Board of Directors)

This finding is clarified by adding the simplest measure of frequency, *what is the most common...*, reported to be only 1%. The finding, *referrals are not predominately driven by owners*, is confirmed by this literature review which collected considerable information regarding communications during the referral process; *request of the pet owner* is not put forth as a driving factor nor as an issue with which to contend.

Having clarified this issue, it should be noted that the ACVIM data is the only current, concise information available on this topic.

VetSOAP FUTURE RESEARCH: ***When to refer***, may prove to become a critical topic of investigation and directly related to patient outcome. This review indicates there may be a gap between what the pcDVM feels is appropriate and what the specialist believes to be the optimum triggers for referral. Differences between pcDVMs and specialists would be explored and best practices for resolving the gap would be surfaced. The scenario-based methodology defined in the next paragraph would be employed for this knowledge need.

VetSOAP FUTURE RESEARCH: This area of exploration into, *Why do veterinarians refer?*, is crucial to VetSOAP board initiatives and members. This is another area requiring careful design and trend reporting. Frequency needs to be captured and a **relationship between type of case and presenting symptoms should be made**. To better understand referral dynamics VetSOAP Research would include (but not limited to) therapeutic case scenarios presented to pcDVMs and pet owners alike. Also, owner/patient bond will be measured to be used as an additional independent variable.

Questions that may be addressed with this methodology include (but are not limited to):

- for which diseases or acute events does the pet owner (repeat with pcDVMs) feel the need for a specialist
- at what point in the patient's condition does the pet owner (repeat with pcDVMs) feel the need for a specialist
- what is the value add of the specialist (perspective of pet owner and pcDVM)
- cost expectations and tolerance by condition (perspective of pet owner and pcDVM)
- what is the impact of owner/patient bond on referral
- how do DVM's differ from pet owners in likelihood to seek treatment with a specialist for specific conditions

Note for future use: Review the methodology used (from human health) in research for National Hospital Ambulatory Medical Care Survey (NHAMCS) and the National Ambulatory Medical Care Survey (NAMCS). This research captured subgroups of patients and physicians in an analysis of referrals from primary care physicians and specialists. Also refer to *Factors Influencing Veterinarian Referral to Oncology Specialists for Treatment of Dogs... Ontario, Canada* (Stoewen, Coe, MacMartin, Stone, & Dewey, 2013)

D. **“Does the pcDVM see the same value in specialty care as the pet owner?”**
(VetSOAP Board of Directors)

Hill/CalPro’s 2015 white paper proved to be the only source supporting these hypotheses. No sources refuted nor validated them; however indications are these types of perceptions are quickly evolving in the veterinary marketplace and worth monitoring on a consistent basis.

VetSOAP FUTURE RESEARCH: The VetSOAP Research effort would include evaluation of cost. Cost is an interesting component of perceived value: Does the pet owner see greater value in the specialist because they are paying more? Does the pet owner resent paying more? Investigate communication with the pet owner regarding fees throughout the referral channel, with the intent to produce recommendations and measure satisfaction. “Emphasis on research (followed by education) that disproves the pcDVM’s ability to accurately determine this fact [pcDVM’s perception of client’s ability to pay] is crucial.” (Fingland, 2015)

TEAMING OPPORTUNITIES: Work with Larry Hill to trend the benchmarking data in two-year increments to determine if a trend which may predict change exists.

E. **“What does the relationship between the pcDVM and specialists mean for the pcDVM? How does a pcDVM define a successful relationship with a specialist? How does a specialist define a successful relationship with a pcDVM? What defines a successful relationship between the primary care vet and the specialist from the perspective of client/patient: primary care veterinarian; specialist?”**

(VetSOAP Board of Directors)

Valid data defining and describing pet owner/veterinarian relationships date back 20 years or more. However, the relationship between the specialists and pcDVMs as well as specialists and pet owners represents a new dynamic in the marketplace. Notable qualitative research (forums) and some quantitative research conducted around the recession and immediate recovery years included satisfaction measures. This led to the development of and updates to referral guidelines, academic curriculum development, and various white papers bringing focus to improving communication and coordination dynamics. Undertakings such as these foretell a marketplace ripe for measurement—especially the satisfaction measures currently available which are now dated and should be only cited as historical reference at this point in time.

VetSOAP FUTURE RESEARCH: The VetSOAP 360° satisfaction study would include all participants in the referral process (specialists, pcDVMs, staff, and pet owners). Research design effort would include a deep dive into these findings to develop meaningful attribute lists and study approaches. Of great importance is fine tuning satisfaction measures to acknowledge communication developments in the field and publish meaningful satisfaction data to balance the various white papers, articles and online statements based on limited sources or dated reports.

VetSOAP FUTURE RESEARCH: Research with pet owners—their perceptions of veterinary specialists and their wants and needs regarding the referral and pet care process is essentially untapped in current reporting. We do not know how they become aware of specialty veterinary medicine. We do not know how their perceptions are formed nor how they may be influenced. We do not know how to make the referral process work for the pet owner. We do not know what the pet owner expects of the pcDVM when recommendations are made. We are at the starting point...fortunately VetSOAP's timing correlates with a relatively new awareness of veterinary specialties among pet owners. Efficient research including qualitative followed by quantitative will provide the information required in time to guide informed perceptions.

VetSOAP FUTURE RESEARCH: This literature review surfaced cost as a complex and critical area of investigation. Available research defines cost as a major consideration in the primary veterinarian DVM's decision to refer—more specifically the pcDVM's *opinion* of the pet owner's willingness to pay. Yet research *measuring the gap* between the pet owner's willingness to pay and the pcDVM's assumption (of the pet owner's willingness to pay) has yet to be conducted. Given substantial research supports this as a complex and critical area of investigation, this should be a focus of VetSOAPS total research efforts--A topic where further research will ultimately benefit: pet owners, pcDVMs, specialty veterinarians and our pets, the patients.

F. “What can specialists do to drive increased caseload for the pcDVMs? What tools do successful referral practices use to have/build collaborative relationships with their pcDVMs?”

(VetSOAP Board of Directors)

Forums, the predominantly employed method for ideation on this topic, have been effective in identifying what is currently practiced deployed through the veterinary marketplace.

VetSOAP FUTURE RESEARCH: the question of the pcDVMs' *perception* of impact on practice economics (esp. growth) remains unanswered. Given the rapid rise of specialty medicine in the veterinary industry, this is likely to be an area of growth and awareness as the specialty practice services mature in the market space. Now is a critical time to measure these perceptions.

VetSOAP FUTURE RESEARCH: An update would involve qualitative research conducted by immersive discussion boards to identify current points-of-pain as well as opportunities. This research could be framed around open discussions of the referral process to identify needs, surfacing new issues, what works, what doesn't. The session would progress to ideation related to solutions and outreach methods.

VetSOAP FUTURE RESEARCH: Remaining to measure through quantitative methods are, relationship-building activities, collaborative behavior, and practice-building actions: how pervasive are they, how effective are they, how valued are they, how frequently are they offered, how often are they utilized, and by whom? In addition VetSOAP Research can collect new ideas currently in play.

VetSOAP FUTURE RESEARCH: Monitoring time spent on types of services by primary care practices along with number of referrals and specialty designations of referrals would provide an *early warning* of change to the marketplace. This has proven beneficial in dentistry (changes to source of care for soft tissue disease). This may prove to be a separate research effort.

Additional notes for future survey instrument design: (a) collect standard demographics including but not limited to: age, gender, type of practice, corporate structure, size of practice (gross revenue, # veterinarians), # years in practice; (b) seek out national representative data set for sampling, (c) collect experience with chemotherapeutics and surgical interventions.

G. How may the human health and dental industries inform our challenges?

Of the two industries, dentistry exhibits the strongest parallels with the veterinary marketplace and provides strong opportunity for benchmarking.

The general dentistry practice does not view a referral to a specialist as a potential loss of revenue. The treatments provided by dental specialists are separate from general dentistry, and in most cases short term. The dentist can be confident that the patient will return to them for future visits. As part of established industry protocols, patients are likely to expect a referral to a specialist for non-routine dental services, including periodontics and orthodontics. Few expect their general dentist to have the expertise needed in the specialty to meet the patient's needs. As a result, there is no loss of 'image' or confidence when a general dentist refers patients to a specialist.

VetSOAP FUTURE RESEARCH: Monitor the dental industry as it continues to evolve and adjust to changes, especially those related to sourcing of periodontal services. As dental practitioners take on more soft tissue care, how do the periodontists' roles change? What is the impact on patient outcome? What actions do professional organizations and educational institutions take? What message tactics are employed? What is the impact on the specialist/primary relationship?

VetSOAP FUTURE RESEARCH: Consider contracting a literature review to explore, *Why are referrals expected in dentistry? How did the industry evolve in a manner that that set the expectation for referral?*

Literature Review

I. STATE OF THE REFERRAL MARKET

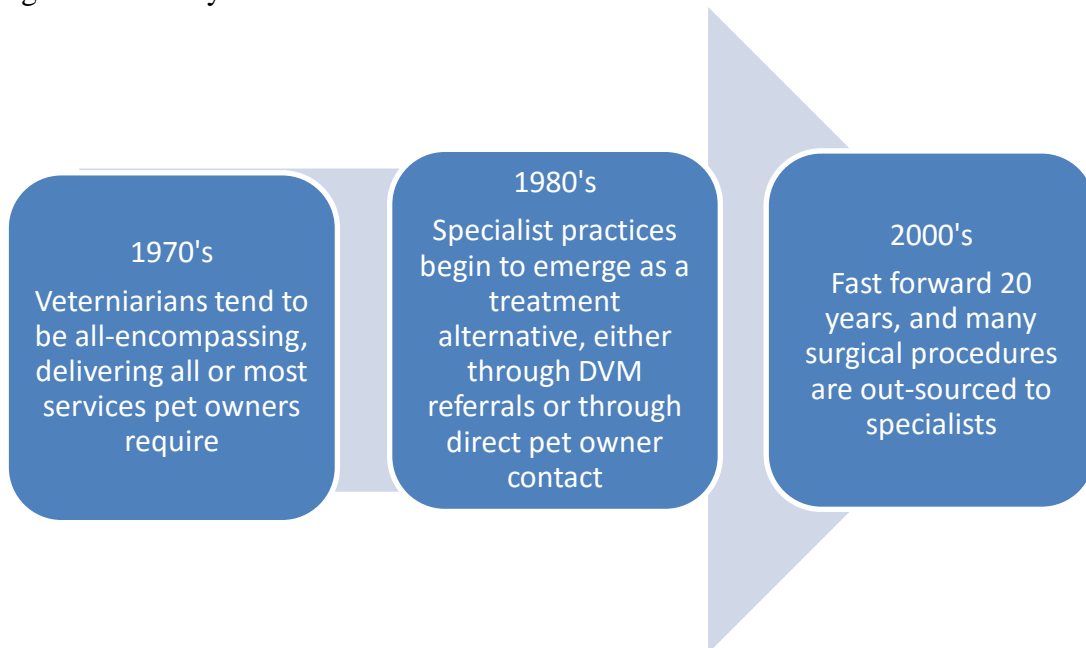
Questions to be explored:

What is the potential for the referral market vs. current referrals?

Is a good referring practice a healthier practice? In what ways?

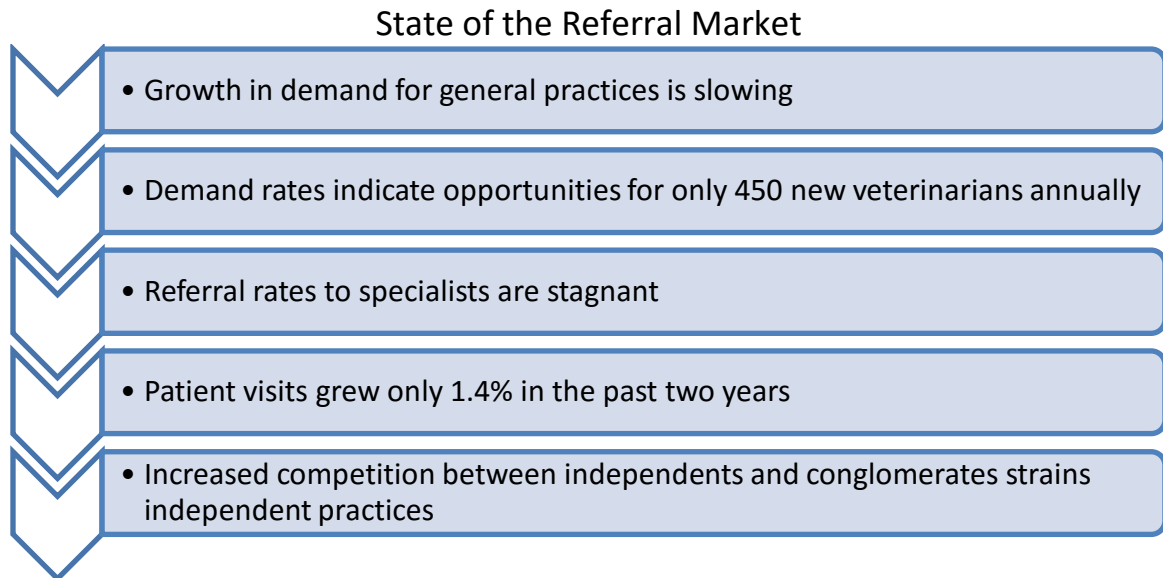
Do pcDVMs harm their practices' reputation by not utilizing specialists?

Figure 1. History of the referral market



(DVMNews.com, 2007)

Figure 2: State of the Referral Market



A. Declining growth rate of companion veterinary practices

The projected growth rate in the field of companion veterinary practices over the next decade is not favorable. Between 2012 and 2025, the projected demand in small animal practices is expected to grow only about 12%. (The Center for Health Workforce Studies, 2013) Average revenue growth for veterinary hospitals was 5.1%, slightly behind average annual growth in 2012-2013. (AAHA, 2015)

B. Supply of veterinarians

Between 2012 and 2025, the projected demand in small animal practices is expected to grow only about 12%. That relates to openings for approximately 450 new full-time, employed, small animal practice veterinarians per year, 0.9% average annual growth. (The Center for Health Workforce Studies, 2013). According to the AAVMC, overall growth in graduates from U.S. veterinary schools was flat from the mid-1980s through the 1990s, but increased markedly over the last decade representing an increase of 34% over ten years. “By 2017 the number of DVM graduates from US colleges is expected to be 3,310 plus an additional 1,150 graduates from colleges outside of the US.” (AAVMC, 2014) AAVMC data indicates the number of graduating DVM’s will far outpace opportunities available.

C. Supply of veterinary specialists

According to the AVMA market research report on veterinary specialists, there are over 11,000 specialists. (AVMA, 2013, Biennial) Currently, there are 22 AVMA-recognized veterinary specialty organizations comprising 41 distinct specialties. Many see this with both benefits and disadvantages and current publications continue to convey concerns many professionals believe to be perceptions of the past. “The increased availability of specialty medicine is viewed by many to be a mixed blessing; for all of the benefits tied to advanced care, specialists can strip general practices of business and interesting cases. Holland sums it up this way: ‘I adore my local specialists; they seem to value us. They almost always are supportive, and we have good working relationships. However, there are a fair number of specialists that are in an ivory tower and have no clue what it’s like to be a [pcDVM]. Early on when I was green I would get harsh remarks and unrealistic recommendations from specialists.’” (DeGioia P. , 2013) Fortunately, current quantitative research and qualitative forums are beginning to point towards progress in establishing positive business relations as these industries (specialist/primary care) continue to evolve.

D. Referral rates

According to ACVIM research, specialist growth stemming from referrals is stagnant. Three quarters of pcDVMs are referring about the same amount of cases as they were a year prior. Eleven percent of all pcDVMs were referring more and 14 percent reported referring less. (ACVIM, 2013)

An owner not able to pay was the most common reason cited by pcDVMs as to what has prevented them from referring a specialty case (greater than 90 percent). Their ability to diagnose and/or treat (in clinic) was the second and third most common reasons (approximately 50 percent each). (ACVIM, 2013) Additional information is provided on the topic of *Owners not able to pay* in Section VII: Cost Issues

E. Use of veterinary services

The 2015 AAHA State of the Industry Fact Sheet indicates: “In 2014, active patients grew 0.9%” and patient visits grew 1.4% over 2013. (AAHA, IDEXX Institute, 2015). Another report found an uptick in two measures: a) the size of active client bases (1+ visits/year) from 4,506 on 2009 to 5,240 in 2012, b) the number of patients seen weekly at the average practice which almost doubled from 116 in 2009 to 200 in 2012. Services with the greatest perceived increases (52-41%) are: Diagnostics, dentistry, and diagnostic imaging. Second tier services (24-29%) are: surgery, and nutritional consulting. (DVM Newsmagazine, 2012)

Past research presented a declining landscape, with a decline in veterinary visits among both feline and canine patients. (Volk, Thomas, & Siren, 2011). Additional reports

revealed substantial evidence that decreases in the number of patient visits began well before the start of the recession. Data published by the AVMA in early 2007 indicated annual dog and cat visits to veterinarians declined slightly in 2006, compared with 2001, despite substantial growth in the pet population. (AVMA, 2007)

Triennial surveys conducted by DVM Newsmagazine found similar results. (DVM Newsmagazine, 2009) And past AAHA research corroborated this trend and indicated an acceleration of decline, reporting in biennial surveys:

- A marked decline in active clients per vet, from 1,299 in 2001 to 1,070 in 2009.
- As well as a decline in number of patients/vet/week, from 76 in 2000 to 66 in 2009.
- New clients have also declined from 271 in 2001 to 218 in 2009.

(AAHA, 2001-2009 Biennial)

F. Competitive pressures on pcDVMs

“In the days of old it was possible for one person to provide all the veterinary care a community needed. There was no such thing as ultrasound, no effective treatment for heartworms, no way to fix cataracts, no drug therapies for behavioral problems, no frozen semen, no laser, no cutting-edge surgeries like the ones almost commonplace today. The fact that one person can no longer do it all is not a statement against the talents of the [pcDVM], but a testament to the advancement of veterinary science in the last 50 years.”

(Coile, 2007)

“Competitors seem to spring up regularly. Humane societies with clinics, low-cost spay/neuter and vaccine clinics, online pharmacies, big box retail stores all compete with private practitioners for business. Outside challenges also abound: One example are the televised advertisements for online pharmacies, implying veterinarians overcharge for pet medications. Another is the recent and widely criticized 20/20 expose that suggests veterinarians prey on pet owners to turn a profit. However sensational or ridiculous, such allegations erode the profession’s value and make it harder for veterinarians to practice good medicine.” Dr. Greg Nutt (DeGioia P. , 2013)

Research has found that competition does not come in a direct form of general practice DVM vs. specialist DVM, but also from consolidation, conglomerates and oversaturation of the marketplace. Regarding oversaturation of the marketplace, AVMA’s 2013 report states there is an overall 12.5 percent excess capacity in the profession. (AVMA, 2013) ACVIM also reports increased difficulty in finding jobs for graduates in recent years. Adding the final layer of rigor, is the 2013 U.S. Veterinary Workforce Study (AVMA & The Center for Health Workforce Studies) which estimates the 2012 workforce to be 90,200 and will grow to 100,400 by 2025 (women constitute 78% of new graduates). Predictive calculations show a surplus capacity of 11-14 percent or 9,300 to 12,300 veterinarians by 2025. (AVMA, CHWS, IHS, 2013)

Competition is growing between the single business owner and conglomerates. Corporate practices have established themselves in recent years as part of the landscape of companion animal practice in the United States. The biggest corporate practices by far are Banfield Pet Hospital, with about 800 hospitals, and VCA Antech Inc., with about 600 hospitals. Banfield and VCA are general practices, while VCA also owns specialty practices and a laboratory network. US Census 2012 reports 30,045 establishments under NAICS Code 541940, Veterinary Services. So while the percentage of these two corporate clinics is low (4.6%). Of note: this scenario is similar to the consolidation found in human health.

Competition is also growing from veterinary universities who are creating treatment centers for pet owners in communities where graduated veterinarians have established their practice upon completion of graduation. (Fiala, 2013) In the past, veterinarian teaching hospitals (VTH) relied on referrals from local practitioners who felt the cases were either too complex or believed that a hospital could provide better care. (Burrows, 2008) At the time of this research, there was more of an emphasis on the VTH developing better relationships with pcDVMs. It is unclear whether this is still the case in 2015.

While certain diagnostic equipment (e.g., blood assay equipment) becomes more affordable and common in the pcDVMs office, high-tech equipment continues to evolve for the specialist—requiring ever more high-capital costs and continuing to be a differentiating factor between the primary care practice and specialty practices and potentially paves the way for conglomerates which can float substantial capital costs. A 2013 Toronto Star article lists equipment found in a Canadian state-of-the art veterinary hospital: “CAT scanner \$75,000; digital X-ray, \$45,000, exhaust hood for chemo location, \$13,000, underwater treadmills, pool with resistance jets... All part of the fuel feeding the growth of corporate veterinary practices, in which veterinary conglomerates operate multiple clinics-both general practice and specialty referral hospitals.” (Graham, 2013)

In addition to client retention and relationship building, the veterinarian practice of today must compete to capture new business. AAHA’s 2014 Pet Owner Survey, indicates 61% of pet owners chose a *new* veterinary hospital in the past one to five years. (29% of pet owners chose a new veterinary hospital within the past year; while, 39% chose their veterinary hospital more than five years ago.) Forty-five percent cited reasons for choosing a new hospital as: First cat or dog, new pet or moved. Twenty-four percent desired a closer veterinarian. And twenty percent felt their pet’s health concern was better fitted for a new vet or were not satisfied with previous vet. Word of mouth (friends, family, coworkers) overwhelmingly (62%) is reported as the most important source of information. (AAHA, 2014)

II. DESCRIPTION OF REFERRAL PROCESS

Questions to be explored:

What percent of a pcDVM’s patients are referred out?

How do pcDVMs determine when a specialist is needed?

What types of cases are referred out?

Do pcDVMs refer out because they think it is the right thing to do or do they refer out at the request of their clients?

A. What percent of pcDVM's patients are referred out?

This literature review did not surface quantified data on the proportion of patients or cases referred to specialists. This is an important topic requiring research and thought as to how to measure. However, ACVIM 2013 research provides self-reported referring behavior—with the majority (75%) of pcDVMs in private practice indicating they are referring about the same amount of cases compared to 2011-2012 (12% referring more, and 13% referring fewer). Moving forward it will be important to tie referral data to practice metrics.

B. What are the characteristics of pcDVM's?

In addition to the information collected and reported below, Zoetis and/or Hill/CalPro may have unpublished data that could inform this topic.

1. Age

“Chronological age of the generalist would appear to be an influential factor in the decision to refer to a specialist. As generalists age, the decision to refer to a specialist becomes more likely. Deciding factors include type of case, difficulty in diagnosing or treatment, and case severity, all increasing in prevalence as age of the generalist rises.” (ACVIM, 2013)

“Younger [pcDVMs] are more likely to wait before referring cases. As [pcDVM's] age increases so too does the proportion who responded, certain types of cases get referred immediately. Similarly, as age of [pcDVMs] decreases, the proportion who indicated any of the following as the point in which they refer a case increased: after we have exhausted all possible diagnoses, after we have exhausted all possible treatments, and the severity of the case reaches a critical point.” (ACVIM, 2013)

However, this conclusion is disputed by veterinary professionals in one-on-one interviews. (Brogdon, 2015) (Bergman, 2015)

2. Gender

Published by JAVMA in 2012, Gender Differences in Veterinarian-Client-Patient Communication in Companion Animal Practice was based on a report originally presented

in 2005. As the data collected in Canada is now dated, it would be interesting to determine through a new research project if there is indication of the findings holding true today and if they hold true in the United States. Primary findings are stated as:

“Female veterinarians conduct more relationship-centered appointments, provided more positive and rapport-building statements, talked more to the patient, and were perceived as less hurried or rushed, compared with male veterinarians. Clients were more likely to provide lifestyle-social information to female veterinarians. Same-gender veterinarian-client interactions were relationship centered and included client provision of more lifestyle-social information.” (Shaw B. R., 2012)

3. Small animal versus large animal

“Small animal private practice [pcDVMs] use specialists more often than do ‘large animal’ practices. Among the specialists used most often by the small animal practices are ophthalmologists, dermatologists, emergency/critical care, and veterinary dentists.” (ACVIM, 2013)

Private practice generalists are more likely than others to increase referral rates. Again, these decisions are largely based on clinic equipment and capabilities. (ACVIM, 2013)

4. Equine decision makers for referrals

ACVIM’s 2013 research reports:

“...horse owners were approximately two-thirds of primary decision makers. This was true among, Diplomates, equine [pcDVMs], and equine trainers. Trainers were the decision makers in about 16 percent of LAIM Diplomates’ cases, 21 percent of equine [pcDVMs’] cases, and 26 percent of equine trainers’ cases. Stable or barn managers were the decision makers in 11 percent or fewer cases. In rural areas, horse owners and breeders were increasingly likely to be the primary medical decision maker for horses, whereas in major metro areas trainers are more likely to be the primary decision makers. (ACVIM, 2013)

Table 1. Decision Makers for Equine Cases

Decision Makers for Equine Cases			
As indicated by =>	LAIM Diplomate	Equine GP	Equine Trainers
% Horse owner	66%	68%	67%
% Trainer	16%	21%	26%
% Stable or barn manager	11%	8%	3%
% Breeder	5%	2%	2%
% All Other	2%	2%	2%

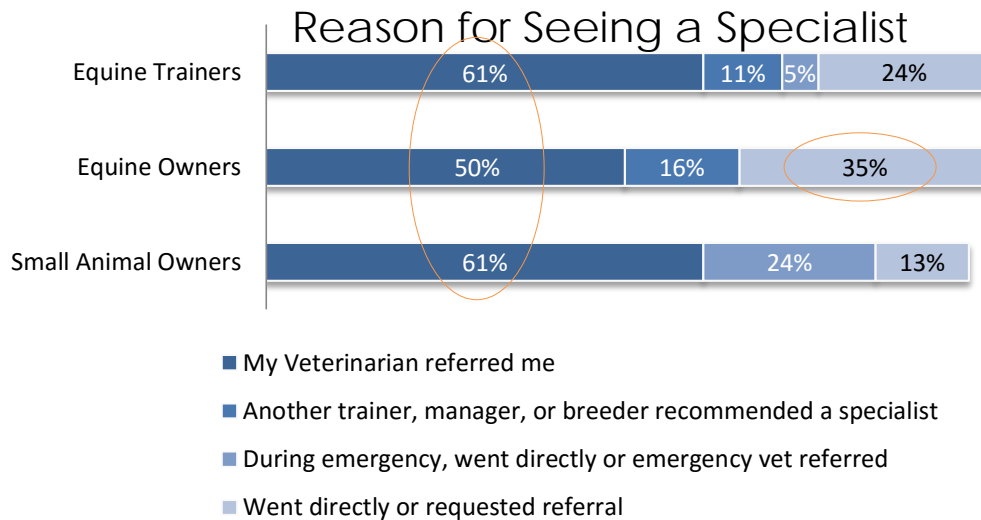
(ACVIM, 2013)

While the ACVIM findings appear to conflict with the following, this may be due to differences in terminology used in the research effort, i.e. *decision makers* versus *determination of need for referral*. For example, the pcDVM may make a recommendation but the horse owner may make the final decision.

“Referring veterinarians (rDVMs) are the primary providers of veterinary care for horses and determine if and when referral to a specialist or referral center is necessary. As such the influence of rDVMs on the case load of the referral centers is significant...purposeful attention should be paid to the relationship between rDVMs and the specialists to whom they refer. (In reference to human health) there is strong evidence that the relationship between the referring physician and specialist impacts the likelihood of referral. Specifically: competence, good communication, previous experience with the specialist, quality of prior feedback, mutual respect, and likelihood of return of the patient to the referring physician for primary care. Also cited are patient-related factors, such as the [pcDVM’s] belief that the patient would have a good experience, and patient management.” (Best, 2014) (Barnett, Keating, & Christakis, 2012)

The ACVIM report further explains, “Among those whose animal had seen a specialist, most reported they had originally gone to the specialist because their veterinarian referred them. Equine owners were more likely [35%] than others to have gone directly to a specialist or requested a referral.” (ACVIM, 2013)

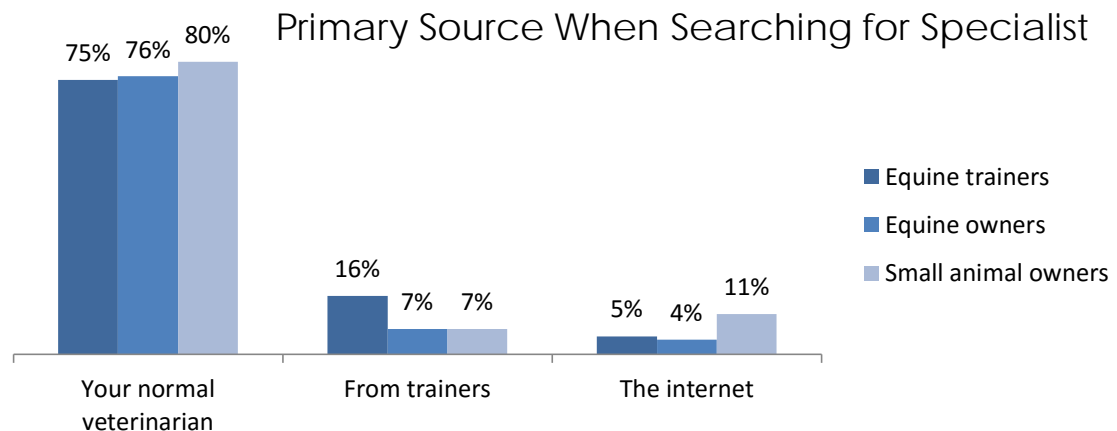
Figure 3. Reason for seeing a specialist



(ACVIM, 2013)
 [Chart format by AllPoints Research, Inc.]

Regarding information sources for specialists, ACVIM’s 2013 report provides a comparison between equine trainers, equine owners and small animal owners. Overwhelmingly information is gained through the pcDVMs.

Figure 4. Primary source when searching for specialist



(ACVIM, 2013)
 [Chart format by AllPoints Research, Inc.]

C. How do pcDVMs select a specialist/specialist hospital?

“Generalists that refer to a specialist typically have a prior relationship that is based on trust.”

(Coile, 2007).

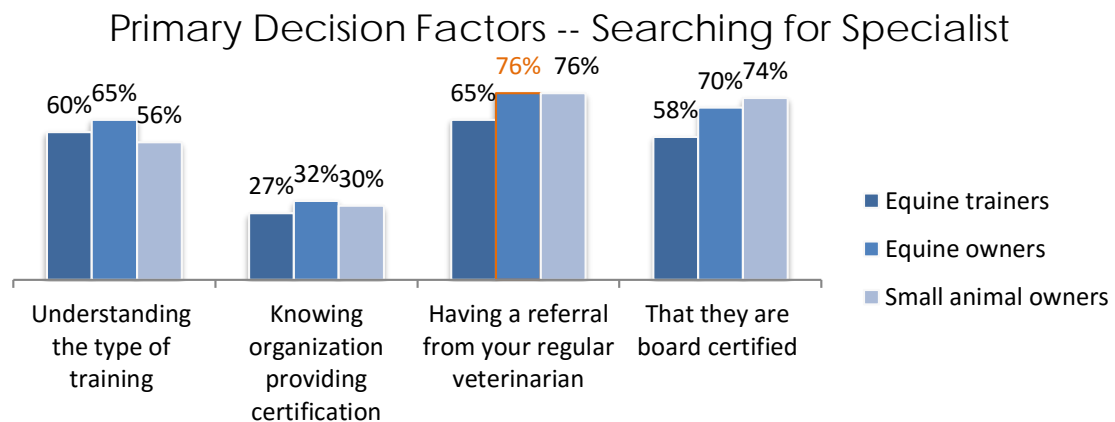
In research collected in 2008/2009, the most common driver for pet owners’ selection of a specialist was “referral from their [pcDVM] (76%).” (Fisher, McFarland, Stansfield, & Coles, 2008/2009)

“The most common response for how pcDVMs decide which hospital to send cases to was to ‘refer to specialists with whom I have good communication and have developed a personal relationship.’” (Donnelly & AAHA, 2006-2007) With the finding of confidence as a significant determinant of whether a practitioner would recommend referral, it becomes important for referral services/specialists to consider the factors that might contribute to practitioner confidence and then design and deliver services in a manner that builds and maintains confidence. (Stoewen, Coe, MacMartin, Stone, & Dewey, 2013)

Patient experience and management also surfaced in the AAHA Forums as attributes in the specialist selection process. (Donnelly & AAHA, 2006-2007)

ACVIM measured the importance of factors when searching a specialist and compares small animal owners, equine owners and equine trainers. “When asked how important each factor is to them when searching for a veterinary specialist, the factor most often said to be ‘very important’ was having a referral from your regular veterinarian. Knowing the specialist is board certified was also very important to most respondents, even though...only 42 percent of small animal owners were aware that veterinary specialists had to pass an exam for board certification.” (ACVIM, 2013)

Figure 5: Primary decision factors when searching for a specialist



(ACVIM, 2013)

[Chart format by AllPoints Research, Inc.]

D. How do pcDVMs determine when a specialist is needed?

“The relationship between the generalist and specialist is a partnership formed to provide the best all-around and, when called for, specialized medical treatment available.”
(Coile, 2007)

Two factors strongly influence the decision of a generalist to refer to a specialist, based on expertise and preparedness: (1) is the generalist able to diagnose and treat and (2) does the generalist have the necessary equipment in-house. If these criteria are met, then there is typically a lower inclination to refer a case out to a specialist.

Results of ACVIM research indicate, “[pcDVMs] most commonly refer a case based on their clinic’s capabilities and equipment (85%). Certain types of cases, the owner’s request, and when a case reaches a critical point were the second through fourth most common reasons”. (ACVIM, 2013)

The study, *Factors Influencing Veterinarian Referral to Oncology Specialists for Treatment of Dogs with Lymphoma and Osteosarcoma in Ontario, Canada*, surfaced the following referral factors as drivers for referral decisions regarding lymphoma or osteosarcoma in canines: (Stoewen, Coe, MacMartin, Stone, & Dewey, 2013)

- Complete confidence in the referral center (vs. moderately confident)
- PcDVM does not treat lymphoma or osteosarcoma
- Strong client bond to dog
- Secure owner finances
- Otherwise healthy dog
- 100% companion animal practice (Interaction between gender and type of practice yielded differences and should be considered in future research.)
- DVMs perspective on the value of treating cancer also yielded differences
- Those not treating cancer were 2.8 times more likely to refer (than those treating cancer)
- Gender should be explored in light of psychographic elements such as how practitioners conceptualize and align with animals versus owners.
- Practitioner attitudes including: school of graduation, era of graduation and type of medicine practiced.
 - Graduates of North American veterinary schools holding more favorable views of cancer treatment.
 - Practitioners in practice since the 1980s and earlier practicing <100% companion animal held less favorable views. Positive association between the number of hours of CPD [continuing professional development] and practitioner opinion of treatment worthwhileness indicates predispositions may reflect variation in awareness of the treatment protocols available and outcomes attainable.

AAHA Referral and Consultation Guidelines provides considerations for referrals: (AAHA, 2013)

- A need for additional expertise and/or advanced training
- A need for additional equipment or services to provide further diagnostic testing
- An inconclusive diagnosis
- An unresolved or worsening medical condition
- A need for medical supervision (24 hours a day/7days a week)
- Client dissatisfaction with the progress of the case.

Regarding equine, “Nearly all trainers (92 percent) have recommended to their clients that their horse see a vet or specialist. More than forty percent of those make recommendations at any sign of immediate need, and among the ten percent of trainers who gave an “other” point at which they make recommendations; any sign of lameness was the most common response. Another forty percent of trainers said they make recommendations whenever the problem is beyond their knowledge, and one quarter said they recommend a specialist whenever there is a serious or persistent health issue with the horse.” (ACVIM, 2013)

E. What types of cases are referred out?

In the Canadian study, when presented with a hypothetical yet true-to-life vignette of a dog with newly diagnosed cancer and asked to choose the option of care they would most likely recommend,

- 56% chose referral
- 28% chose palliative care
- 13% chose in-clinic treatment
- 03% chose euthanasia

Such a distribution may be driven by the fact many practitioners lacked experience with chemotherapeutics and surgical intervention. Only 33% were familiar/comfortable with oral administration of chemotherapeutics and 22% with parenteral administration. 60% report comfort and skill with surgical intervention/limb amputation for osteosarcoma. (Stoewen, Coe, MacMartin, Stone, & Dewey, 2013)

When to refer cases appears to be an issue for both the pcDVM and the specialist. Specialists’ concerns with timeliness of referrals continually surfaces in the research reviewed—see section VII.A. , Levels of collaboration. In some cases this issue is complicated by the client, when he or she declines the referral initially but reconsiders when the pet’s condition deteriorates. (Donnelly & AAHA, 2006-2007)

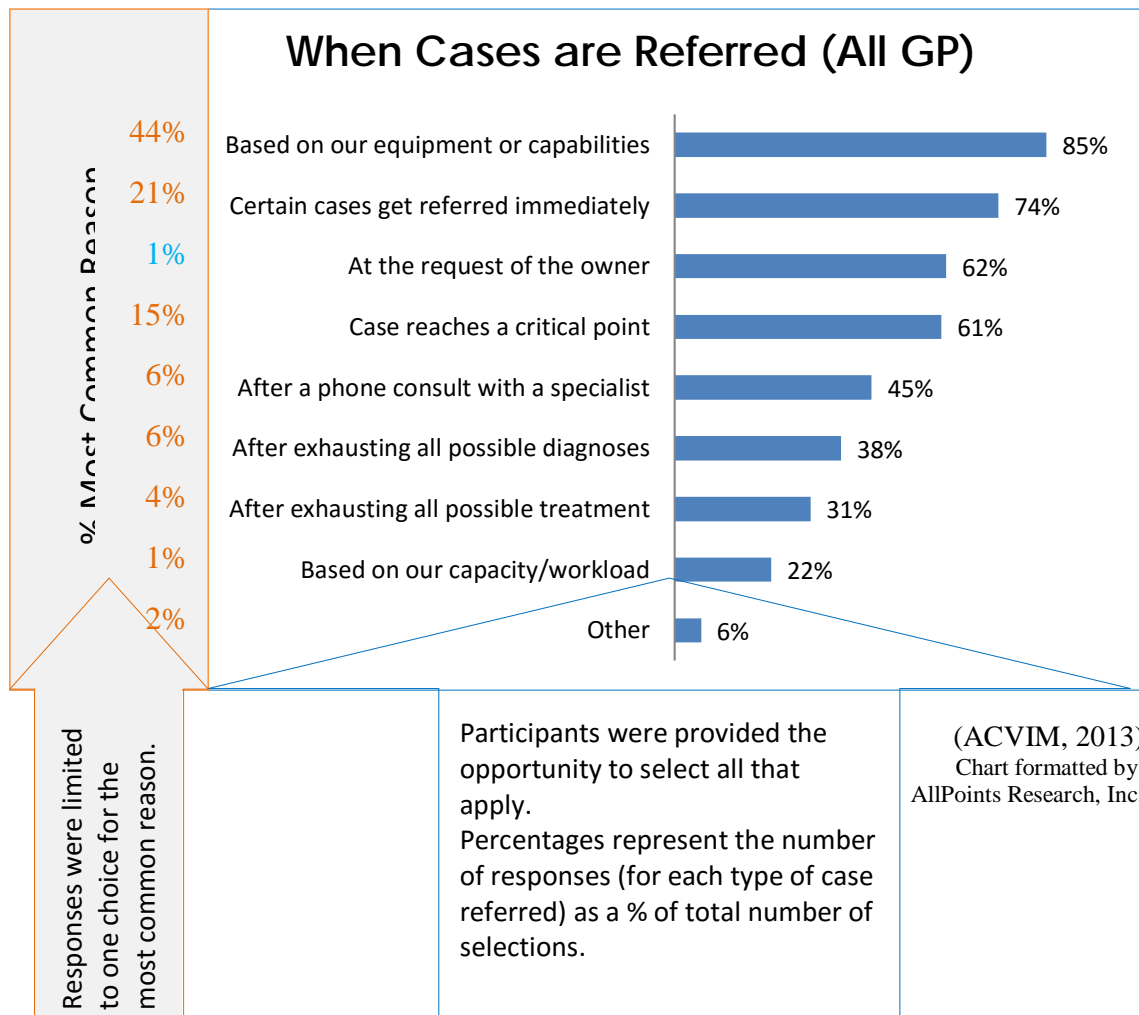
Unexpected reasons identified for referring a patient to a specialist include:

- Confirming the diagnosis of the generalist, and thereby negating pet-owner skepticism
- ‘Unloading’ a difficult-to-manage pet owner (ACVIM, 2013) “Nutt has found specialist referrals to be a useful tool for handling difficult clients. ‘There are many times GPs refer just because we don’t feel knowledgeable enough, sometimes because we are at wit’s end, or they-re not following our recommendations. Some clients might perceive specialty care to be more valuable due to its price tag. If owners pay more for specialty care, they might be more inclined to follow the specialist’s directions.’” (DeGioia P. , 2013)

G. Do pcDVMs refer out because they think it is the right thing to do, or do they refer out at the request of their clients?

ACVIM provides a quantitative assessment of referral practices. This assessment finds a majority of veterinarians (62%) include *request of owner* in their list of reasons to refer. (ACVIM, 2013) Adding the simplest measure of frequency, *what is the most common*, (at only 1%) clarifies this finding. This is confirmed by this literature review which collected considerable information regarding communications during the referral process, and request of the pet owner is not put forth as a driving factor nor as an issue with which to contend. [Section II: Description of Referral Process | VM](#) [Section III :Description of Referral Dynamics | VM](#)

Figure 6: When cases are referred



Indications are, client requests for specialists or perhaps receptivity towards the referral recommendation may be on the rise. In 2007 the Companion Animal and Family Health Council, reported that 73% of veterinarians said their clients seek more referrals to veterinary specialists today than they did 5 years ago. (Coile, 2007)

IV. DESCRIPTION OF REFERRAL DYNAMICS

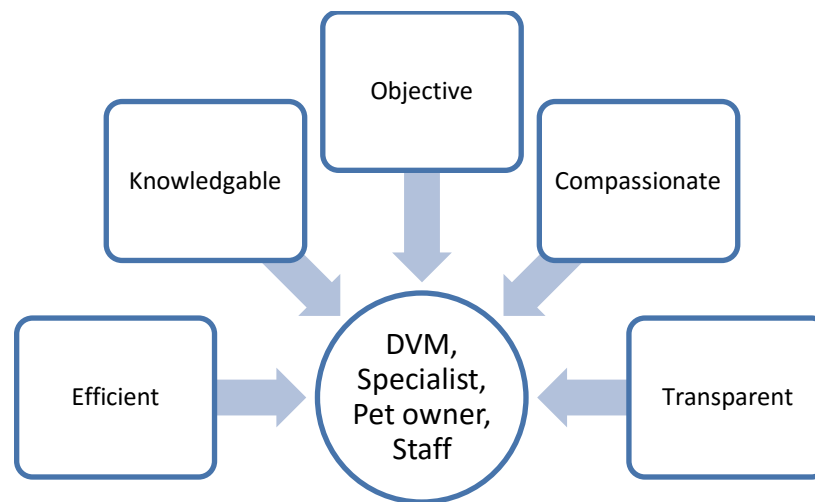
Questions to be explored:

*How does the pcDVM define a successful relationship with a specialist?
 How does the specialist define a successful relationship with a pcDVM?
 Do pcDVMs view specialists as competitors or as partners?
 What does the relationship between the pcDVM and specialists mean for the pcDVM?
 Why does the [pcDVM] not see the same value in specialty care as the pet owner?*

A. Collaboration throughout the referral process

Figure 7: Communication Collaboration and Criteria

Communication Collaboration and Criteria



The referral communication chain is fraught with potential pitfalls. While AAHA Referral Guidelines and AVMA Principles of Veterinary Medical Ethics provide direction, research indicates implementing best practices is difficult. Smooth execution involves purposeful dialogue among multiple parties (pcDVM, specialist, pet owners and staff).

For in depth guidance regarding referral and consultations refer to *AAHA 213 Referral and Consultation Guidelines*. The AAHA forums provided the acumen and understanding required to provide guidance for various scenarios found in this process. [Link to AAHA Referral and Consultation Guidelines](#)

1. The need for full-circle communication is declared:

Referral is the transfer of responsibility of diagnosis and treatment from a referring veterinarian to a receiving veterinarian. The referring and receiving veterinarian should communicate. (AVMA, 2015)

The need for communication between the rDVM and specialist prior to admission, at the time of first examination, and for the duration of the time the patient is under the care of the specialist is underscored. Timely and frequent communication between the rDVM and specialist facilitate collaboration and contribute to the formation of a respectful and trusting relationship. (Block, 2006) Communication based on open-ended inquiry, attentive listening, empathy, and contracting/assignment of responsibilities is recommended. (Best, 2014)

Clients may appear compliant but may not fully adhere to recommendations made by the veterinarian or veterinary technician for many reasons. Client adherence is directly related to one's communication skills, which can be practiced by all members of the health care team in each client encounter. (Abood, 2007)

2. Pre-referral/prior to admission

The referring veterinarian should provide the receiving veterinarian with all the appropriate information pertinent to the case before or at the time of the receiving veterinarian's first contact with the patient or the client. (AVMA, 2015)

Specifically:

Specialists conveyed they are happy to talk to pcDVMs prior to referrals to answer questions regarding **whether a case should be referred**, to ensure the case is sent to the correct specialist and to clarify the expectations of the pcDVM and the client regarding the referral process. (Donnelly & AAHA, 2006-2007)

Best states particular attention should be given to the initial conversation between the rDVM and specialist regarding the case since it sets the stage for the referral experience. (Best, 2014) The initial conversation should include:

- The rDVM's goal for the care to be provided
- The services and expertise the specialist can offer
- The cost of care being discussed

- Plan formation/contracting/assignment of responsibilities. Each party's expectations of the other's involvement or role including "safety netting"/backup care plans.

The 2006/2007 forums conducted by AAHA/Donnelly emphasize the importance of phone calls prior to referrals to discuss cases and clarify expectations of the pcDVM and the client. In addition, timely referrals and sharing of appropriate medical records with a case summary were important to specialists. (Donnelly & AAHA, 2006-2007)

In forums, Specialists offer this perspective: PcDVM make diagnoses, but they also provide guidance, advice, support, and counsel for care. The health, happiness, and quality of life of patients and clients are markedly influenced by the choices made, so the recommendations of practitioners are of profound consequence. (Stoewen, Coe, MacMartin, Stone, & Dewey, 2013) (Villalobos & Kaplan, 2007)

3. Time of first examination:

When the referred patient has been examined, the receiving veterinarian should promptly inform the referring veterinarian. Information provided should include diagnosis, proposed treatment, and other recommendations. (AVMA, 2015)

Specifically:

Effective sharing of patient history/pre-referral work between all three parties (DVM, specialist and pet owner) is necessary. (Fisher, McFarland, Stansfield, & Coles, 2008/2009)

PcDVMs note that a follow-up phone call soon after a pet is seen by the specialist is helpful in case the client contacts them right away. (Donnelly & AAHA, 2006-2007)

Emphasis is placed on the need for communication between the specialist and rDVM in the event problems other than the initial complaint that prompted referral arise. (Block, 2006) (Best, 2014)

Communication remains a huge issue at this critical juncture. For example: in the case of a referral for consult only, wherein the client wishes to proceed immediately, it is often difficult to achieve timely contact between both the pcDVM and the specialist. This scenario often results in an awkward situation, leaving the client with a negative perception of the process as well as both the specialty and primary care practices. (Bergman, 2015)

4. Duration of care under specialist

The receiving veterinarian should provide only those services or treatments necessary to address the condition for which the patient was referred and should consult the referring veterinarian if other services or treatments are indicated. (AVMA, 2015)

Specifically:

Continual and transparent communication between all parties throughout treatment (Fisher, McFarland, Stansfield, & Coles, 2008/2009)

“Continual communication between the specialist and the pcDVM throughout patient care can benefit both the specialist as well as the pcDVM.” (Best, 2014) If this communication is transparent through to the pet owner, miscommunication between all three parties is avoided, the pet owner’s trust in his/her pcDVM may be transferred to the specialist, and the way is laid for a smooth transition back to the pcDVM.

Need for improved systems fostering prompt responses to phone calls between all parties. (Fisher, McFarland, Stansfield, & Coles, 2008/2009)

6. Time of discharge from specialist/specialist hospital

Upon discharge of the patient, the receiving veterinarian should give the referring veterinarian a written report advising the referring veterinarian as to continuing care of the patient or termination of the case. A detailed and complete written report should follow as soon as possible. (AVMA, 2015)

The receiving veterinarian should advise the client to contact the referring veterinarian for the continuing care of the patient. If the client chooses continuing patient care with a veterinarian other than the referring veterinarian the receiving veterinarian should release a copy of the medical records to the veterinarian of the client's choice. (AVMA, 2015)

Specifically:

Efficient sharing of follow-up instructions to the pcDVM and pet owner is mentioned by several sources. (Fisher, McFarland, Stansfield, & Coles, 2008/2009)

Best recommends at the time of discharge:

- Clear communication about the care the patient received
- The care the patient needs going forward
- How the care is to be provided

(Best, 2014)

Graham's 2013 study (with 103 veterinary students & 19 standardized clients), revealed "two perceptions indicative of trust in veterinary contexts among clients: professionalism and technical candor [as well as] a perception of technical competency." (Grand, 2013) The technical candor attribute supports the importance for the entire team to be fluent in accepted medical treatment protocols throughout the referral process.

7. A common communication issue

Not surprisingly, there appears to be a major problem with *phone tag*. Both sides have difficulty being available to take phone calls. Surgeons are in surgery most of the time while pcDVMs are with clients. Because of scheduling, many specialists have a need to return phone calls during the nighttime hours, often a problem for primary care practices. (Donnelly & AAHA, 2006-2007) Also mentioned by (Fisher, McFarland, Stansfield, & Coles, 2008/2009)

B. Why does the pcDVM not see the same value in specialty care as the pet owner? (VetSOAP Board of Directors)

The 2015 white paper, *Referring Veterinarians' Perception of Value* (Hill, L/CalPro Research, 2012), addresses this issue.

“Our research shows the perception of value, in the mind of the referring veterinarian, is the primary area in need of improvement for specialists and specialty hospitals and is the most impactful for improving Net Promoter Scores (i.e. overall satisfaction) as well as market share. The national average for ‘Value for fees paid by your clients’ is 17% and the national best is 60%. This is striking compared to the scores that we see on other portions of the survey. For example, the national average for ‘quality of medicine’ is 78% and the national best is 97%. Pet owners rate the Value for Price Paid for specialty hospitals much higher; the national average is 43% and the national best is 68%.” (Hill, L/CalPro Research, 2015)

Table 2: Value ratings for specialty hospitals

Value Ratings for Specialty Hospitals		
Rating Source	National Average	National Best
Ratings from pcDVMs	17%	60%
Ratings from pet owners	43%	68%

(Hill, L/CalPro Research, 2015)

Hill/CalPro continues with an explanation of what drives this dichotomy. “We believe there are three main reasons for this stark discrepancy. First, the communication between pcDVM and specialists is challenging due to hectic schedules, having to rely on faxes, emails and third parties to relay messages. Second, pcDVM have very specific expectations about how tests and procedures should be done. This difference in expectations causes angst for both rDVM’s and specialists. Lastly, rDVM’s have long memories. When a significant problem occurs between a pcDVM and specialist, the incident can be remembered for years. These three dynamics are challenging to overcome, but progressive specialty hospitals are able to make headway by being intentional instead of ignoring the problem.” (Hill, L/CalPro Research, 2015)

C. How does the pcDVM define a successful relationship with a specialist?

“I am sending to you a case to work up, not a procedure to do.”

Quote from a pcDVM (Donnelly & AAHA, 2006-2007)

“To deliver the best medicine to pets, specialists and referring veterinarians should develop a team approach to patient care. The veterinary team should stay focused on patient advocacy and communicate with each other regarding the needs of the pet. Referring veterinarians should consult with specialists when they have questions about difficult cases or concerns about patient outcomes.”

(Donnelly & AAHA, 2006-2007)

Theoretically, aspects of (a specialist/specialist hospital) service that may contribute to practitioner confidence include:

- attracting and retaining highly regarded specialists,
- offering an online cancer treatment consultation service,
- offering team-based educational programs for pcDVM and staff,
- developing and maintaining reliable communication practices and procedures with pcDVM,
- and ensuring positive client experiences with optimal patient outcomes.

(Stoewen, Coe, MacMartin, Stone, & Dewey, 2013)

For pcDVMs participating in the 2006/2007 AAHA Focus on Referral Issues Forums, the most important determinant of a positive referral experience was effective communication. Specific comments regarding effective communication included:

- discussing cases on the phone prior to referral,
- receiving timely updates on cases,
- developing a team approach between specialists and pcDVMs and
- establishing a collaborative relationship characterized by respect and trust.

(Donnelly & AAHA, 2006-2007)

The white papers, *Satisfaction with Specialty Services*, reflect:

- Communication-based satisfaction statements: approximately 60%-75% of pcDVMs either “Strongly Agreed” or “Agreed” (on a 5-point semantic scale) with a series of statements, indicating room for improvement but a consistent showing across all communication-based statements. (Fisher, McFarland, Stansfield, & Coles, 2008/2009)
- Service and quality statements had an even higher with 75-90% indicating “Strongly Agree” and “Agree” on a five-point semantic scale. (Fisher, McFarland, Stansfield, & Coles, 2008/2009)

Communication Statements

Kept rDVM well informed on case progress
 Follow-up information promptly sent to rDVM
 Owners pleased with value for fees
 rDVM & staff calls responded to promptly
 Owners report calls responded to promptly
 Owners questions answered to satisfaction
 Owners treated in professional manner
 Owners satisfied with time spent
 Owners treated compassionately

Service/Quality Statements

Specialist provided High Quality Care
 Confidence in specialist quality of medicine
 Specialist showed respect handling rDVM work-up (+/- 70%)

(Fisher, McFarland, Stansfield, & Coles, 2008/2009)

Additional insight to the referral communication process is provided by the AAHA forum discussions. PcDVMs noted that mutual respect and a non-judgmental attitude is important to them when they speak to specialists on the phone. (Donnelly & AAHA, 2006-2007) This issue is continually cited in the research reviewed for this report, indicating this has been an issue. However, with the current emphasis on this topic (academic and professional writings) and the evolution of communication tools and approaches, a current assessment is suggested.

D. How does the specialist define a successful relationship with a pcDVM?

1. Timely referrals

As reported in the ACVIM Member Engagement and Brand Assessment Survey, “a majority of members (78 percent) believed pcDVMs keep cases that a specialist in their field should be seeing.” (ACVIM, 2013) The literature review surfaced the desire for pcDVMs to contact the specialist prior to the patient presenting “critical” status.

2. Professional approach to phone consultations

“Throughout the AAHA forums, specialists described very few instances in which they charge for phone consultations. Most indicated they are happy to discuss cases with those veterinarians that refer cases on a regular basis. Specialists find it less rewarding to talk to pcDVMs who want medical information and advice but do not refer cases. When returning phone calls, typically it is this second type of phone call that is returned last by specialists. In addition, specialists have liability and patient advocacy concerns about giving medical advice to pcDVM for pets and clients with whom they do not have or no longer have a client-patient relationship.” (Donnelly & AAHA, 2006-2007)

3. Pet owner communication prior to referral

PcDVMs should caution owners that a specialist may determine the need for different diagnostics may make a different assessment of the case and may need to repeat tests, and that it will take time to work up the case. (Donnelly & AAHA, 2006-2007)

4. Patient updates after discharged from specialist care

The AAHA Forum participants addressed communication of the death of a patient with the prevalent view that specialists inform the pcDVM more frequently than the other way around. (Donnelly & AAHA, 2006-2007)

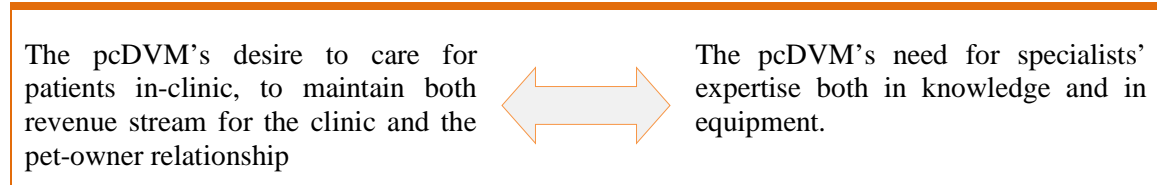
5. Professional attention to transfer of medical records

“With regard to medical records, specialists participating in the AAHA Forum conveyed they would like a case summary for all referrals. Often they receive the entire medical file via fax, with information that is not complete or not pertinent to the referred problem. Of greatest importance is laboratory data to prevent the cost to the client of repeating diagnostics. Depending on the case, specialists stated it is acceptable to receive the medical records from the client at the time at the appointment; however, for complex cases, a few hours to 1-2 days before the appointment is preferred. On the other hand, pcDVMs are often overwhelmed with the variety of different referral forms required by multiple specialty hospitals and would prefer a common form.” (Donnelly & AAHA, 2006-2007)

E. Do pcDVMs view specialists as competitors or as partners?

The relationships between generalists and specialists are essentially two-pronged:

Figure 8: Relationships between generalists and specialists



1. PcDVMs' perceptions of specialists

Advanced Knowledge | Better Diagnostic Tools | Better Equipment

Among those in veterinary and related professions, initial impressions of veterinary specialty medicine include perceptions of advanced knowledge, better diagnostic tools and better equipment; however, sometimes cost remains an overriding factor. (ACVIM, 2013) Despite the perception of costs, specialists are seen in an overall positive light.

In preparation for this literature review, the following hypothesis was presented for investigation: *Why does the pcDVM not see the same value in specialty care as the pet owner?* No information directly addressing this issue was found in the literature review. Furthermore this hypothesis did not surface as an issue in the reports reviewed. The information most closely related to this topic was addressed in the ACVIM 2013 research: *veterinary specialists feel* pcDVMs have a more favorable view of their skills and training than pet owners. (ACVIM, 2013)

2. Practice economics

The issue of practice economics as a barrier to referral was discussed in the AAHA Forum discussion. Some specialists said they feel pcDVMs are reluctant to refer cases because of the perceived loss of income, and they see specialists as competition. (ACVIM, 2013)

Decisions to refer to a specialist may result in short-term loss of revenue to the pcDVM. If the generalist had the equipment and knowledge to manage the case in-house, that revenue would remain at the clinic. When the case is referred out, that additional revenue follows the case to the specialist. While cost of capital equipment should be considered when addressing loss of revenue, this literature review did not surface this consideration in current research.

While a complex issue, research confirms appears to confirm this revenue transfer. The Zoetis survey (data collected in 20008/2009) revealed, "in the year before referral, pet owners spent an average of \$1,113 at the hospital that referred them to the specialist,

compared to \$2,266 at the specialty hospital.” (Fisher, McFarland, Stansfield, & Coles, 2008/2009)

Regarding cost, a tendency among some generalists to bend to the desire to save the pet owner money by treating in clinic should be mentioned. While veterinarians place pet health as the top priority, revenue and client costs are considerations and factor in with non-critical case presentation.

3. Retention and pet owner allegiance:

ACVIM reports a majority of pcDVMs participating in their study were likely to agree that owners appreciate being offered a referral to a specialist and that they receive good feedback from owners after they have seen a specialist. (ACVIM, 2013)

However, a pet owner’s interaction with veterinary specialists remains a concern for some pcDVMs, who are concerned about being left out of the care loop. There are indications that generalists see their role as liaison, responsible for pet’s overall wellbeing, managing referrals to specialists, and completing the cycle by reporting results back to the pet owner. The desires of pet owners on this topic remain to be explored.

“Problems occur when clients want the specialist to perform duties that the generalist can handle, effectively transferring revenue from the referring generalist to the specialist. Communication between client and specialist does not always guarantee that the client will go back to the generalist to have a procedure done. When client decisions are made to refuse to return to the generalist for routine procedures, a breakdown in the relationship between the specialist and generalist DVM occurs.” (Rosenberg, 2014)

4. Is this a one-way street? Does the pcDVM benefit economically from the referral or referral relationship?

This literature review found no current research directly addressing the *pcDVM’s attitudes* on the topic, *Does the pcDVM benefit economically from the referral or referral relationship?* While dated reports convey a negative view, more current qualitative and quantitative research indirectly supports a change in the attitudes of pcDVMs on this topic.

Dated Research: While no one disputes the goal of building a mutual beneficial business relationship, dated reports would lead one to believe the business relationship between a pcDVM and a specialist may appear to be one-directional to some pcDVMs – the pcDVM builds business for the specialist.

- “The referring veterinarian is expected to educate the pet owner on the expertise of the specialist, describing their advanced training, qualifications, credentials, equipment, etc., review the typical procedures the specialist will perform their time

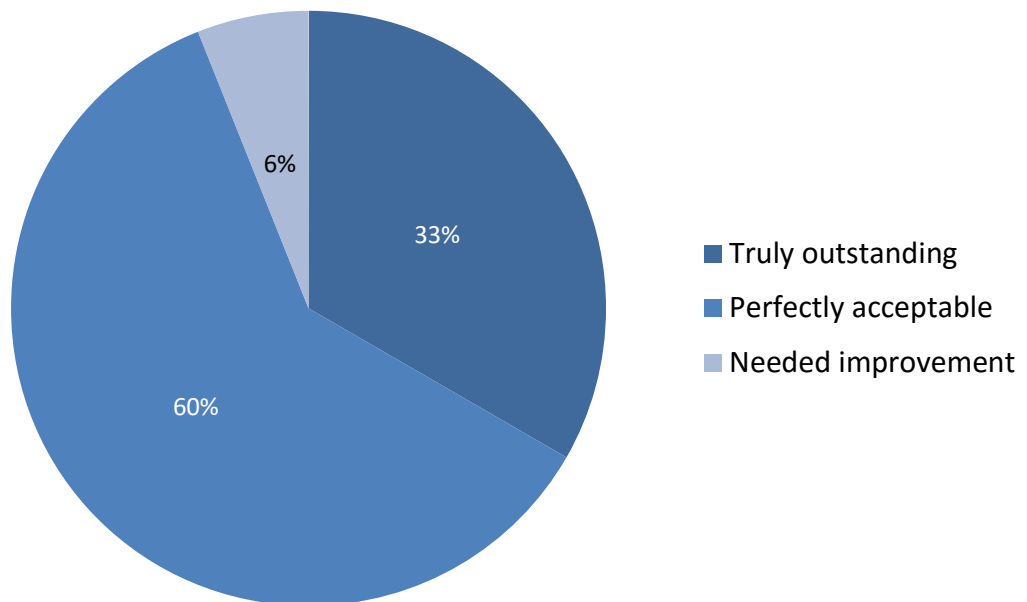
frame and expected fees. The referring veterinarian effectively becomes the ‘sales force’ for the specialist.” (Fisher, McFarland, Stansfield, & Coles, 2008/2009)

- “There may be lingering feelings of a lack of reciprocity – questions surround how the specialist might serve to build the generalist’s practice. Traffic does not flow in this direction.” (Fisher, McFarland, Stansfield, & Coles, 2008/2009)

Current Implications: Fast forward to the ACVIM 2013 report and a different picture begins to emerge (keep in mind potential bias towards ACVIM boarded specialists). PcDVMs were asked to describe their last interaction with an ACVIM boarded specialist: 33% reported truly outstanding, 60% reported perfectly acceptable and only 6% reported needed improvement. (ACVIM, 2013)

Figure 9: Last interaction with specialists

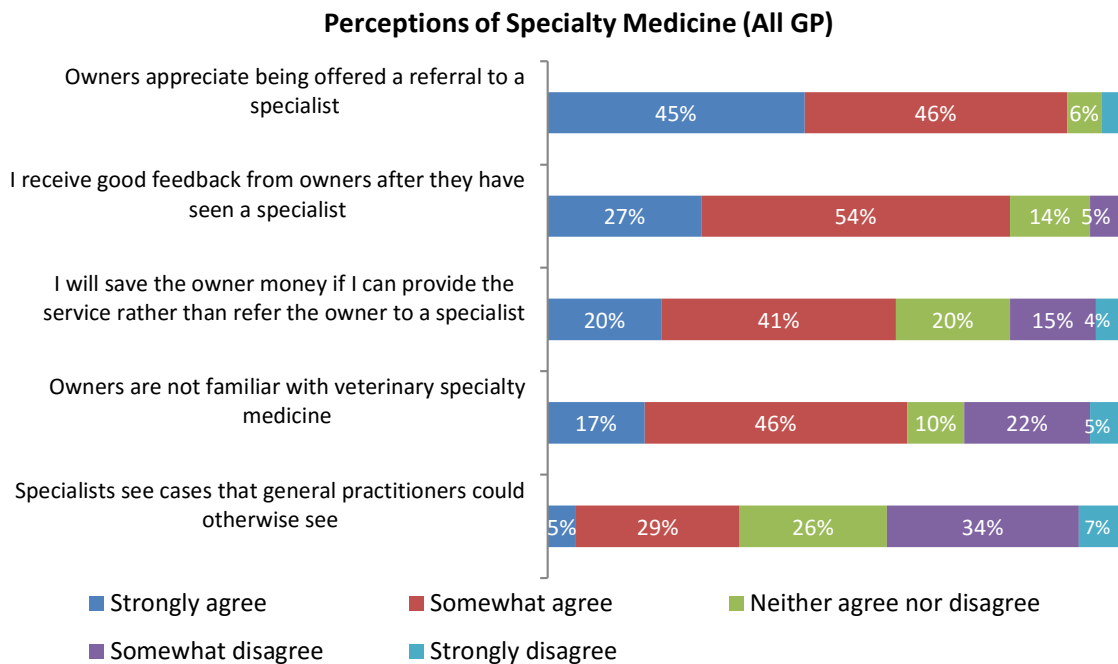
Description of last interaction with ACVIM boarded specialists (All GP)



(ACVIM, 2013)

Research demonstrates pet owner satisfaction is a primary driver of referrals (Hill, L/CalPro Research, 2015) and one may hypothesize also a driver of practice health and growth. Given this, the ACVIM investigation into Perceptions of Specialty Medicine is worth reviewing. These encouraging results provide further indication of a positive trend regarding the primary care DVMs' attitudes towards the benefits of referring cases to the growth and positioning of their practice.

Figure 10: Perceptions of specialty medicine



(ACVIM, 2013)

From a qualitative perspective, of those participating in the AAHA forums of 2006-2007, most specialists express they are not interested in stealing cases from pcDVMs and the pet owners are typically very bonded to the pcDVM. As specialists, they respect and encourage that relationship. (Donnelly & AAHA, 2006-2007) Other discussions have referenced primary care practice outreach and support initiated by veterinary specialists such as: lunch & learns, continuing education, patient rechecks for primary care issues cropping up at the time of referral (e.g. dentistry, otitis, anal sacs, etc.) including subsequent referral back to primary care practice for treatment. (Bergman, 2015)

F. Communication Style: Do Specialists Support or Degrade PcDVMs?

With the exception of one Canadian report, the attitudinal/behavioral studies reviewed were based on the pcDVM's and pet owner's perspective. Few reports addressed the

pcDVMs perception of a problem and all are dated. However, there is clear indication that pcDVMs perceived issues in the past with specialists' judgmental attitude, lack of professional respect and degrading pcDVMs' work in front of clients. Given the foundation of changing dynamics, current measurement is required before projecting past measurements onto behavior of specialists today.

A commentary based on the work of the Northeast Veterinary Liaison Committee suggested guidelines regarding referral care, based on the premise there is a greater need for communication, professional respect, and collegiality in the field of veterinary medicine. (Block, 2006) (Best, 2014)

PcDVMs noted that mutual respect and a non-judgmental attitude is important to them when they speak to specialists on the phone. (Donnelly & AAHA, 2006-2007)

In the absence of current research regarding the level of professionalism in communications between pcDVMs and specialists, it is difficult to determine if past problems (with specialists degrading treatment completed by the pcDVM) persist. Of interest, the same communication issue is raised by general practice dentists in reference to periodontists. While we know communication is an important issue, we do not know the current state of communication effectiveness. [Summation by Aycock}

Given the emphasis on interpersonal skills of the 1999 KPMG study (Brown & JD, 1999), and the ensuing communication programs top veterinary schools implemented, one would expect improvement at this point in time. There was also a notable awareness by educators of the importance of and efforts to infuse appropriate learning opportunities for students throughout the curriculum. More than simply adding a few communication classes to the curriculum, instructors and other clinical role models need to exemplify and model the appropriate behavior in multi-disciplinary settings. (Shaw, Adams, & Bonnett, 2004)

As a comparison, in the CATalyst Council research 53% of veterinarians and 71% of shelters perceive their relationship as one of *Mutual Support and Respect*. (Brunt & Olson, 2013)

V. THE PET OWNER'S ROLE

Questions to be explored:

How do pet owners become aware of veterinary specialists?

A. How do pet owners become aware of veterinary specialists?

“There is speculation that increasing pet owner awareness of veterinary specialty medicine may increase utilization.”

(ACVIM, 2013)

Evidence implies that as pet owners become more comfortable with the idea of veterinary specialists, cost may become a lesser factor.

1. Pet owner awareness is low

Approximately one-third of small animal owners were not familiar with specialty medicine, while less than 10 percent of horse owners/trainers were not familiar with specialty medicine. In addition, the ability to name any one specialty area was 50% or less for both groups. Small animal owners' knowledge of credentials, education, training and sources associated with *specialists* is not only low, but also marginally important (half to two-thirds indicated understanding the type of training as *very important*.) However, the term/concept board certification is a title that resonates with owners and conveys *quality*. (ACVIM, 2013)

“Pet owners have limited knowledge of the requirements for veterinary specialists, including the skills and training required as well as board certification and its requirements. Research has shown that two-thirds of all pet owners are not aware of the term ‘internist’ as it applies to veterinary medicine.” (ACVIM, 2013)

2. PcDVM and specialist perspective

As reported in the ACVIM Member Engagement and Brand Assessment Survey, “Members generally felt that the animal-owning public had little knowledge of specialty medicine, from the skills and training, to understanding board certification, and the term ‘Internist.’” (ACVIM, 2013)

3. How do pet owners become aware of veterinary specialists?

No current information on this topic was uncovered in this literature review, making this an important topic for future research.

B. What is the pet owner perspective?

1. Pet Owner Satisfaction

The report spawning the white papers, *Satisfaction with Specialty Services* includes a pet owner perspective. Pet owners indicated “Very Satisfied” or “Satisfied” (five point semantic scale) with specialists 80% to 90% of the time on three measures:

- a) Value obtained for fees paid,
- b) Meeting my overall needs,
- c) Overall quality of service.

In addition eleven communication/efficiency-based attributes were measured with “Very Satisfied” or “Satisfied” indicated +/- 90% of the time. (Fisher, McFarland, Stansfield, & Coles, 2008/2009)

Once a pet has been referred to a specialist, pet owners encounter care parameters that both delight and disappoint:

- Pet owners are generally satisfied with the sensitivity provided by specialist’s staff toward their pet’s illness, as well as the level of compassion shown in care.
- Pet owners are satisfied with communication levels within the specialist’s office
- However, pet owners are not as highly satisfied with communication of financial costs for specialist treatment, or with thorough fee explanations.
- Effective pet owner communication

Canadian qualitative insights (collected in 2009) clearly illustrate the complexity of conveying information to the pet owner. Add the complication of multiple sources (pcDVM and specialist and staff) to a multi-dimensional conveyance of message and the necessity for intense collaboration between all parties is apparent. (Stoewen D. , Coe, MacMartin, Stone, & Dewey, 2014)

“For the clients, the central qualification was that the information given had to be the truth. Information was expected about all aspects of their dog's cancer and its treatment, varying in relation to clients' basic understanding of cancer, their previous experience with cancer, and their information preferences. Provision of information generated the trust and confidence necessary to engage in treatment, the ability to make informed decisions, and the ability to be prepared for the future. Provision of information also engendered a sense of control and capability and

fostered hope. When dealing with owners of dogs with life-limiting cancer, results indicated that in addition to abiding by the principle of truth-telling, it is important for health-care service providers to ascertain clients' understanding of and experiences with cancer as well as their information preferences and thereby adopt a tailored approach to information giving. Provision of information enabled client action and patient intervention but also enhanced clients' psychosocial well-being. Veterinary healthcare service providers can purposely provide information to build and sustain clients' ability to successfully cope with their pet's condition.” (Stoewen D. , Coe, MacMartin, Stone, & Dewey, 2014)

In a 2008 JAVMA article, five themes related to veterinarian-client communication were identified in focus groups conducted with pet owners and veterinarians: (Coe, 2008)

- Educating clients (i.e., explaining important information, providing information up front, and providing information in various forms),
- Providing choices (i.e., providing pet owners with a range of options, being respectful of owners' decisions, and working in partnership with owners),
- Using 2-way communication (i.e., using language clients understand, listening to what clients have to say, and asking the right questions),
- Breakdowns in communication that affected the client's experience (i.e., owners feeling misinformed, that they had not been given all options, and that their concerns had not been heard),
- And challenges veterinarians encountered when communicating with clients (i.e., monetary concerns, client misinformation, involvement of more than one client, and time limitations).

A small subset of a larger observational study (20 veterinarians and 350 clients in Ontario) indicates that odds for pet owner adherence to recommendations “were 7 times as great for clients who received a clear recommendation, compared with clients receiving an ambiguous recommendation from their veterinarian. Moreover, adhering clients were significantly more satisfied as measured after the interview.” This study also linked adherence to increased perception of relationship-centered care among pet owners. (Kanji, 2012)

AAHA State of the Industry (2015) reports 6 in 10 pet owners are researching their pet's health online but only 3 in 10 receive recommendations for trusted online resources. (AAHA, 2015) An assumption, pet owners in need of specialty services are likely to research the health topic online, may be made to relate this information to this topic.

VII. COST ISSUES

“Inability of owners to afford the cost of a specialist is an influential factor in the generalists’ decision to recommend, sometimes based on fact and sometimes on assumptions.”

(ACVIM, 2013)

While fees are a tricky area for all, overarching demographic trends indicate an opportunity to rethink the communication of fees. While in this industry fees have not previously been published or shared, pet owners are becoming more and more accustomed to transparency and open discussion. Pet owners utilizing specialists are likely to discuss specialty fees with their pcDVM as well as fees in general with friends, neighbors, etc. A two-way understanding of fee structures between pcDVMs and specialists could mitigate misunderstandings and serve the pet owner.

A. Cost—A complex and critical area of investigation

Research *measuring the gap* between the pet owner’s willingness to pay and the pcDVM’s assumption (of the pet owner’s willingness to pay) has yet to be conducted. However, substantial research supports this as a complex and critical area of investigation. A topic where further research will ultimately benefit: pet owners, pcDVMs, specialty veterinarians and our pets, the patients.

Hill/CalPro’s 2015 research among 110,000+ pet owners and 20,000+ rDVMs reflects strong correlation .67-.68 between Value for Fees Paid and the Net Promoter Score [overall satisfaction.]

Regarding equine, “Nearly one-quarter of trainers reported an experience where something prevented them from recommending a horse/owner to a vet or specialist, and in all cases that “something” was cost.” (ACVIM, 2013)

B. Impact of pet owner’s perception of cost

Average expenditure per household for all pets was \$375 in 2011. (AVMA, 2012) The economic end-point, (the point at which a pet owner decides to stop treatment), jumped to \$1,704 in 2012 from \$1,407 in 2009, an all-time high and reversing a downward trend. Cost also has a major impact on the decision to treat sick or injured animals: (DVM Newsmagazine, 2012)

- 25% Cases in which cost was not a factor at all
- 30% Cases in which cost was a factor but client agreed to treatment
- 28% Cases in which cost limited treatment

- 17% Cases for which cost was the primary reason for refusing treatment

The 2011 Bayer Veterinary Care Usage Study, US pet owners conveyed a desire for the following five concepts that dog and cat owners indicated would most likely cause them to take their pets to the veterinarian more often. (Volk, Thomas, & Siren, 2011)

- Competitive product prices
- Wellness program billed in monthly installments
- Full-year health program spelled out
- *Extended business hours*
- Information about financing programs

Of the top five, four are directly related to finance. Item 3, *Full-year health program spelled out*, may be viewed as the cornerstone as it could be seen as a vehicle to manage cost expectations (and provide more predictability to the owner).

In another study, pet owner areas of concern include references to costs. (Fisher, McFarland, Stansfield, & Coles, 2008/2009).

- Cost differentials between services performed by specialist that could be performed by pcDVM. (Often brought to forefront by pet owner and subsequent pressure on pcDVM to perform services at lower cost.) (Fisher, McFarland, Stansfield, & Coles, 2008/2009)
- For pet owners, timely and clear explanation of fees is of great concern (Fisher, McFarland, Stansfield, & Coles, 2008/2009)
- Pet owner concerns over affordability and subsequent election for euthanasia (Fisher, McFarland, Stansfield, & Coles, 2008/2009)

Yet results of a 2009 study suggest that discussions related to cost were relatively uncommon during clinical appointments in companion animal practice and that written estimates were infrequently used to aid these discussions. When discussions of cost did occur, veterinarians appeared to focus on explaining costs in terms of the veterinarian's time or services provided by the veterinarian, rather than on the medical information that could be obtained or the benefits to the future health or function of the pet. (Coe, 2009)

While the frequency of this type of discussion may not be applicable to 2015, the elements of effective cost communication are pertinent to this discussion (i.e. cost differentials between pcDVM services and specialist services is of concern to the pet owner.)

C. Drivers of pet owner's cost beliefs

Evidence implies that as pet owners become more comfortable with the idea of veterinary specialists,

cost may become a lesser factor.

As part of the discourse on “cost”, Opperman’s perspective should be considered when exploring pet owner communication opportunities.

“Many Americans believe veterinarians make a great deal of money. People are usually quite surprised when the author tells them that’s not the case. In fact, veterinarians are the lowest-paid medical professionals, with an average starting salary of around \$60,000 a year. Veterinarians don’t do procedures just to generate more income. In fact, they give away services every day and, in [the author’s] opinion, are probably the most generous medical professionals of all. The public doesn’t know the amount of debt veterinarians incur to pay for education, and they don’t know what it costs to purchase, build and maintain a veterinary hospital. The average person simply doesn’t realize the sacrifices most veterinarians make in their personal lives to be veterinarians.” (Opperman, 2014)

D. The impact of the pcDVMs’ assumptions regarding pet owners’ ability and willingness to pay

“In our opinion, the main causes of the industry wide issue concerning ‘Value for Fees Paid by Your Clients’ has to do with communication, coordination, collaboration, and compassion not the prices of individual tests or services.”

(Hill,L/CalPro Research, 2012)

The typical pet owner using a specialist has a higher-than-average household income. This is an important factor when contrasted with generalists underestimating the client’s ability to pay, and as a result perceived affordability is a primary factor for not referring to a specialist. This disparity in perceived ability/willingness to pay for specialty services may result in lower generalist referrals and more self-referrals on the part of the pet owner. (Fisher, McFarland, Stansfield, & Coles, 2008/2009)

The research supporting the 2012 white paper, *Referring Veterinarians' Perception of Value*, presents evidence that the pcDVMs' assumptions, regarding the pet owners' ability and willingness to pay, is directly related to the pcDVMs' willingness to refer. The research found strong correlation (65%, n ~4,879) between *Value for fees paid by your clients* and *Willingness to refer*. The research further identified ten drivers of the referring DVMs' perception of value for fees paid as follows: (Hill,L/CalPro Research, 2012)

Table 3: Drivers of referring DVMs' perception of value

#	Drivers of Referring DVMs' Perception of Value	Correlation* to Value for Fees Paid
1	Overall client satisfaction	78%
2	Satisfaction with the level of compassion	66%
3	Willingness to recommend hospital overall	65%
4	Satisfaction with staff communications	60%
5	Satisfaction with case consultations	58%
6	Satisfaction with follow up instructions	58%
7	Satisfaction with timeliness and punctuality	57%
8	Satisfaction with responsiveness to inquiries	57%
9	Satisfaction with the communication of specialists	57%
10	Satisfaction with the quality of medicine	57%

(Hill,L/CalPro Research, 2012)

*40% to 70% is considered significant

Of note, 6% of the referring DVMs' comments relayed negative experience with the application of appropriate tests and diagnostics by the veterinarian specialist. Either tests are viewed by the pcDVM as excessive given presenting symptoms, redundant with tests executed in primary care clinic, or costs of tests and treatments are not clearly, compassionately and continually communicated to the pet owner throughout the treatment process. (Hill, L/CalPro Research, 2015)

Hill/CalPro sums up this investigation into the pcDVMs' perception of value for fees paid as follows, "there is a direct cause and effect relationship between the 'Perception of value for fees paid' and the (specialty practices') market share." (Hill,L/CalPro Research, 2012)

The Canadian exploration into the pcDVM's assumption regarding pet owner's attitudes towards costs lends additional insight to this topic and validation for the information presented herein.

"The costs of specialty care are often much higher than those associated with other options, largely because of the expense of costly tests and sophisticated treatments, and are almost always a consideration, given most clients pay for a pet's health care with out-of-pocket funds. Practitioners may be reluctant to recommend referral if they believe it is unfeasible for the client, conscious of the potential to cause the client additional distress (e.g., guilt) in addition to the distress of the diagnosis. In the effort to protect clients, options for care may be presented in a partisan manner. However, this can undermine client's right to make fully autonomous decisions on how to spend their money and ultimately, inadvertently, impact patient welfare. It is important to remember that one cannot predict the amount a client may be willing to spend and the associated reasons. Practitioners can be assured they are fulfilling their mandate to engage clients in fully informed decisions and avoid inadvertently limiting patient access to care when each treatment option is presented in a balanced and respectful manner. They should consider their obligations to clients as well as patients, providing they do not undermine client autonomy or conflict with the interest of patients." (Stoewen, Coe, MacMartin, Stone, & Dewey, 2013) (Main, 2006)

E. Pet insurance

The best therapy in the world is useless if the client cannot afford it.

"I am encouraged by the rise in popularity of pet insurance, which makes these treatments accessible to more and more pet parents."

Monique Feyrecilde, (DVM360.com, 2015)

While pet insurance can impact the decision to spend added funds at a specialist, penetration of pet insurance remains fairly low in the US. (ACVIM, 2013) However track records of other countries foretell a promising upturn in the pet insurance marketplace—and an indication of more change in store for the veterinary medicine marketplace.

Sweden wrote its first pet insurance policy in 1924 and about 50% of pets are now insured. (Hartville Pet Insurance Group, 2012) Britain sold its first pet insurance policy

in 1947 and is currently second highest level of pet insurance in the world (25%). (Hartville Pet Insurance Group, 2012) (Taylor, 2008) In 1982 the first pet insurance was sold in North America to protect TV's Lassie. (Hartville Pet Insurance Group, 2012) North American Pet Health Insurance Association, NPAHIA, reports the pet insurance trend is strong and growing in North America. There are currently more than 1 million pets insured (or only .65% of the cat and dog population in North America) with dogs representing 90% of premiums in 2013. The industry has experienced 13.2% growth rate since 2009 representing \$595 million. (NAPHIA, 2014) Market share by premium of the top three pet insurance companies are reported to be: VPI (49%), The Hartville Group (10%), and Petplan USA (9%). (Embrace Pet Insurance, 2012)

Jessica Goodman Lee CVPM, states pet owners with pet insurance will generally spend twice as much with a practice over the course of a pet's life. (Stewart P. , 2014) Pet insurance may provide a forum for collaboration and relationship building between specialists, pcDVMs and their staff. *Firstline's*, 2012 article, *Everything You Always Wanted to Know about Pet Insurance—but were afraid to ask*, points out the complexity of pet health insurance and the pet owners' need for guidance. Recommendations are presented for incorporating this service into the practice. Of interest is the recommendation to invite pet insurance companies to conduct lunch-and-learn sessions. These sessions will assist in selecting the insurance programs best suited for the practice as well as training "insurance point persons" to assist with client questions. (Stewart P. , 2014) Collaborating to open these sessions to multiple practices holds the potential to foster a collegial culture between specialists and primary care practices, reduce customer confusion, promote decision making among customers, enhance professionalism of staff, etc.

VII. BEST PRACTICE

Questions to be explored:

What tools do successful specialist practices use to have/build collaborative relationships with primary care DVMs?

What can specialists do to drive increased caseload for the primary care DVMs?

A. What tools do successful specialty practices use to have/build collaborative relationships with pcDVMs?

In Hill/CalPro's 2015 white paper, *Referring Veterinarians' Perception of Value*, Hill/CalPro "proposes a 'ladder of collaboration' that specialty hospitals can employ...The primary purpose to climbing the ladder of collaboration is to create a three-way win/win/win...When the collaboration between pet owner, pcDVM and the specialty care team is strong then everyone wins....here is a frame work you may want to consider:" (Hill, L/CalPro Research, 2015)

Figure 11: Levels of collaboration

Levels of Collaboration	
Level 5: Best Practice	Mutually beneficial relationships in a formal context between rDVM's and specialists.
Level 4	Specific programs that create a seamless team approach that works both ways between rDVM's and specialists
Level 3	Specific programs that encourage teamwork between rDVM's and specialists
Level 2	Regular communication and events that build the relationship between rDVM's and specialists
Level 1	Arms-length relationship with rDVM's

(Hill, L/CalPro Research, 2015)

[Formatted by AllPoints Research, Inc.]

Hill/CalPro follows by linking measurements of “goodwill” with gains in market share as demonstrated by case studies and *Net Promoter Score* research. Key to this research is the Net Promoter Score matrix which evaluates elements driving overall satisfaction.

Figure 12: Key drivers of perception of value

Key Drivers of Perception of Value		
Rank	Top Drivers of Value Based on Ratings from <u>rDVM's</u>	Top Drivers of Value Based on Ratings from <u>Pet Owners</u>
1	Perception of pet owner's overall experience	Staff's ability to answer questions and explain things clearly
2	Level of compassion	Doctor's ability to answer questions
3	Communication of staff	Healthcare team treated you and your pet with compassion and care
4	Case consultations & recommendations	Speed and convenience at check-out
5	Timeliness and punctuality	Friendliness and courtesy of the doctor(s)
6	Communication of specialists	Punctuality in meeting sch. appointments

(Hill, L/CalPro Research, 2015)

[Formatted by AllPoints Research, Inc.]

Hill/CalPro's white paper further provides factors for specialty veterinarian practices to employ:

Figure 13: Best practices for maximizing the perception of value

Best Practices for Maximizing the Perception of Value
Ensure prices are positioned correctly relative to competitive options in your area
Educate pet owners' with regard to the medical condition of their pet
Present bad news and options for care with compassion and clarity
Set the pet owner's expectations for tests, procedures, potential outcomes, timeframes & costs.
Gain the pet owner's buy-in or approval with warmth and compassion for their situation.
Deliver to the established expectations
Re-set expectations with compassion and options for care only on rare occasions
Present the final bill or sequence of bills with compassion and have an immediate way of detecting if the bill meets the established expectations.
Have predetermined ways to "make it right" if and when legitimate discrepancies occur
Have an ongoing process of pet owner feedback to ensure the highest levels of success
Respond to specific pet owner feedback in a timely manner
Respond to themes that may appear in pet owner feedback through a cross-functional improvement team.

(Hill, L/CalPro Research, 2015)

As advanced treatment and diagnostic equipment becomes more accessible to the pcDVM, the lack of equipment as a driver for referral will become less impactful. ACVIM recommends, "Further differentiating specialists as experts **and focusing the benefit on knowledge** as opposed to equipment or facilities can help" mitigate the effect of this trend. (ACVIM, 2013) In addition, increasing partnerships with pcDVMs could prove to be a "win/win" through increasing referrals to specialists while saving the pcDVMs capital expenditure for costly equipment.

The AAHA Forums, Focus on Referral Issues, discussed whether specialists and pcDVMs visit each other's hospitals on a regular basis. PcDVMs visiting specialist hospitals regularly stated the time was valuable to discuss cases, learn from specialists and develop a personal relationship. Specialists at all forums indicated a desire to visit pcDVM hospitals on a regular basis and stated they welcome and encourage pcDVMs to visit their facilities. (Donnelly & AAHA, 2006-2007)

“Another opportunity to *change the conversation* is to change the concept from *referring to/transferring to partnering with...* in the care of a patient.” (Fingland, 2015)

B. What can specialists do to drive increased caseload for the pcDVMs?

1. Continuing education seminars for pcDVMs and staff

“Continuing education seminars provided by specialists was cited most commonly by referring veterinarians as the most helpful marketing initiative by specialty practices to market to the [pcDVM]. (preference is for evening, weekend or lunch seminars) [pcDVMs] noted a desire to be educated on diseases or conditions that can be referred to specialists and on **when to refer cases**. Rounds held on a regular basis at some specialty hospitals for small groups of referring veterinarians were cited as being very valuable. Newsletters were mentioned as another continuing education tool that referring veterinarians find useful, and most [pcDVMs] indicated they do read these mailings. Many referring veterinarians commented they like to have brochures and business cards for specialty hospitals to give to pet owners. They also like magnets so the specialty hospital phone number is easily accessible.” (Donnelly & AAHA, 2006-2007)

2. Continuing education seminars for pet owners

With the incidence of chronic disease increasing, there may be interest on part of pet owners and various groups/clubs to participate in seminars related to managing these conditions, or preventing them, such as Lyme disease. Included would be leveraging the pcDVM for healthy pet life.

The Banfield Pet Hospital’s State of Pet Health (Yearly 2011-2014) reveals that chronic disease is growing as pets are aging. These reports cite that over previous 5 years: (Banfield Pet Hospital, Yearly 2011-2014)

- Arthritis is up 38% in canine and 67% in feline (2013 report)
- Obesity & overweight is up 37% in canine and 90% in cats (2013 report)
- Dental Disease up 91% in canine and 85% in feline (2013 report) for animals over the age of 3
- Diabetes Mellitus is up 31% in canine and 16% feline (2011 report)
- Kidney disease is up 15% in felines and 22% in older canines (2012 report)
- Hypothyroidism up 26% in older canines (2012 report)
- Lyme Disease up 21% in canines (2014 report)

3. Practice builders inherent in referral process

The AAHA Forums took on this discussion point with insightful results. “Referring veterinarians and specialists alike said they feel referrals can result in increased revenues for the general practice.” (Donnelly & AAHA, 2006-2007)

- Promoting “Best Care” = financial success: “Referring veterinarians noted that promoting the best care results in financial success, and they often learn from referrals, which can lead to improved care for other pets.” (Donnelly & AAHA, 2006-2007)
- Increased pet life span = increased revenue: “The increased life span of pets was cited by several attendees as a positive outcome associated with referral that leads to increased revenue.” (Donnelly & AAHA, 2006-2007)
- Referrals = Client Satisfaction = Trust/Confidence in pcDVM = Client Referrals: “Multiple referring veterinarians commented that enhanced client satisfaction and client trust and confidence in the [pcDVM] is associated with referrals. They said this is a practice builder and leads to more client referrals from existing clients.” (Donnelly & AAHA, 2006-2007)
- Specialists recommend tests to be conducted by pcDVM prior to admission: “Specialists noted they often help increase revenues at the general practice by making recommendations for tests to be done prior to referral. Some specialists such as surgeons or ophthalmologists send patients back to the referring veterinarian to have lab work done when possible. Specialists were asked to comment on what tests or treatment should or could be done at the referring practice prior to referral. Urinalysis was noted as a laboratory test that is often not done. Many specialists said they require routine blood work for most cases and prefer these tests to be done by reference labs to ensure accuracy.” (Donnelly & AAHA, 2006-2007)
- Specialists send cases back for follow-up: “Specialists noted they often help increase revenues at the general practice by sending cases back for follow-up at the referring practice.” (Donnelly & AAHA, 2006-2007)
- (Donnelly & AAHA, 2006-2007)

4. Specialist could assist with promoting wellness visits with pcDVMs

The Bayer Veterinary Care Usage Study reports, “Inadequate understanding of the need for routine examinations by pet owners as one of six factors appearing to contribute to the decrease in visit numbers at a time when pet populations are increasing.” (2006-2010) In addition, this study surfaced the following top four reasons that dog and cat owners would take their pets to the veterinarian more often: (Volk, Thomas, & Siren, 2011)

- If I knew I could prevent problems and expensive treatment later
- If I was convinced it would help pet live longer

- If each visit was less expensive
- If I really believed pet needed examinations more often

Note: Three of the four reasons relate to better understanding of the benefits and what occurs in a yearly wellness visit to a pcDVM. Perhaps specialists can assist in communicating the benefits and reminders for pet wellness visits with a pcDVM, through handouts, posters, verbal support, follow-up instructions, etc.

“VetSOAP could produce a brochure for specialists to give to clients at discharge emphasizing the importance of the partnership with the pcDVM in the continued care of the patient and the importance of routine wellness visits.” (Fingland, 2015)

5. Work with pcDVMs to monitor post discharge compliance and promote continual improvement of communication tools and methods

The journal article, *Increasing Adherence in Practice: Making your Clients Partners in Care*, links behavioral science and communication to pet owner compliance. Of note is the linking of compliance to communication skills, practiced by all members of the team in each client encounter. The article further promotes a four-habit communication approach that has been effective in human healthcare. Compliance is known to drive sales, clinic visits and relationship development between veterinary professionals and pet owners. Once again, we find support for collaboration between specialists and pcDVMs to continually improve communication methods, systems and processes.

6. Work together to leverage technology: link websites, record client testimonials, train staff how to leverage and build relationships through technology, etc.

“Any practice tracking referral sources is on the right path—it’s crucial to know what channels are working for your hospital, says Karyn Gavzer, CVPM. That said, the world is changing. Conventional word-of-mouth referrals are great but no longer sufficient in our technology-driven society. If face-to-face word-of-mouth was sufficient, we wouldn’t be seeing the decline in new client numbers and patient visits documented by the new Bayer-Brakke-NCVEI Usage Study.” Consumers today rely on consumer-to-consumer recommendations—like those found on Yelp and other similar review sites—instead of advertising. This means that new pet owners will make their decisions on which practice to choose based partly on what they read online. (Karyn Gavzer, MBA, CVPM, 2011)

C. Industry best practices

1. “Pull” marketing strategies

Opportunities exist for *pull* marketing strategies, rather than *push* strategies. Pull marketing strategies serve to encourage the pet owner to request or seek out specialty medicine services. ACVIM reports evidence this strategy is active in the marketplace. Although only one percent of primary DVMs indicate owner’s request is the most common reason for referring, 62 percent indicate they refer cases as the request of the owner. (ACVIM, 2013)

2. Education aimed at younger pcDVM candidates

Additional education aimed at younger pcDVMs around *when to refer*, and perhaps where specialists can be most beneficial, may help increase referrals, or at least how quickly they are made. (ACVIM, 2013)

ACVIM’s communication channel recommendations would translate to VetSOAPs’ initiatives and are presented in full herein:

“Younger audiences are more likely to prefer communication through multiple channels than older audiences.

PcDVMs working in metro areas are more likely to prefer to receive communication at conferences than those practicing in mid-sized towns or rural areas.” (ACVIM, 2013)

“Small animal [pcDVMs] indicate a significantly stronger desire to receive communication through the VIN.com website than equine practitioners.” (ACVIM, 2013)

“While respondents chose several preferred communication sources, email was consistently the most popular. However, multiple channels and touch points will result in the highest reach and satisfaction. Furthermore, while social media and mobile may be smaller proportionally, we do not recommend ignoring them altogether. Finding ways to have social and mobile integrated into your other sources (e.g. mobile friendly websites, using social media to drive traffic to your website, etc.) may provide even greater benefit. Also, these are growing in usage and likely will be of greater importance in the future.” (ACVIM, 2013)

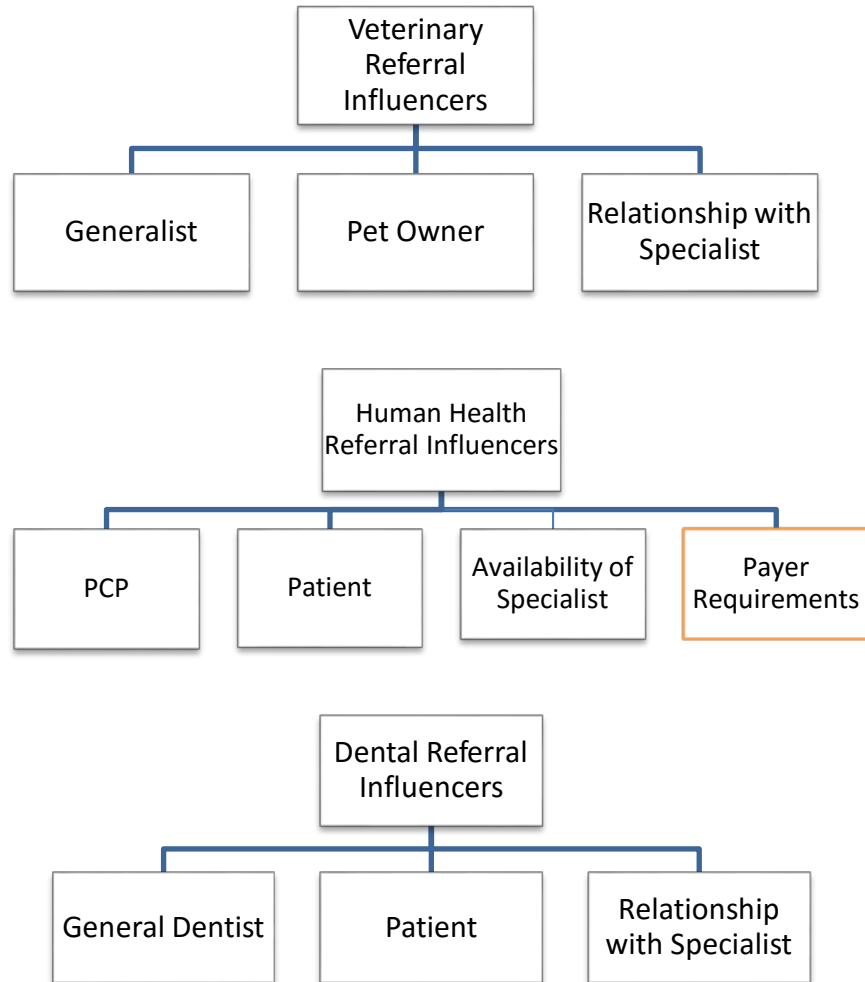
IX. COMPARISON WITH HUMAN HEALTH AND DENTISTRY

Specialist referrals in the veterinary field, human dentistry and in human health are impacted by a different set of influential factors. In human health, Payer (Insurer) requirements play a significant part in the process of referrals. In dental referrals, insurance plays a far smaller role.

- In veterinary health, the influence of Insurers is negligible, with only 2% of veterinary expenses being handled through pet insurance.
- In human health, a referral may be required before a visit to a specialist, or a specialist appointment may only be available after consultation with a PCP (primary care physician).
- As a result of differing dynamics, referral practices in veterinary medicine and in human health are quite dissimilar.
- On the other hand, referral practices in veterinary clinics and in dental practices are far more similar – insurance plays a limited role, and reasons for referral are similar: expertise, equipment and time constraints.

In animal health, human health and human dentistry, the referral pathway is effectively a one-way street – the generalist builds the specialty practice through referrals, but the specialist sends little or no business revenue back to the generalist.

Figure 14: Referral Influencers



XI. REFERRAL DYNAMICS IN HUMAN HEALTH

The human health referral landscape is widely different from the animal health landscape, with the significant influence of Payers in the human health arena. While only 2% of pet owners use insurance to cover their pet's specialist expenses, Payers (Insurance) plays a nearly universal role in human health, including the decision to continue care or not.

Insurers regulate access to specialists, the processes for engaging a specialist, and the need for PCP involvement, all of which impact referral rates. None of these are factors in the animal health arena.

A. Description of referral process in human health

In the first decade of the 21st century (1999-2009), specialist referrals rose over 90%, from under 5% to over 9%. Visits to specialists rose from 11 million to 38 million visits, with multiple visits per patient. The biggest increases were noted in referral rates from primary care physicians for patients with the following types of symptoms: cardiovascular, gastrointestinal, orthopedic, dermatologic and ear/nose/throat. (Barnett, Song, & Landon, 2012) (Anderson, 2012, March)

While data directly comparative to the previous citing was not found for veterinary medicine, of note is ACVIM's 2013 data reflecting pcDVMs are referring about the same amount of cases compared to the year prior (late 2012 to late 2011) (ACVIM, 2013).

Overall, widespread incidences of human health specialty practices have been in play decades longer than veterinary specialties. It may be hypothesized that specific market characteristics currently present in human health may eventually evolve in animal health markets. In addition, one may hypothesize that since a specialty referral model is present among the population at large these developments may occur more quickly in animal health. However, there will be differences due to inherent differences in business models (between animal health and human health). These differences are explored below. In addition, the following section, *Referral Dynamics in Dentistry*, further defines differences in business models that may impact the continuation of referral practices.

Physicians with ownership interest in their practice, and those realizing most of their income from managed care contracts, had a slower growth in referral rates. (Anderson, 2012, March) It is estimated that more than one-third of patients are referred to a specialist each year, and specialist visits constitute more than half of all outpatient visits. (Mehrotra, 2011)

Some hypothesized reasons for this increase in referral rates include:

- Increasingly complex care issues, requiring highly specialized physicians.

- PCP's (primary care physicians) have much to accomplish during limited visit time, providing increased screening and preventative recommendations. As a result, PCP's have less time for treatment of more serious health issues.
- Patients on average require more medications and often have more than one chronic condition, creating a multitude of issues to address in a limited visit.
- Lastly, the number of specialists is growing. Better availability of specialists may influence referral rates. (Barnett, Song, & Landon, 2012) (Anderson, 2012, March)

Again differing from animal health, the human health landscape includes two types of referral scenarios rather than the single scenario seen in most private veterinary clinics:

- As in private veterinary clinic, a PCP may refer a patient to a specialist outside his practice
- Secondly, as collaborations and practice buy-outs become more frequent, a PCP may actually refer a patient to a specialist within his own practice group. For example, a PCP may refer to an endocrinologist within the same overarching practice.

This dichotomy in practice types creates different allegiances between PCP's and specialists. (Mehrotra, 2011)

B. General practice & specialists—Competitors or Partners? What factors influence relationships between PCP's and Specialists?

“The complexity of referral appropriateness is compounded by the multiple roles that specialists can play in the care of a patient, ranging from consultative to procedural to co-managing a complex condition.”

(Barnett, Song, & Landon, 2012) (Anderson, 2012, March)

The process itself has been a long-standing source of frustration among both primary care physicians and specialists. PCP's and specialists often disagree on the role of the specialist, whether it should be as a single consultation or continuing co-management. (Mehrotra, 2011)

PCP's serving adults identified a set of critical attributes that determine a quality experience with a specialist. While this research is about 10 years old, there are no indications that these attributes have changed: (Kinchen, 2004)

- Medical skill
- Appointment timeliness
- Insurance coverage
- Previous experience with specialist
- Quality of specialist communication

- Specialist efforts to return the patient to the PCP for care
- Expectations of good patient-specialist rapport

Research conducted in 2006 with 386 physicians reports:

- Specialists were less likely than PCPs to cite ease of communication with colleagues
- Medical and surgical specialists were less likely than PCPs to cite “shares my medical record system” as a reason in selecting a referral.
- Medical specialists frequently initiate referrals, bypassing PCPs.
- PCPs are concerned with between-physician communication and patient access when selecting a specialist to refer a patient to. (Barnett, Keating, & Christakis, 2012)

While research collected from 1997 through 1999 is now dated, the attributes investigated are helpful to note for future research efforts in animal health referral dynamics.

“PCPs’ referral decisions are influenced by a complex mix of patient, physician and health care system structural characteristics.”

(Forrest, Nutting, Rohde, & Starfield, 2006, Data:1997-1999)

- Patient Characteristics (conditions presented) had the largest effects on referral models.
- PCP Characteristics associated with increased referral include:
 - PCPs with less tolerance of uncertainty
 - Risk aversion and malpractice fear was found to be a driver in separate research. (Franks, Williams Geoffrey C., Swanziger, Mooney, & Sorbero, 2000, DataSource: 1995)
 - “Less tolerant of uncertainly” was mentioned in Variation in GP referral Rates, EU. (O'Donnell C. A., 2000)
 - “MDs who perceive serious disease to be a more frequent event may refer more patients.” This attribute surfaced in EU research. (O'Donnell C. A., 2000)
 - Larger practice size
 - Health plans with gatekeeping arrangements
 - Practices with high levels of managed care
- Environmental determinants increasing referral rates include:
 - Capitated primary care payment
 - Internal medicine specialty of the PCP
 - High concentration of specialists in the community
 - Higher levels of managed care in the practice

(Forrest, Nutting, Rohde, & Starfield, 2006, Data:1997-1999)

Leveraging robust Medicare administrative data from 2006, a novel approach was taken to investigate patient-sharing networks. This research defined two groups of physicians, connected and non-connected. *Connected* status was determined by the number of shared patients. Each physician was connected to an average of 27 other physicians.

“Physicians thus tend to cluster together along attributes that characterize their own backgrounds and the clinical circumstances of their patients.”

(Landon, Keathing, Onnela, Paul, & Cristakis, Jul, 2012: Data, 2006)

Characteristics of “connectedness” were identified as:

- Based at the same hospital
- Close geographic proximity (13 miles vs. 24 miles for non-connected)
- Compositions of patients populations were similar racially, mean patient age, percentage of Medicaid patients, and similar comorbidities. (Landon, Keathing, Onnela, Paul, & Cristakis, Jul, 2012: Data, 2006)

A report that may prove to be an exercise in expanding thought to encompass new possibilities, is Providing Specialty Consultant Expertise to Primary Care: An Expanding Spectrum of Modalities. This 2014 report is based on experience with Veterans Health Administration’s adoption of electronic consultation, secure text messaging, telemedicine of various types, and population preemptive consults. For example: Cat owners and DVMs alike might appreciate the ability to measure a variety of blood levels while the animal is calm at home and have the results immediately communicated to the veterinarian through electronic devices. In human medicine, new devices and other technological advances are improving efficiency and effectiveness especially in rural areas. Ref: (Kirsh, 2014)

Given the propensity of pet owner on-line research habits, comparative performance information as a determinant in referral selection may be an area of accelerated development for the veterinary care industry (in comparison with human health). The 2014 report, Comparative performance information (CPI) plays no role in the referral behavior of PcDVMs, used both qualitative and quantitative data to determine:

- Most GPs did not know where to find CPI
- Most GPs did not know where to search for CPI
- GPs are not motivated to use CPI due to
 - Doubts about its role as support information
 - Uncertainty about the effect of using CPI
 - Lack of faith in better outcomes
 - Uncertainty about CPI content and validity

None the less, most GPs believed patients would like to be informed about and discuss quality-of-care differences. (Ketelaar, 2014)

In Drug Benefit Trends, Jan 2009, the consumers’ perspective was explored with the following finding: “When choosing a PCP, specialist or facilities medical procedures, few Americans actively shop or consider price or quality information.” In this study friends, relatives and physician or other health care provider accounted for 88% of choice.

However, with implementation of the Affordable Care Act, and the increasing prevalence of social media, further research remains to reveal how this may have changed.

XIII. REFERRAL DYNAMICS IN DENTISTRY

As a narrower field of health care, essentially a specialty unto itself, dentistry presents a smaller list of specialty options when compared to human health in general: (American Dental Association)

- Dental Public Health
- Endodontics
- Oral & Maxillofacial Pathology
- Oral & Maxillofacial Radiology
- Oral & Maxillofacial Surgery
- Orthodontics and Dentofacial Orthopedics
- Pediatric Dentistry
- Periodontics
- Prosthodontics

While there is a large number of human medical empirical studies on related topics, referral practices in dentistry are more closely related to the field of veterinary medicine. There are commonalities in marketing efforts and opportunities. Referral circles for dentists and veterinarians are much tighter and smaller than for medical professionals.

A. Description of referral process and elements impacting decision tree

Similar to reasons seen in the veterinary field, reasons for referring a patient to a dental specialist are centered around ‘expertise’, either expertise of the specialist or resulting from advanced equipment. In the dental field, referrals to specialists are not just common place but expected [by the patient]. In this respect, dental referrals differ from veterinary referrals, where pet owners may expect the veterinarian to be capable of handling both routine and non-routine requests and be largely unaware veterinary specialists exist. Research is needed to better understand the pet owner’s current perceptions and how perceptions positive to specialty veterinary medicine are formed and influenced.

B. General practice & specialists—Competitors or Partners?

Unlike human health or veterinary practices, the general dentistry practice does not view a referral to a specialist as a potential loss of revenue. The treatments provided by dental specialists are separate from general dentistry, and in most cases short term. The dentist can be confident that the patient will return to them for future visits. As part of established industry protocols, patients are likely to expect a referral to a specialist for non-routine dental services, including periodontics and orthodontics. Few expect their general dentist to have the expertise needed in the specialty to meet the patient’s needs. As a result, there is no loss of ‘image’ or confidence when a general dentist refers patients to a specialist.

Much of the literature found addressed marketing, especially actions dental specialists could take to build the rates of referral from general dentists. The referral process was not collaborative in nature, but one-sided, offering insights into how specialists can increase their revenue by marketing to dentists. Dentists do not appear to be building a revenue stream via specialists, although the specialists are expected to refer patients back to their general dentist for future needs. (Orthodontic Cyber Journal, January 2008)

Around the mid 1980's the dental industry experienced a shift to the customary business model similar to what veterinary practices face with today's emerging technology—services previously only provided by periodontists are now provided by general dental practitioners. Most new patients with periodontal disease were referred to a periodontist before any restorative dentistry was done. Most were treated surgically and returned with healthier tissues to the general practice for the restorative phase. In the early to mid 1980s, the phrase *soft tissue management* hit the treatment scene. This nonsurgical method appealed to many dental professionals in general practice. It involved anesthetizing the patient and treating only a quadrant of teeth in one visit. This started a trend by general practices to treat periodontitis in-house, with positive outcomes and financial incentives to keep revenue in the practice—forever changing the service mix of the periodontists to one commanding more time providing implants, cosmetic tissue treatments, etc.

Market conditions fostering an environment of change included factors present in veterinary medicine today: (Lanning, Best, & Hunt, 2007)

- Advances in and dissemination of (periodontal) knowledge
- Availability of controlled-release local drug delivery systems
- Current training of dental care providers
- Changes in practice management
- Changes in practice philosophies
- Changes in demands for services
- Patient-based issues

However, periodontists have observed that more of the periodontal patients who are referred are “train wrecks”, continuing to lose attachment after root planning/scaling in the general office. (Glasscoe, 2007) This *train wreck* observation is supported by an article published in the October 2003 Journal of Periodontology which reported the following trends: (Cobb, et al., 2003)

- An increase in the average age of patients at the time of the initial examination
- A decrease in the percentage of patients using tobacco at the time of the initial interview
- An increase in the percentage of periodontal Case Type IV patients with a concomitant decrease in the number of periodontal Case Type III patients
- An increase in the average number of missing teeth per patient at the initial examination
- An increase in the average number of teeth scheduled for extraction per periodontal treatment plan.

In September 2006, the American Academy of Periodontology (AAP) developed guidelines for the management of patients with periodontal diseases to encourage referring dentists and periodontists to work together to optimize the health of patients. (see <http://perio.org/resources-products/pdf/management.pdf>) These guidelines proved to be controversial. If the guidelines were followed, 50 percent of the general dentists' customer base would be referred. Criteria for referral are similar to those found in veterinary medicine: Severity of the disease, patient's host immunity, lifestyle factors, skill level of the clinician, systemic diseases such as diabetes, anatomical considerations. (Glasscoe, 2007)

As with pet owners, financial constraints, (plus fear of pain and inconvenience/time issues) were primary reasons given for refusal to follow-up by the patient. Likewise reluctance on the part of some general dentists to refer to periodontists include factors common to veterinary medicine:

- Once a patient is referred to the periodontist, the patient is never released back to the care of the general practitioner.
- There is no periodontist within easy driving distance
- The local periodontist does not provide documentation and updates about the patient to the referring doctor as treatment progresses.
- The specialist makes disparaging remarks about care of quality of dentistry received in the referring doctor's office and the referring doctor learns of these remarks from returning patients. (Glasscoe, 2007)

Research conducted in 2006 concluded "four demographic variables have a statistical influence on the number of referrals per month from a GP to a periodontist. These variables are as follows: female gender (more likely to refer three or more patients per month to a periodontist than a male respondent), practicing with one other dentist (twice as likely to refer more frequently when compared to solo practitioners or larger group practices), employing two or more hygienists (more likely to refer patients than those with fewer hygienists), and practices greater than five miles away from the nearest periodontist (are more likely to refer)." (Zemanovich, Bagacki, Abbott, Maynard, & Lanning, 2006)

Monitor the dental industry as it continues to evolve and adjust to changes, especially those related to sourcing of periodontal services. As general dental practitioners take on more soft tissue care, how do the periodontists' roles change? What is the impact on patient outcome? What actions do professional organizations and educational institutions take? What message tactics are employed? What is the impact on the specialist/primary relationship?

C. Best Practices

The report, *Dental Screening and Referral of Young Children by Pediatric Primary Care Providers* indicates the importance of "institutional efforts to increase providers' dental

knowledge or opinions of the importance of oral diseases are unlikely to be effective in increasing dental referral unless they include methods to increase confidence in providers' ability to identify and appropriately refer children with disease. ...include components that address self-efficacy in providing risk assessment, early detection, and referral services." (de la Cruz, Rozier, & Slade, 2004) This parallels recommendations for specialists to conduct seminars and specialty clinic rounds with pcDVMs.

A second finding of *Dental Screening and Referral of Young Children* is "the referral environment is more important than provider knowledge, experience, opinions or patient characteristics in determining whether medical practitioners refer at-risk children for dental care." Included in environmental factors are: availability of dental care, increases in Medicaid/insurance coverage and community organization activities to link families, physicians, dentists with public programs. (de la Cruz, Rozier, & Slade, 2004) As pet insurance becomes more prevalent, research should be done to determine how the pet owner communities would respond to greater awareness of primary care and specialty services.

Roger P. Levin, DDS emphasizes referral-based marketing. Like pcDVM and veterinary specialists, "the majority of patient referrals are from general dentists. A practice's top referral source can provide from \$100,000 to \$150,000 in production per year or \$2 million in revenue over 20 years. A successful referral-based marketing program requires repeat, positive and consistent contact that builds relationships with referring doctors and their offices. It's true that time and money must be invested. However, when done properly this type of marketing can offer huge returns and increase referrals for the life of your practice." (Levin, 2008)

Levin further points out that the dental specialist should anticipate that over time, the practice will lose referral sources as well as patients, due to a multitude of uncontrollable circumstances. Instituting a referral-based marketing program can prevent those losses from adversely affecting the practice over the long-term. In addition, referral-based marketing allows practices to grow even during slow economic times, when patients shop for orthodontic services more carefully. (Levin, 2008)

Levin's recommendations for instituting or reviving a referral service are:

- Designate or hire a part-time professional relations coordinator. Strengthens relationships with referring doctors and staff, hygienists, and patients. Functions as the liaison to your referral base, organizational framework and momentum to ensure consistent communication with your referral base. Increases revenue by as much as 15 to 30 percent.
- Develop a targeted strategy. 15-30 repeatable marketing strategies to implement.
 - Relationship-building with referring doctors and their staffs
 - Education through seminars, fact sheets, letters, etc.
 - Branding your practice as the area's orthodontic leader
 - Better customer service through internal marketing and staff training

- Creating patient referrals through word-of-mouth and other strategies
- Monitor and track performance measurements such as:
 - Number of referral sources
 - Total referrals
 - Referrals per doctor
 - Total # of patients referred
 - Number of starts per referral source
 - Trends and changes in referral patterns
- Segmentation of referral base
 - A-level: Highest referrers
 - B-level: Lower referral rate. Work on the relationship to upgrade to A-level
 - C-level: Rarely refer patients. Unlikely to become high-level. May have relationships with other key doctors.
 - D-level: Do not refer to your office but have the potential to begin referring. Take steps to develop the relationship.
- Be Proactive with your competition
 - Focus on your office's unique selling points
 - The trend of general dentists bringing periodontics/orthodontics into their practices will further impact potential growth. Get the message out that your training and experience gives you the ability to offer more to patients *and* referring doctors. (Levin, 2008)

Valuable suggestions for developing referral programs in dentistry was offered in the blog, *Off the Cusp*, include: (McQueen, 2011)

- Name your referral program (example: *Share your Smile*)
- Monthly drawings for gift baskets, offer discounts on services, develop a program for donating to a charitable organization, or a gift card to a local establishment
- Make sure everyone on your team is comfortable talking about the program, can explain it and supports it!
- Use your practice Facebook page, website or newsletter to talk about winners—include photos

The dental community maximizes referral opportunities through collaborating with other organizations and programs such as Decide2Quit.org (smoking cessation) (Ray, et al., 2014) and WIC Nutritionists (Shick, Lee, & Rozier, 2007) to maximize referral opportunities. Of note, e-referral methods were effective with WIC referrals.

UMKC School of Dentistry, Clinical Research Center funded a study among dental and dental hygiene students in their final year of study investigating referral competencies. While over 90 percent reported a willingness to refer patients, only 40 percent reported

confidence in diagnosing, treating and appropriately referring such patients. The students' ability to recognize critical disease and risk factors was good; however, clinical application of that knowledge indicated a gap between knowledge and applied reasoning. (Williams, Burgardt, Rapley, Bray, & Cobb, 2014)

The dentistry community has also supported research into investigating the considerations used by dentists who make no periodontal referrals, relatively few referrals or more referrals. Determining criteria surfaced is similar to that found in veterinary medicine: patients from higher socioeconomic backgrounds and private insurance. In addition, referring dentists considered the patients' oral hygiene more important, and felt less prepared by their dental education. Of interest, the more positively dentists evaluated their dental education in periodontics, the more conservative they were when considering percentage of bone loss as a basis for referral, the more often they used systemic antibiotics in treatment, and the more they considered whether their patients would return after periodontal treatment as factors. (Lee, Richards, Inglehart, & Habil, 2009)

XV. REVIEW OF LITERATURE AVAILABLE TO INFORM TOPIC

Market research measuring aspects of the veterinary marketplace and practice are readily available. However, *current* behavioral and attitudinal research as well as ad hoc studies available to the veterinary marketplace pales when compared with what is available in dentistry and medicine. This section of the 2015 VetSOAP Literature Review defines and expands on the applicability of various resources.

When evaluating information available, it is important to know what questions are to be addressed and the implications of two critical research characteristics on those decisions to be made:

- **TIMELINESS:** Is the research current enough to be applicable?
- **RESEARCH RIGOR:** Is the rigor of peer review necessary? To what degree should social science research methods be applied?

When accessing articles and research reports, care should be taken to *first* determine when the research data on which the publication is based was collected. Note that *peer reviewed* studies and articles are frequently published one to two years after data collection.

Secondly, a review of the research methods should define the *degree* to which and *manner* in which the information may inform the research question(s). Care should be taken to differentiate between the sampling frame (original dataset) and the actual number of interviews completed, and between qualitative and quantitative studies.

The following is a brief of the predominant source research studies and articles referenced in this literature review. Please refer to the Annotated Bibliography for information on cited works not covered below.

A. Marketplace Resources

1. 2013 U.S. Veterinary Workforce Study: Modeling Capacity Utilization (New Longitudinal Study)

With social science rigor appropriate for measuring and projecting to the population this study is an excellent source, conducted with input from multiple sources including, AVMA, The Center for Health Workforce Studies (SUNY School of Public Health), IHS Healthcare & Pharma and an eleven member Workforce Advisory Group. Data is based on 2012 Veterinary Workforce Survey. The Veterinarian Workforce Simulation Model projects future supply and demand furthering the applicability of this research to today's needs. The datasets serving as the base for the simulation model are: AVMA's database, Biennial Economic Survey of Veterinarians (AVMA), AVMA Graduating Senior Survey, American Community Survey/U.S. Census Bureau, and the 2012 Veterinary Workforce Survey. The 2012 Veterinary Workforce Survey leveraged

the AVMA database, which is recognized as the most comprehensive database available for research in this marketplace. The longer the projective formulas are monitored the more accurate they should become. For demographics, veterinary service supply/demand, workforce supply/demand, capacity this report is an important resource.

2. ACVIM 2013 Member Engagement and Brand Assessment Survey (Biennial)

This study included ACVIM Diplomats and Candidates, JVIM readers, pcDVMs, companion animal owners, equine owners and equine trainers. A well-constructed survey includes Section 9, *General Practitioners & Referrals* as well as comparisons with 2011. A solid source of data.

3. AVMA 2013 Report on Veterinary Practice Business Measures (Biennial)

A solid study tracking back over 10 years, this report provides insight into profitability and financially-based (not attitudinal) drivers of profitability. Based on 4,198 surveys with sample utilization of 26.2% (AVMA Sample), this is a “go to” resource. A total of 352 participated in the practice analysis. Data is predominantly cut by food animal exclusive, food animal predominant, mixed animal, companion animal predominant, companion animal exclusive and equine. Of note: AVMA reports 2,300 referral/specialty medicine members.

4. Banfield Pet Hospital, State of Pet Health 2014 Report

An obvious benefit to this report is that it is conducted yearly, providing up-to-date information as well as trend analysis. In addition, this report is shared with the industry. Keep in mind the respondent base for this report is Banfield’s network of hospitals and results reflect the demographics of their targeted locations; however, the data is reflective of 850 hospitals, 2.3 million dogs and 470,000 cats. Source data is a download of case work recorded in the Banfield hospitals and is limited to but comprehensive of incidence measurements for disease and treated conditions by geography and breed. However, the 2011, 2012, 2013 and 2014 reports reviewed did not include reporting of referral dynamics between specialists and pcDVMs.

B. Behavioral and Attitudinal Resources

1. AAHA/IDEXX 2015 State of the Industry (Annual)

The Annual AAHA State of the Industry Fact Sheet compiles information from multiple sources including annual studies conducted by IDEXX Laboratories. In 2014 this report was greatly enhanced through the addition of a segmentation employing 16 key factors that identify and differentiate consistent “out-growers” from “growers” and “decliners.” (Of note, the original segmentation study included only 202 veterinarians.) Regarding applicability to VetSOAP et al, it is unknown if referral attributes were

included in the original list of 46 research attributes. In addition, the relatively small incidence of specialists (>5%) prevents reporting by specialist without establishing quota cells in advance of data collection. However, the annual research provides valuable attitudinal insights relative to pcDVMs and pet owners and contributes insight to the knowledgebase.

2. Additional AAHA Reports

AAHA continually sponsors a variety of forums and ad hoc reports. Of note is the *2006-2007 Forums on Veterinarian-Veterinary Specialist Referral Issues Report*. While satisfaction measurements are dated, the elements comprising the referral process as well as the communication issues found would be useful in designing quantitative research on this topic. This is the only report found that gives the specialist a “voice” and reports their perspectives in addition to the pcDVMs’ perspectives.

3. ACVIM Member Engagement and Brand Assessment Survey

The June 2013 report includes *Section 9, General Practitioners & Referrals*. This includes the most comprehensive and current information on referral dynamics available. While the report does not include longitudinal data, ACVIM should be encouraged to repeat this section in future waves of research and consider publishing trend data. Topics covered include: Perceptions of specialty medicine, Description of last interaction with ACVIM boarded specialist, Perceptions of specialty medicine (All GP), Referring cases (types), Referring behavior, When cases are referred, Reasons that have prevented referring cases, Communications (satisfaction). The section on equine is the most comprehensive information for equine found.

4. Bayer Veterinary Care Usage Study

This is a four-phase research effort including: Literature review, in-depth interviews with 34 practice owners, qualitative interviews with 60+/- dog and cat owners, and quantitative research with 2,188 dog and cat owners. Published in 2011, data collection occurred in 2010 just after the recession of 2007-2009. The timing of this effort captured impact of the recession and as such should not be used to define the current state of affairs which is now 6 years out from the recession. Unfortunately referral activity is not explored in this study; however, this study is well organized and lends value to the knowledge base. Valuable perspectives and new thought regarding the pcDVM/client relationship are presented. Much of this may be directly and indirectly applicable to specialists. Review for the big picture as well as detail elements included and keep measurements in perspective.

5. Hill/CalPro Research, Net Promotor Database

Industry reports are published to customers of CalPro Research and interested parties (on request). CalPro Research is continuing to develop a database of behavioral and attitudinal data that could prove to be beneficial for further study. This database was

initially developed through collaboration between Zoetis and CalPro Research. Content is included in this literature review from the most current white paper released in May of 2015 as well as the 2012 release. The 2105 report includes 110 specialty hospitals, 20,000 responses from pcDVMs, pet owner feedback reflecting 110,000 customer responses.

6. Canadian research published by AVMA

AVMA has published several ad hoc cross-sectional studies conducted in Canada. Of note is, *Factors Influencing Veterinarian Referral to Oncology Specialists for Treatment of Dogs with Lymphoma and Osteosarcoma in Ontario, Canada* (2013). With over 1,000 participants and a 39% sample utilization rate, this vignette-based research method yielded in-depth and robust content, reporting in 2010. USA-based research comparable to this study was not surfaced through the literature review.

Of note is the authors' caution: "Normative prescriptions, such as treatment recommendations, are formed on the basis of facts and values. Thus, the ability to generalize the findings of the present study to veterinary populations with values that differ from those within the study may be limited."

7. DVM state of the Veterinary Profession 2012 (Triennial)

Look for a new release of this report in 2015. Sent to 73,695 subscribers, a 5% response rate was realized with 3,355 responses. Although the incidence of specialists is most likely too small to analyze in this study, longitudinal information about primary care practices is valuable. The section, *Services Provided and Projected*, included in the 2012 release is of utmost interest to this topic. Hopefully this topic will be included in the future study release.

8. Satisfaction with Specialty Services, Part 1 & 2 | Zoetis 2008-2009 Specialty Hospital Survey (Ad Hoc)

The white papers, *Satisfaction with Specialty Services*, Part 1 and Part 2, published by *Trends Magazine* in 2014, were based on primary research, *Zoetis Specialty Hospital Survey*, conducted in 2008/2009 (Fisher, McFarland, Stansfield, & Coles, 2008/2009). While this report is noteworthy as it is one of the few providing data on pcDVMs vs Specialists, satisfaction measures have a "shelf life." Given the age of the data as well as the 2008/2009 economic environment and evolutions in collaboration tools/methods, much of this data may not be applicable to the 2014-2015 state of affairs. The survey instrument reflects actionable study design including well thought out attribute lists. A second wave of this research would most likely provide insightful longitudinal data. When reviewing this report, keep in mind the research sources approximately 30 specialty hospitals and pet owners utilizing those hospital services (400) and referring DVMs (200) utilizing those hospital services. Satisfaction studies, by definition, are designed to support and prioritize continual improvement initiatives; as such, change within 1-2 years is normally expected. For example the conclusion that *a phone call*

prior to treatment, and a fax report at the conclusion of treatment, are sufficient (communication from the Specialist to the pcDVM), is disputed by other research indicating the communication relationship now requires more involvement by all parties.

9. General Communication

Information abounds regarding effective communication approaches to veterinary medicine. This information may be useful in developing programs and constructing research instruments. For example: JAVMA published observational/qualitative research conducted in Canada that detailed the importance of the veterinarian opening discourse with an open-ended question. “The odds of a new concern arising during the closing segment of an appointment were 4 times as great when the appointment did not contain a veterinarian solicitation at the beginning of the interview.” (Dysart, 2011)

XVII. RECOMMENDATIONS

The knowledge gaps revealed through this literature review indicate immediate need for primary research. Please refer to pages 8 through 15, *Knowledge Gaps and Next Steps*.

In summary VetSOAP's next steps might include the following. With the exception of the primary research efforts which should be executed consecutively the tasks may be run concurrently.

A. Define Referring Veterinarian/Referring Practices

B. Partner with other research efforts

Suggest adding the *Referring Veterinarian Practice* criteria to longitudinal research and include as an independent variable. Analysis to include correlations with *Healthy Practice* to answer questions such as, *Is a referring practice a healthy(healthier) practice? What percent of patients are referred? What is the potential for the referral market?*

C. Qualitative Immersive Discussion Boards with pcDVMs, pet owners

Immersive Discussion Boards provide the opportunity to surface the unknown, clarify assumptions, develop present-day attribute lists and test approaches to be utilized in design of the quantitative survey instrument.

The inclusion of the following content will provide the foundation for member and industry communications development and outreach programs as well as provide the fundamental detail required for quantitative survey instrument development. Results will be publishable.

- How does/might referrals impact the growth of pcDVMs' practice (positive and negative),
- Exploration into the triggers for referral,
- Pretest scenario effectiveness. Note: The quantitative phase will quantify findings and include comparative analysis between specialists, pcDVMs and pet owners.
- Exploration into elements of cost concerns
- Qualitative investigation into formation of value perceptions

D. Quantitative Research with pcDVMs, specialists and pet owners

While Immersive Discussion Boards elucidate the multiplicity of perspectives, the quantitative research phase quantifies and projects the manifestation of the factors in the marketplace. Unique to this research is scenario-based case presentations which enable analysis between all three cohorts and will answer questions such as, *How does the pcDVM's perception of pet owner willingness to pay match the owner's willingness to pay?* Results will be projectable to the population and publishable.

The results of the primary research effort may be used to inform the knowledgebase and direct VetSOAP's outreach effort in a manner benefiting specialists, pcDVMs, pet owners and companion animals.

E. Learn from the dental industry. Set up monitoring of related articles and publications in the dentistry industry. Consider special investigations such as: how the dental industry achieved an environment/culture of referral among professionals and patients.

XIX. LEVERAGING THIS LITERATURE REVIEW

The following is a compilation of ideas presented by the board for leveraging this literature review.

- Produce a summary of the report for sale. Note this report is organized by the questions the board presented. It would be best to create new topics and reorganize for publication to a wider audience. Consider a report in MS PowerPoint which may prove to be easier to share and present.
- Produce white papers on specific topics based on the findings. Release individually to industry, publishers, and make available on the VetSOAP website.
- Produce short [forward-thinking] thought-leader video interviews relating to the points brought out in the literature review. Post on website and encourage other organizations to post.
- Produce a brochure for specialists to give to clients at discharge emphasizing the importance of the partnership with the pcDVM in the continued care of the patient and the importance of routine wellness visits.

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