

**Development of a
Veterinary Teaching Hospital Business Model**

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EXECUTIVE SUMMARY

The KPMG report entitled, “The Current and Future Market for Veterinarians and Veterinary Medical Services in the United States,” published by JAVMA on July 15, 1999 contends that veterinarians may lack some of the non-technical skills, knowledge, aptitudes, and attitudes that result in economic success (SKAs). The National Commission on Veterinary Economic Issues (NCVEI) was established to address the problems identified by the KPMG study, and one theme that repeatedly and consistently surfaced as the NCVEI considered potential actions was the need for progressive leadership and management of our veterinary teaching hospitals to serve as a model for both students and practitioners to emulate. To meet this need, the development and publication of a standardized business model for veterinary teaching hospitals (VTHs) was proposed.

The VTH is not a private practice, so useful systems and procedures for leadership and management cannot be expected to be fully compatible or transportable between the two models. However, the basic principles of organizational leadership and management are the same regardless of the specific organization involved, and as such should have meaningful applications in either the public or private sectors. Each VTH is also unique, so development of a single prescriptive model for implementation of leadership and management principles cannot be expected to be effective for every campus. As such, development of the VTH business “model” should be viewed as an exercise in identifying key issues to address in VTH leadership and management, and the suggestions that arise from the process should be viewed as possible approaches to be considered for implementation within the context of each individual campus.

To develop a VTH business model, the expertise and unique perspectives of academicians, private practitioners, and veterinary practice management consultants were collected through a rigorous schedule of focus groups conducted across the veterinary profession. The discussion format was the same for all focus groups. After an introductory round of “Why is this topic important?” the standard business topics of strategic planning (balancing the tripartite mission), financial management, pricing, human resource management, legal and ethical issues, marketing, and operations management were addressed sequentially.

As a general pattern, discussions tended to organize around two central themes: strategic issues and operational issues. Although the lines are not always exactly definitive, this pattern is more-or-less consistent with a distinction between leadership (strategy) and management (operations/tactics).

Focus group participants recognized that VTHs are facing management challenges of a type and magnitude not characteristic of anytime in the past. Rapidly changing structure in the market for veterinary services with an increasing prevalence of private specialty practices has led to the availability of more options for animal owners and referring veterinarians seeking specialty veterinary care. These issues occur at a time when trends in state appropriations for the VTH (when they exist) are flat at best, and are commonly decreasing.

According to participants, the key challenge in balancing the mission relates to the three basic tasks of the VTH: teaching, service, and research. A number of suggestions were offered to help address these issues, but at the foundation it was noted that strong, effective leadership is needed.

A clear vision is vital, starting in the Dean's office. Because of the complexity of the situation, structured strategic planning and management were strongly recommended.

When discussing financial management, concern was expressed that there needs to be a balance between financial and academic goals in the VTH; profits can't be the foremost objective.

Methods and systems of effective cost accounting, budgeting, financial reporting, and benchmarking were suggested for VTH consideration.

The pricing topic generated discussions about the philosophy of pricing, how to set prices, who should set prices, how discounts should be managed, and issues relating to student awareness of pricing policies. Participants agreed that pricing is a very important issue for VTH management. However, agreement was not as clear with regard to the importance of price as a choice factor for clients seeking veterinary service. Although the literature is clear on the inelasticity of demand for veterinary services, university participants in particular worried about the potential adverse impact of price increases on caseloads. Setting prices, adjusting prices, and pricing benchmarks were all topics of considerable discussion, which provided background for a number of recommendations.

Human resource (HR) management in the VTH was discussed with regard to overall management, administration, faculty, and staff. The overwhelming consensus from all participants was to build a system that fostered teamwork and mentoring in a respectful workplace. A culture of respect and responsibility within the VTH was viewed as highly desirable, avoiding a situation where "doctor-centered" teams prevail. HR concerns regarding

faculty emphasized the importance of attracting and retaining veterinarians to work in the VTH. For staff, emphasis centered on hiring the right people, teamwork, appropriate compensation, staff development programs, and the proper use of well-trained technicians.

According to participants, marketing the VTH should start with understanding who the market is, what needs exist, and developing a strategy from there. Understanding market needs can be a challenging endeavor, and conducting client and referring veterinarian surveys or focus groups to ask about both the suitability of current services and potential service needs or improvements was strongly suggested. Not surprisingly, the referring veterinarian was recognized in several forums as the most important VTH customer. For both referring veterinarians and clients, customer service was seen as a top priority. The importance of marketing the VTH to the general public (including the greater university community) was also widely discussed, and progressive use of mass media was suggested.

Discussions that related to operations management in the VTH touched on topics such as the physical environment, procedures and systems management, efficiency, and customer service. Participants agreed that the VTH must become efficient in workflow issues, work place facilities, and time management. Related procedures and systems management issues were discussed, and the use of benchmarks was suggested for management of both efficiency and customer service.

Legal issues were viewed as especially important for the VTH in light of the increasing size of awards being granted by courts today. In general, it was suggested that faculty should be aware

of, and comply with, the pertinent legal requirements. Several comments were also recorded with regard to the ethical responsibility of a model VTH, and recommendations were provided.

Along with the host of recommendations and suggestions, participants also acknowledged a number of noteworthy constraints to the implementation of a model VTH. Topics that topped the list included the need for effective leadership, the challenge of balancing the mission, the resistance to achieving effective change in culture, and the frequent difficulty encountered in working with university policies and systems.

From this project, a number of broad-based recommendations have arisen. First, it was suggested that the VTH business model be communicated across colleges/schools of veterinary medicine. In addition, it was recommended that a national dialogue on balancing the mission be initiated, that networking among and between VTH directors and administrators be enhanced, and that benchmarking for VTH management be developed.

At the level of individual colleges/schools, recommendations for both the strategic view/ leadership and operations management were provided. Leadership for the VTH should include a clear vision and mission, and be supported by progressive systems of strategic management. Specific management recommendations were also provided related to finance, pricing, human resources, marketing, operations, and legal/ethical issues. To achieve these ends, it was recognized that it may be necessary to utilize the services of outside consultants.

Although a number of constraints have been identified, implementation of the VTH business model should be feasible to some degree at all VTHs. Ultimately, colleges/schools of veterinary medicine will be better able to achieve their individual vision/mission and meet stakeholder needs as a result.

INTRODUCTION

The KPMG report entitled, “The Current and Future Market for Veterinarians and Veterinary Medical Services in the United States,” published by JAVMA on July 15, 1999,¹ continues to generate a great deal of discussion across the veterinary profession. One specific item that has been the focus of considerable interest is the contention that veterinarians may lack some of the non-technical skills, knowledge, aptitudes, and attitudes that result in economic success (SKAs). Scientific and technological skills and knowledge are necessary for today’s veterinarians but, by themselves, are not sufficient to produce successful veterinarians. Business expertise is also desirable, as well as individual capabilities such as leadership, interpersonal, and communication skills; working well in a team; and understanding cultural differences and values.

The fact that non-clinical capabilities can be vital to a veterinarian’s economic success was reinforced by the Bayer/Brakke study.² Published after the KPMG work, this report contends that issues including business acumen, self image, and the ability to consistently price veterinary services are key determinants of success.

The National Commission on Veterinary Economic Issues (NCVEI) was established to address the problems identified by the KPMG study.³ Toward that end, several working subgroups were formed, including one to study the non-technical SKAs that are correlated with economic and professional success and to answer the question: if veterinarians do not currently have these skills, how can we as a profession see that they are incorporated into our professional culture?

The SKA subcommittee has worked diligently to define the current strengths of the veterinary profession (with regard to non-technical SKAs), and identify opportunities for improvement and recommended action plans.^{3,4,5,6} During December 2000, the SKA group met at Brook Lodge in Augusta, Michigan to define the veterinary profession's current baseline of non-technical SKAs, to begin developing a consensus of what non-technical SKAs are needed, and to deliberate about how and where to implement change.^{6,7} It was determined that regional meetings would be beneficial to gain a broader base of input from across the profession while validating and strengthening the Brook Lodge findings. Consequently, workshops were held at North Carolina State University on April 20, 2001 and at the University of California, Davis on May 20, 2001. One of the outcomes of these meetings has been a realization that the desired attributes for veterinarians' professional success in a given environment can be obtained through careful selection of individuals who are invited to enter the profession, appropriate training of those admitted, or both.

One suggestion that repeatedly and consistently surfaced during these meetings was the need for progressive leadership and management of our veterinary teaching hospitals to serve as a model for both students and practitioners to emulate. To meet this need, the development and publication of a standardized business model for veterinary teaching hospitals (VTHs) was proposed. This model would serve as a key reference for VTH administrators to use when developing and evaluating their structures and processes for leadership and management.

At the outset, it is important to recognize that the VTH is not a private practice, so useful systems and procedures for leadership and management cannot be expected to be fully compatible or

transportable between the two models. However, the basic principles of organizational leadership and management are the same regardless of the specific organization involved, and as such should have meaningful applications in either the public or private sectors. In addition, it is vital to understand that each VTH is unique, so development of a single prescriptive model for implementation of leadership and management principles cannot be expected to be effective for every campus. As such, development of the VTH business “model” should be viewed as an exercise in identifying key issues to address in VTH leadership and management, and the suggestions that arise from the process should be viewed as possible approaches to be considered for implementation within the context of each individual campus. Perhaps it is useful to think of the project’s specific aim as one of providing a better model for students and practitioners to emulate, and not the development of a single, standard model for all VTHs to implement in an identical fashion.

METHODS

To provide a foundation for developing the model, pertinent literature applicable to VTH management was reviewed. General business textbooks and references provided the structural framework and the core of basic business principles. As it turned out, much of the literature specifically relevant to VTH management relates to work completed for the human side of medicine (Academic Health Centers, or AHCs), or to the private sector. Following the framework provided from the business literature, the review explored management practices in strategic planning, financial management, human resource management, marketing, pricing, operations, and legal/ethical issues. The complete review has been published elsewhere.⁸

To validate and augment findings from the literature, the expertise and unique perspectives of academicians, private practitioners, and veterinary practice management consultants were sought. To achieve this end, data for this project were collected through a rigorous schedule of focus groups conducted across the veterinary profession. These groups included both large and small-animal practitioners, university faculty and staff, academic administrators, veterinary practice management consultants, and representatives of organized veterinary medicine. The discussions were conducted at national veterinary conferences (practitioners, consultants, and academic administrators) and at various veterinary schools (faculty, staff, and administrators).

Specifics about the focus groups are summarized in Table 1. In all, focus groups were conducted at 11 different veterinary schools during the fall of 2002. Depending on the venue, these discussions included faculty, staff, hospital directors and administrators, college business officers, assistant and associate deans, and sometimes the deans themselves. For the practitioners, focus groups were conducted with the American Association of Equine Practitioners (AAEP), the American Association of Bovine Practitioners (AABP), the American Animal Hospital Association (AAHA), and the Michigan Veterinary Medical Association. The American Association of Swine Veterinarians was also contacted but the offer for participation was declined because their members do not frequently refer cases to VTHs. In addition, focus group discussions were conducted with the North American Veterinary College Administrators (NAVCA) and the Association of Veterinary Practice Management Consultants and Advisors (AVPMCA).

Table 1. Veterinary teaching hospital business model focus group discussions, 2002

<u>Non-faculty Groups</u>	<u>Date</u>
Academic administrators*	July 13
American Animal Hospital Association (practitioners)	July 14
Michigan Veterinary Medical Association (practitioners)	July 28
Association of Veterinary Practice Management Consultants and Advisors	August 17
American Association of Bovine Practitioners	September 26
North American Veterinary College Administrators	October 9
American Association of Equine Practitioners	December 3
<u>Faculty Groups</u>	
University of Minnesota	November 12
University of Wisconsin	November 13
The Ohio State University	November 15
University of California, Davis	November 18
Washington State University	November 20
University of Florida	December 2
North Carolina State University	December 4
University of Illinois	December 6
University of Missouri	December 12
Tufts University	December 13
Michigan State University	December 19

*included a mix of Associate Deans, VTH Directors, and VTH Administrators

Groups were invited to participate based on their responsibilities, expertise, clinical involvement with VTHs, and to achieve diversity across species. Schools were selected to both achieve geographic diversity and to build on an expressed interest in VTH leadership and management. Within each group, the study's principal investigator initially contacted a single person. For the schools, this contact was usually the dean or VTH director. In the practitioner groups, the contact was with the executive director.

For the non-academic groups, recruitment of participants was left to the contact person for the most part. It was suggested that 8 to 12 (no more than 15) thoughtful individuals who would be willing to share their ideas be recruited for each group. The experience was described as an in-depth discussion of at least 2 hours, but likely 3 or 4. A tentative discussion outline was also provided. Because many academics are members of the Associations in question, the point was made that the perspective of academicians would be obtained in another venue, and that this session was designed specifically to obtain the non-academic perspective.

For the faculty discussion groups, again the point person was instrumental in recruitment. Here it was suggested that a group of 8-12 members of the clinical faculty from a diverse background of disciplines and species be convened. Further, it was suggested that it would be best to involve those individuals who would be thoughtful and interested in hospital management issues, and would be willing to share their insights and perspectives. Some schools convened a single group, but others convened several groups. Some groups contained only faculty, some were only administrators, others included just staff, and still others contained a mixture. It is worth noting

that conversations in faculty groups when an administrator also participated often seemed to be somewhat restricted. However, this situation occurred in only a few cases.

In both academic and non-academic groups, many participants were self-selected in response to a widely distributed invitation, but others were appointed by the contact person for their particular group. Discussions were admittedly biased by the selection method of participants, and results should be interpreted accordingly.

The discussion format was the same for all focus groups and followed a consistent *Discussion Outline*. After an introductory round of “Why is this topic important?” the standard business topics of strategic planning (balancing the tripartite mission), financial management, pricing, human resource management, legal and ethical issues, marketing, and operations management were addressed sequentially. Each session then concluded with the opportunity to discuss implementation constraints and change management. Most participants reviewed their own group notes for accuracy.

Organization of report. This balance of this report is organized into sections of results, discussion, and recommendations. The results section summarizes focus group participants’ thoughts, comments, and suggestions. Comments were grouped according to common themes, frequency of responses, and strength of opinions. Most comments have been reported, but inclusion/exclusion decisions had to be made as to their applicability to VTH leadership and management. Some comments were more relevant to the topic of discussion than others. The discussion section considers participants’ ideas in light of common practices from the literature

review and basic business practices. Finally, recommendations for future development of this model are presented.

RESULTS

This section of the report summarizes the high points of the focus group discussions. Due to the sheer volume of the data collected, not all comments could be included in this report. However, attempts were made to include those comments that clearly resonated with individuals or groups, and those that were consistent with the literature. Often, focus group discussions strayed to related issues that were not deemed to be central to this research, such as admissions and curriculum. Although many of these topics are also vital to the future of veterinary medicine and to improvement of non-technical SKAs, accompanying comments are not reported here in an effort to maintain an effective focus on the VTH.

As a general pattern, discussions tended to build on the *Discussion Outline* and organize around two central themes: strategic issues and operational issues. Although the lines are not always exactly definitive, this pattern is more-or-less consistent with a distinction between leadership (strategy) and management (operations/tactics). Results have been organized in a manner to reflect this distinction while maintaining the fundamental structure provided by the *Discussion Outline*.

By the nature of the research, data in different sections cannot be expected to be mutually exclusive; considerable overlap was found, as the reader will note. For the most part, comments

are reported in this section without analysis or value judgment, and reflect the opinions of study participants. Summary and synthesis leading to recommendations will be reported in subsequent sections of this document.

Strategic Issue #1: Why is this Topic Important?

At the outset, it is important to emphasize that participants recognized the very real differences between the VTH and a private veterinary practice. As such, the VTH was not viewed as a viable model for a private practice if the intent was to adopt systems and procedures verbatim. Improved leadership and management in the VTH were deemed as very important nonetheless, for the reasons that follow.

In general, participants recognized that VTHs are facing management challenges of a type and magnitude not characteristic of the past. Rapidly changing structure in the market for veterinary services with an increasing prevalence of private specialty practices has led to the availability of more options for animal owners and referring veterinarians seeking specialty veterinary care. This situation has raised concerns over maintaining VTH caseloads adequate for teaching. Concurrently, the same specialty practices are offering unprecedented employment options for veterinarians with specialty training, leading to concerns related to recruitment and retention of an appropriate mix of well-trained faculty for the VTH. These issues occur at a time when trends in state appropriations for the VTH (when such appropriations exist) are flat at best, and are commonly decreasing. The budgetary challenges that result led one participant to comment that “...the VTH is a business and it needs to make money.”

In addition to the management challenges, this topic was viewed as important from the perspective of student training in the VTH. The basic principles of organizational leadership and management were viewed as fundamentally the same, regardless of the specific organization involved. Recognizing the importance of first impressions, it is these principles that participants hoped to have modeled for students in an effective manner in the VTH. It was generally agreed that if students could clearly perceive the importance of good leadership and management in the VTH, then they would be more likely to expect (and perhaps help to develop) the same in the organization they joined on graduation, regardless if that organization was a private practice, a corporation, an academic institution, or a government agency.

Participants also recognized that enhanced leadership and management in the VTH might well result in improved relationships with practitioners. The support of referring veterinarians and alumni was seen as vital to the success of the VTHs and their associated colleges or schools of veterinary medicine.

Strategic Issue #2: Balancing the Mission

Issues. The key challenge in balancing the mission relates to the three basic tasks of the VTH: teaching, service, and research. Having a three-part mission is a particularly unique feature of the VTH when compared to the private veterinary practice, whose primary mission is usually service. Participants indicated that differential emphasis on research (vs. teaching and service), whether real or perceived, can lead to burned-out clinical faculty. Inevitably, such situations

result in poor clinical service, an accompanying poor model for students, and a tendency to drive clinical faculty out of academia.

Achieving balance within each part of the mission can also be a challenge for the VTH. For example, achieving the appropriate mix of cases to support the needs of the teaching program can often be problematic. Because one of the major goals of most veterinary curricula is to produce competent, entry-level practitioners, this can be an issue in seeking an appropriate mix of primary vs. referral cases. Developing adequate entry-level skills can be difficult in the absence of sufficient experience in primary care. Similarly, appropriate mixes are needed between specialties and between species.

It is inherently difficult for individual faculty members to achieve an appropriate balance on their own, because they are often not able to fully weigh the pros and cons from the college perspective. Consequently, ad hoc decisions can be counterproductive.

Suggestions. A number of suggestions were offered to help address these issues. First, it was noted that strong, effective leadership is needed. A clear vision is vital, starting in the Dean's office. It was pointed out that the Dean needs the vision before effective change can be expected, and in the absence of a clear vision it is difficult to get everyone on board.

In addition, operating from an appropriate administrative structure is important if an acceptable balance across the mission is to be achieved. For example, the hospital director might also be associate dean for clinical services to assure that clinical service doesn't become of lower

priority than the academic pursuits of teaching and research. Similar mechanisms should be devised to assure that the types and quantities of clinical cases seen in the VTH are appropriate to meet the needs of teaching and research.

Because of the complexity of the situation, structured strategic planning and management are strongly recommended. Based on the mission and vision, it is important to develop clear goals, corresponding plans to achieve those goals, and methods for follow-up monitoring. This process needs to maintain a global perspective, focusing on what's best for the college.

With regard to the VTH, the specifics of the mission need to be considered across species.

Maybe not all colleges need to provide every program. For example, the question was posed as to whether or not a particular VTH should even seek to provide a food animal service in light of both the associated economic constraints and the markedly changing nature of food animal practice. If the food animal service was maintained, revenues from small animal services may actually be needed as a subsidy to make the food animal service feasible. For any given species, it was noted that the balance of clinical services needed to meet the academic mission may not match market opportunities, and potential solutions that might need to be considered would include things like use of private practices to help train students, adopting a regional approach through cooperation with other VTHs, and development of satellite clinics to maintain caseloads.

As a result of prioritization, it may even be necessary to consider dedicated fund raising to support certain clinical services that cannot be funded entirely from clinic revenues. The

question was posed as to whether or not it is possible to budgetarily separate service functions (supported by client dollars) from teaching functions (supported by tuition and state dollars).

In addition to species priorities and caseload mix, the strategic planning process should consider broader programmatic issues. For example, growth should be considered as a potential strategic objective. One university participant offered the opinion that status quo was unlikely to be sustainable in their particular market, stating that, “If we don’t grow continuously, we die.” Unique trade-offs, constraints, and opportunities are often associated with certain programs and should be appropriately recognized, such as the decrease in hospital efficiency that accompanies the training of students, interns, and residents. Similarly, the capability to offer certain “high margin” services in areas of high demand may need to be maintained independent of the teaching value of the clinical cases involved.

It was suggested that an outside advisory group might be useful both in the strategic planning process and in the follow-up. In that regard, partnering with organized veterinary medicine was recommended as a key part of obtaining stakeholder input – building relationships to assist with setting priorities, hiring decisions, etc.

Throughout the strategic planning, it was suggested that a global view and flexibility should be maintained. Faculty input should certainly be included, while remembering that prioritization is not the same as majority rule. In fact, faculty retreats were suggested as a means to develop strategic plans based on established priorities.

To achieve accountability with regard to the strategic plan, monitoring progress toward goals is essential. Among other things, it was suggested that outcomes be measured – students, interns, residents, service, research, etc. In addition, periodic surveys of referring veterinarians, clients, employees, and students were thought to be potentially useful. One college is developing a balanced scorecard as a method of monitoring strategic progress and maintaining focus.

In addition to monitoring, the reward system for faculty is crucial in maintaining alignment with the strategic plan. In short, the reward system should recognize the importance of all three parts of the mission. Both clinical track and tenure track positions should be considered for their individual merits in light of the strategic objectives. If researchers are being recruited, then their expectations, time allocations, and reward system should be focused accordingly. Obviously, if an increased amount of these individuals' time is committed to teaching and clinical service, a negative impact on research productivity can be expected. Conversely, clinical service needs to be appropriately valued and rewarded among the faculty with caseload responsibilities. Several participants held an impression that difficulty balancing time has pulled faculty away from academia into the private sector. Several suggestions surfaced regarding an opportunity to run parallel services in the VTH – one for teaching and one for service – as a method to consider for helping focus the efforts of the faculty.

To enhance the success of strategic planning and management, it was suggested by both practitioner and university discussants that outside consultants be utilized by the VTH. These individuals would help to assess the current state of affairs, provide useful information on potential methods for improvement, and model the appropriate use of consultants for students.

Operational Issue #1: Financial Management

Goals of financial management. When discussing VTH financial management, opinions varied on appropriate financial goals. It was stated that most schools don't have complete financial knowledge and many are turning to outside consultants for help with their financial analysis. Concern was expressed that there needs to be a balance between financial and academic goals; profits can't be the foremost objective. One participant questioned, "What other teaching labs on campus are expected to generate their own support?" Another made an argument against profitability because the state government may start viewing the VTH as a profit center. Several participants, however, believed that with shrinking state revenues, the VTH must generate income. "No margin, no mission" was acknowledged. One university discussant believed the goal for their food animal service was to make money. Another suggested that the VTH be divided so a separate part can be profit driven.

Practitioners felt that students should have increased exposure to the costs of veterinary medicine. They wanted students to understand the client bill. They felt more exposure to the financial aspects of a case would help them understand the cost vs. benefit basis of decisions that many clients face. One idea was to incorporate a "business expert" into clinical rounds periodically. It was suggested from a university participant that by improving students' financial knowledge they might get higher salaries.

Methods of financial management. Regardless of the methods used for financial management it was recommended by one participant that the more systematic you can be about exposing people to finance, the more efficient you can be at having them develop a functional awareness and pick up associated skills. Several potentially useful methods were discussed including cost accounting, budgeting, reporting, and benchmarks.

Cost accounting. A majority of university-affiliated discussants, in addition to the practitioners, mentioned cost accounting as an appropriate method of financial management.

It was discussed as a positive method for several reasons including:

- To help faculty and students understand the cost of delivering service
- To assist decision making and allocation of resources
- To provide a basis for prices
- To understand the cost of teaching
- To increase the understanding of cost as a basis for value of service
- To understand and develop profit centers
- To strengthen pharmacy management systems, in particular

It was suggested that each procedure and service undergo cost accounting. One suggestion was to implement cost accounting along with time management studies and then sort clinical vs. research vs. teaching costs.

The negative side of cost accounting was also discussed. It was mentioned that it is possible to “over-cost account,” adversely affecting the morale of those faculty members who work at a university because they like to teach, and who enjoy the other academic pursuits (including research). It was also suggested that traditional methods of cost accounting might not be useful in a VTH because of the 3-part mission of each case. The difficulty of allocating overhead in the VTH was also recognized, and one participant did not believe it was fair to

apply all of the VTH overhead to the fee schedule. It was suggested that the business office work with the faculty in development of cost accounting systems to boost the credibility of the resulting information. Although cost accounting and profit center analysis were viewed as positive tools for use in allocation of resources, participants cautioned that not all decisions should be made solely on the basis of cost accounting and profitability; the VTH also needs to consider programmatic priorities across the three part mission.

Budgeting. Budgets were discussed with regard to how they should be developed and who should be responsible. It was suggested that VTH management should develop budgets with the input of service chiefs and lead technicians, providing those individuals with, among other things, revenue targets and the ability to explore potential means to pay for new equipment as it is requested. It was also stated that faculty should have input into budgets and then be made aware of how they are doing to stay on budget. The system should be transparent. Many suggestions were offered to strengthen budget development, including:

- Consider all sources of income – service, research, donors, government
- Develop a budget for the entire VTH, not just individual services
- Budget by service, based on cost accounting
- Budget by cost center
- Budget each mission separately

It was suggested that effective budgeting should indicate how many positions could be supported in any service.

Reporting. Financial reports were important to some participants but opinions on what should be reported varied widely. It was noted that some university accounting systems are not amenable to VTH financial management and reporting. However, it was viewed as important

for the VTH to have computer systems that provide the capability to generate useful financial reports in a timely manner with minimal effort.

Whatever financial reporting system is used should allow administrators to compare services and facilitate “what if” analyses. For teaching purposes, the system should be able to collect and report data that are comparable to private practice. To build credibility, financial reports should be transparent and accessible to faculty and students; users need to understand and trust the system. In particular, it was recommended that faculty thoroughly understand where the money comes from, how it is used, and what impact (if any) financial results might have on their own performance evaluation. One practitioner believed that clinicians frequently discount procedures, which in effect makes economic decisions for the client and the entire VTH. This could be tracked by better financial reporting.

Key measures suggested for inclusion in financial reports were:

- Average client transaction (ACT) – both overall and by clinician
- Gross revenue by clinician
- Service income
- Revenue by clinician, source, case
- Revenue and cost per hour of operation
- Diagnostics per case
- Costs of special equipment
- Discounts by clinician
- Bad debts by clinician
- Payback on equipment
- Cost of disposable items
- Profit/loss by department or service

It was suggested that faculty who know their own ACT will be more sensitive to how their students who enter practice will be evaluated after graduation. In addition, it was recognized

that development of financial reports at all VTHs using consistent methods would allow them to compare data and develop benchmarks.

Particular concerns were expressed for calculation of indices such as gross revenue per clinician in services that may not provide primary care, but play a vital supportive role in the VTH (eg. anesthesia, radiology, in-house consults, etc.). Also, consistently and clearly addressing the question of whether the primary service receives “credit” for revenue generated by supportive services provided to cases they initiate generated a considerable amount of discussion.

Benchmarks. Participants suggested that benchmarks be developed for evaluating financial trends. In addition to assisting management, it was stated that having these benchmarks would help faculty understand how graduate veterinarians are evaluated in private practice. One participant, however, didn’t think faculty should receive reports on things they could not control. A few VTHs currently have financial benchmarks that they use for internal management. Several university participants suggested that AAVMC should act as a starting point to define and collect benchmark data across schools. However, standardization will be critical for this exercise. Metrics such as caseload (exactly what is a case?), FTE faculty commitments to the VTH, and FTE technicians need to be clearly defined, based on user input.

Ultimately, the benchmarks could be similar to ones used in private practice, but could not be compared directly to them because goals are different between the two systems. Benchmarks

could be used to compare between VTHs or internally to assist faculty in understanding how revenues and expenses are related, and how trends develop over time. Some benchmark figures and ratios suggested were:

- Gross revenue per hour of service
- Average client transaction (ACT)
- Ratio of faculty to technicians
- Products and services as a percentage of gross revenue
- State support as a percentage of revenue produced
- Drugs and supplies as a percentage of gross revenue
- Total expenses and salaries as a percentage of gross revenue

Operational Issue #2: Prices

General comments. The pricing topic generated discussions about the philosophy of pricing, how to set prices, who should set prices, how discounts should be managed, and issues relating to student awareness of pricing policies. There was general agreement among participants that pricing is a very important issue for VTH management. However, similar strong consensus was not achieved when considering the importance of price as a choice factor for clients seeking veterinary service. Although many participants expressed a belief that clients shop around for standard procedures, the same type of agreement was not reached with regard to specialty services.

Several participants believed that VTH clients are very price sensitive, yet others commented that prices are not always a factor when choosing veterinary care and decisions are made based on reputation, equipment, facilities, and location. Clients sometimes have the perception that profit is not a motive at a VTH and this is attractive to them. One VTH believes the perception

exists that they give teaching discounts even though they don't. They also believe that this perception, albeit erroneous, actually increases referrals.

Concern was raised (in both university and practitioner forums) that there should not be price competition with local practices, especially with drugs. However, these same sentiments did not extend to specialty practices. A common suggestion involved the need to keep prices at a point that maintains an adequate teaching caseload.

Participants recognized the important link between price and service. Several comments were made that university expertise is high; the service should be just as high and prices should reflect the levels of expertise and service involved. It was also mentioned that high prices are necessary because of the extensive support staff required by the VTH (radiologists, anesthesiologists, etc.). One participant believed that high prices would indirectly help students receive higher salaries. Another expressed that if the level of service is inconsistent across the VTH, it becomes difficult to establish consistent prices; however, if the service is consistently excellent, prices become less of a factor. Concern was raised that if prices are too high it might become difficult to have case follow-through and that prices should always be appropriate for the service actually provided. Practitioners generally expressed the perception that many VTH fee structures were out of line. One contributor felt that VTH prices are currently quite high to cover operational inefficiencies, but another said the university prices were "laughably" low.

When discussing who should set prices, nearly half of the comments made were against faculty having anything to do with price determination. After honoring faculty requests not to raise

prices, one university reported experiencing a drop in referrals as a result of referring DVM dissatisfaction. In spite of the backlash, clinicians at that VTH still thought fees were too high.

Slightly over half of the comments reflected a belief that prices should be set by hospital administrators/directors, the business office, or a hospital advisory board or committee. A few felt faculty or sections should have input via boards or committees, but it was recognized that faculty should not generally have the capability to arbitrarily cut/change fees. One participant actually suggested that faculty should have no method of changing prices or offering discounts. At least two practitioners wanted local practices to be involved in VTH pricing policies.

Practitioners had more comments about food animal prices, as they believed that prices are extremely low at the VTHs in an effort to attract ambulatory cases. A university participant suggested that food animal services should not be required to follow pricing policies of companion animal and equine services, and believed food animal prices should be different. One university contributor explained that at their VTH, the equine service prices are market driven.

Setting prices. Use of pricing tools such as the ones available for private practices was suggested for setting VTH prices. Ideas mentioned were *The Veterinary Fee Reference* published by AAHA,⁹ the well-managed practice study,¹⁰ value-based pricing strategies, private practice prices (for both community service and local specialty practices), the NCVEI website (www.ncvei.org), COGS (cost of goods sold), and other methods available from *Veterinary Economics*.^{11,12}

The most common theme mentioned for establishing prices was to start with costs, an approach that was suggested by university personnel, practitioners, and consultants. However, cost-based pricing systems require both well developed cost accounting systems and proper computer software. It was emphasized that cost-based pricing would help faculty understand how administrative services contribute to the financial success of the hospital. Costs, it was noted, are especially important to know for new procedures. In addition, participants noted that during the development process, new services generally need to be affordable for clients, especially if it is not always clear that the services are clinically imperative.

Several concerns related to the additional time and medical supplies that are often associated with teaching in a clinical setting. In a sense, a strict cost-recovery pricing system would then result in substantially higher prices and client bills when greater amounts of teaching occurred. The dilemma of the VTH, then, is knowing how to compensate the client's time (perhaps by reduced pricing) while not undercutting local practices.

A slight variation of cost-based pricing is to determine the target margin or profit goal desired and set prices at a percentage over costs, accordingly. Another suggestion was to understand what the market would bear as a guideline for setting prices, but to be sure that costs are covered. Two related methods forwarded were to base prices on the market alone or to establish a budget and base prices based on funds needed. Other comments about setting prices included development of pricing objectives, and establishing medical standards of care then setting prices according to the value placed on that care and the associated costs incurred. It was also suggested that VTHs could package prices similar to private practices, but still consider costs. A

few participants believed prices should be set entirely out of the market, especially when private specialty practices are also available. The importance of understanding what the market will bear was repeatedly discussed, and it was suggested to use external advisory boards to assist with pricing issues.

One university has their fees set to cover all faculty salaries and generate a profit. One university established a pricing policy manual and employs a former human hospital administrator to assist with pricing decisions, which they believe was a positive change.

Adjusting prices. Protocols for changing prices were also discussed. Two universities change prices every 6-12 months and another adjusts annually. Some update prices according to inflation, and others raise them by a flat percentage (eg. 5% each year). When discussing price adjustments, comments were made that faculty should be aware of these changes (and all prices) so they can adjust estimates accordingly. In addition, strong agreement was encountered with regard to the need for VTH pricing benchmarks and the need to share information between VTHs.

On the topic of discounts, the overwhelming theme involved the importance of making any teaching discounts transparent. Ideally, there should be some type of system to separate the cost of teaching from that of providing service. Because the charges for some procedures are based on the amount of time required for completion, one participant recognized that discounts may be appropriate where students and/or residents require more time than expected. However, the full charge should be shown along with the discount. Ideas for covering the teaching costs of cases

included using general funds (from the University), a fundraising/development fund, or having clients bear some of the costs. One practitioner believed that offering any discount sent the wrong message to the students and clients.

Students and prices. Practitioners especially had comments about the importance of student awareness of prices. Their thoughts included:

- Students should be able to see all prices, and should be involved in preparing estimates
- Students need to be aware of the impact prices have on salaries
- Students should be aware of how prices are set but that they cannot compare VTH prices to those in private practice.
- Students need to understand how overhead affects prices.
- Students should understand how prices affect business goals.
- Students may learn poor pricing strategies if VTH price structures and systems are not appropriate.

Operational Issue #3: Human Resource Management

Human resource (HR) management was discussed with regard to overall management, administration, faculty, and staff. Across the board, the importance of strong leadership based on well-established core values and clear objectives was emphasized, along with well-developed systems to achieve those objectives. Modeling these qualities, along with effective mentoring, communication, staff development, time management, and teamwork were viewed as important roles for the VTH. It was generally agreed that not all VTHs currently have effective HR management systems.

Not surprisingly, university participants had more comments about HR management in the VTH than did practitioners. The overwhelming theme from all participants was to build a system that

fostered teamwork and mentoring in a respectful workplace. Participants stressed, many times, the need for a culture of respect and responsibility within the VTH. The importance of avoiding or breaking the “us vs. them” mentality was emphasized with regard to the veterinarians and staff, making sure that the whole team knows that their contributions are valued and appreciated. In short, VTHs should strive to avoid “doctor-centered” teams. Suggestions to encourage teamwork were:

- Opportunities for faculty and staff input
- Teambuilding exercises
- Regular staff meetings
- Accountability for persons that are not team players – working in the VTH is a privilege, not a right
- Workshops on communication, mentoring, stress management, professional behavior, and leadership.

To be effective, meetings and workshops need a strong commitment to gain broad attendance and participation (ie. close the service). It may help to involve faculty and staff in selection of which development programs to pursue. When possible, 360° feedback should be incorporated. In addition, follow-up on agreed-upon action items is necessary. Use of outside consultants should be strongly considered for team-building workshops and faculty/staff development programs.

Other general suggestions for both faculty and staff included clearly developed job descriptions, systems and protocols for performance evaluations, professional development, conflict management, understanding customer service, and strictly following employment law. It was recognized that adequate resources are necessary to develop and pursue topics such as these. The importance of monitoring and intervention was also emphasized. Monitoring can include single indices such as faculty/staff turnover rates, more comprehensive measures such as

employee satisfaction studies, or individualized approaches such as professional development plans.

HR policies in the VTH need to complement university-level HR policies. However, university participants believed that VTH management of human resources should be both flexible and innovative. Policies and practices should solicit faculty, staff, and student input. Importantly, this approach demonstrates a caring attitude toward people, which requires well-developed listening skills and the ability to empathize for success.

In keeping with a participative approach, it was recommended that VTH administrators be more like facilitators than gatekeepers. It was suggested that hospital directors should act as a liaison between the VTH and the academic mission. Other comments pertaining to the director included having them play a key role in HR issues for the veterinarians who work in the VTH. Also, it was suggested that it might be good to compensate VTH directors based on financial performance of the hospital. Then it was pointed out, however, that the veterinarians generating the revenue typically report to an academic department chairperson rather than the VTH director, so to have compensation based on VTH performance might be counterproductive. A consultant recommended that VTHs look for hospital directors from the pool of human hospital administrators instead of strictly promoting academics from within veterinary medicine.

Faculty. The importance of attracting and retaining veterinarians as members of the faculty was repeatedly expressed and emphasized. It was noted that faculty come to work at the university for a variety of reasons including high reputation/prestige, level of technical support available in

clinics, ability to do research (including both time off clinics and access to laboratories and technicians), teaching opportunities, lifestyle, and equipment/facility availability. However, because of expanding opportunities for specialists in the private sector, the financial incentives to leave a VTH can be strong. As a result, it was recognized that faculty need incentives to stay within the university system. In addition to the above list of non-monetary items, various other incentives were mentioned, and included financial compensation, university contributions towards journals, continuing education, travel, etc.

Participants viewed the tenure system as frequently having a negative impact on the VTH. Several university participants and practitioners commented that the current tenure system should be abolished or at least changed dramatically. A practitioner suggested the system should be revised to reflect productivity and efficiency. Reward methods should be developed for teaching, research, and service accordingly. University contributors felt that teaching should be valued as much as research and service for tenure consideration. Another comment suggested that tenure might be tied to the financial success of the hospital.

The use of clinical track faculty as an alternative (or adjunct) to the tenure system had mixed reviews from participants. Some felt that these positions with an almost exclusive focus on clinics work well to offer good client service, provide an excellent model for students on how to use technicians, and meet the needs of referring veterinarians. However, incentives for committee work and teaching are admittedly low. Also, even though performance evaluations in these systems do not generally hinge on research, there is often an attempt to remain actively

engaged in research activities in an effort to become competitive for a tenure stream position somewhere.

As a variant of the clinical track theme, most clinical faculty at one particular university have an academic home and do some teaching, but others are considered “hospital staff.” Another VTH had clinical track positions but these individuals currently have no method of advancing without doing research. At this VTH, it was recognized that the rounds involving students and clinical faculty were not as detailed. When the service is busy, students are often relegated to a more observational role.

Participants from a third VTH believe the old tenure-system created burnt-out clinical faculty trying to do research and teaching. They felt it generated poor service and was a poor example for students. They are developing teams of both tenure track and clinical veterinarians (for teaching and clinical service, respectively), but admit it is difficult finding the right people for the mix as they strive to develop a “hospital within a hospital.” In this model, primary teaching responsibilities are not case driven; in contrast, the clinical service is a high-volume specialty practice (almost purely case driven), where students learn by observing role models (not necessarily hands-on experience). When developing these ideas, one participant recognized the importance of equitable compensation for faculty so as not to create a “two class” system of higher paid clinicians and lower paid teachers, which can quickly result in friction between tenure stream and clinical track faculty. The importance of salary discretion was noted, and a hospital administrator recognized the importance of clinical faculty as revenue generators. In addition, it was emphasized that allocation of resources in the VTH cannot be based solely on the

amount of revenue that can be generated in a particular service; market conditions do not always match academic priorities.

Frustration was expressed over the perception that faculty rewards do not always appear to be linked to productivity (teaching, service, and/or research). Development of incentives for clinical service productivity was suggested as reinforcement for charging appropriately, limiting discounts, and effective collections. The argument against incentives was that more time in clinics might have a negative impact on other aspects of faculty work, such as research, teaching, and administrative responsibility. A comment was also made that any incentives should be tied to the revenue generated and not the time spent in clinics. A university participant recognized that the link between financial performance and the ability to practice good medicine is as true for academia as it is in practice. This ability is not often tied to financial rewards at the VTH.

One university offers production pay but only as an opportunity to increase income (income cannot be reduced for low production). Production pay is not always an option within the university structure, according to one administrator. Two universities have historically returned a percentage of revenue to the sections (for equipment or staff), but this is currently under review because of a budget crisis. Such systems would encourage faculty to understand how to justify equipment and personnel. One contributor expressed frustration over a perception that faculty members' lack of fiscal responsibility occurs because their paycheck does not depend on the hospital's finances. They then suggested that staff might also benefit from having incentives tied to VTH finances.

Faculty management was also discussed with regard to evaluations. One university currently has faculty evaluated by students, residents, and referring DVMs. Another has evaluations solely by clinical department heads; still another uses input from the VTH director, and others use input from clinical section/division/service heads. In whatever manner the evaluation is conducted, it was emphasized that clinical productivity and performance should be important factors for active monitoring and consideration.

Other faculty concerns discussed included the importance of practice plans that guard against outside consulting with potential conflicts of interest. Also, the opportunity lost when specialists teach routine procedures was mentioned, ie. specialists training generalists. A suggestion was presented to have general practitioners or technicians do more teaching of general clinical education. This would help leverage specialists to do what they were trained to do. In this model, students would be “exposed” to specialty medicine, but the specialist would do more training of interns and residents.

Miscellaneous comments made with regard to faculty HR organization included:

- Clinicians could/should do a better job of communicating business aspects to students
- Clinicians need to learn to appreciate staff
- Keep clinicians out of primary supervisory roles
- Faculty need to care to keep jobs and earn money
- Faculty development was important to some participants in the areas of business management and teaching/research, although incentives may be necessary to gain strong faculty participation
- A few suggested that residents and all newly hired clinical veterinarians in the university system should sign non-compete clauses
- As a method of professional development, it was suggested that clinical faculty should spend time in private practice (in addition to a residency) to assist with customer service, financial management, and case management issues

Staff. Staff at the VTH includes technicians, receptionists, and all paraprofessionals. The importance of having a well-developed system to hire the right people surfaced in several discussion groups. This was evident when the difficulty of firing a poor employee was discussed. It was explained that many university systems (with and without unions) make it very difficult to fire employees. Hiring qualities important to participants included attitude, motivation, high energy, accountability, and productivity. As mentioned earlier, the importance of teamwork was stressed. University participants emphasized the need for staff to feel appreciated (eg. employee of the month) and receive regular positive feedback as part of the VTH culture.

Many suggestions were offered for staff compensation. Unfortunately, union pay scale restrictions can often prevent VTHs from paying good staff adequately to retain them long term. In such cases, reclassification of staff positions to higher levels might be necessary. Although adequate pay was viewed as important, benefits such as discounted animal health care, cross training, and staff development were also suggested. Staff development can occur in full-blown workshops, or over the lunch hour. However, it was suggested that some type of continuing education should be provided to staff on at least a monthly basis. Ideas contributed included:

- Health realization model
- Conflict management and general people skills (including exercises such as the Myers-Briggs Personality Type Indicator)
- Respectful workplace training
- Personal self-improvement
- Leadership and/or management training

Other issues important to staff included training programs for new hires, frequent staff meetings (scheduled so all staff can participate, and conducted with all pagers turned off), effective communication (perhaps including a VTH newsletter), opportunities for merit promotions,

regular performance reviews, well-developed job descriptions, opportunities for job “switching” to prevent boredom, and participative management. One university does reviews four times a year for all staff. One participant suggested that staff supervision be conducted by non-faculty, but with faculty input for performance evaluations. Faculty should also have input into scheduling and organization of staff. Generally, these activities are coordinated and led by the hospital administrator in the VTH.

Participants stressed the importance of proper use of well-trained technicians, not only for efficient VTH operations, but also as a model for students. In addition to appropriate staffing levels (technician-to-veterinarian ratio), the delegation of challenging responsibility to well-trained staff members working as a team was viewed as an important example to provide for students. The professional treatment of staff by faculty was also mentioned as important for students to observe. It was suggested that technicians should be used for teaching certain procedures and techniques to students to improve operating efficiency as well. One university is using technicians as case managers. Another issue discussed was the increased use of technicians with clients so they bond with the technician instead of the clinician, as clinicians rotate off duty frequently.

Finally, the importance of skilled receptionists was emphasized in one university group. They felt this group was key to a solid VTH, and low turnover among receptionists was viewed as vital.

Operational Issue #4: Marketing

According to participants, marketing the VTH starts with understanding who the market is, what needs exist, and developing a strategy from there. It was recommended that any VTH marketing initiatives be unique, innovative, and in line with the overall strategic plan for growth. In addition, the initiatives should be viewed as important by the college administration. In that regard, one university participant wondered if more marketing is not done by VTHs because they really “don’t want the caseload to grow.”

Developing an understanding of the market needs can be a challenging endeavor. As a start, participants emphasized the importance of knowing the geographic distribution of the VTH market and clients. One university has two external advisory boards (small and large animal) that meet twice a year to provide input on the needs of the market. A consultant recommended conducting client and referring veterinarian surveys, asking about the suitability of current services and potential service needs or improvements.

Regardless of the specific needs that may be identified in the market, participants expressed the opinion that perceptions about the VTH are vital to attracting an adequate number of cases. Just being the “ivory tower” is no longer enough to assure a robust caseload. It was deemed important to transform the image of the VTH from the “cheapest place” to the “best place for clients to go.” To achieve that status, customer service and technical quality were both viewed as vital. Participants suggested fostering an image of high quality care, based on cutting edge technology. Among other things, an active research program can help lead to a “cutting edge”

perception. In this sense, cases can be attracted to the VTH through the unique combination of expertise, facilities, and equipment.

Further, participants suggested that top quality service results in satisfied clients, ultimately leading to additional referrals from the same veterinarian. Exceeding expectations was a prominent theme. Being polite, efficient, visible, and good were considered key determinants of quality service. Accessibility of the VTH is also an important trait for both clients and referring veterinarians. In that regard, answering the phone was viewed as critical. As one participant suggested, the VTH should provide emphasis on “service-service-service” for clients and referring veterinarians.

Communicating and propagating these lofty perceptions can also be a challenge. In addition to providing the foundations of outstanding technical quality and customer service, it was suggested that methods such as newsletters, websites, and email be employed to let people know about the VTH. Information on VTH services and staff, research projects, reminders, and announcements are all candidates for broad-based distribution. In addition, it was pointed out that any written communication from the VTH should be viewed as marketing, and should be developed with the overall image and marketing goals in mind.

Potential targets for VTH marketing initiatives were suggested to be referring veterinarians, clients, and the community. Each target has unique features that were discussed.

Referring veterinarians. The referring veterinarian was recognized in several forums as the most important customer, and that marketing efforts should be specifically targeted accordingly. Building relationships with referring veterinarians was seen as an important step in most groups because the VTH is a relationship business. Again, it was suggested to ask referring veterinarians for ways to serve them better, and listen to their feedback. Surveys, focus groups, and advisory boards were suggested as ways to listen to these stakeholders and improve practitioner/university relations. For surveys, it was suggested that licensing lists be used in an attempt to obtain input from both veterinarians who currently refer the VTH and those who don't. Alternatively, a survey could be sent with each discharge letter for specific feedback from referring veterinarians. External advisory groups were viewed as useful two-way streets – they help the VTH understand the practitioners' world while helping referring veterinarians understand the VTH.

Any method that increases interaction between referring veterinarians and faculty was believed to be positive if it enhanced understanding and improved relationships. Mentoring programs could be developed to involve practitioners, or practitioners could actually become involved in teaching. In addition, a hospital administrator suggested that the university should do more to make their alumni look good and promote strong relationships, thus promoting referrals. As one suggestion, pictures and a short bio of all faculty might be sent to all practitioners (not just alumni). All of these suggested programs stand to improve communications and help referring veterinarians develop realistic expectations of the VTH.

One suggestion that surfaced in nearly every forum was for faculty to be actively involved in continuing education for both current and potential referring veterinarians. Unique technologies and familiarity are important for the relationship with the referring veterinarian, and it is important to highlight/showcase research activities. Other suggestions included:

- Local, regional, and/or state veterinary medical association (VMA) meetings
- Referring veterinarian continuing education days
- Case reviews on Saturday mornings
- Wet labs
- Newsletters
- Offering VTH tours

In addition, faculty should, at least, be members of state and local VMAs and be encouraged to actively participate. It was recommended that new faculty visit every local VMA group within the first year or two after they are hired and get to know the practitioners. A suggestion was also made for leaders in organized veterinary medicine to form positive relationships with the administrators of their VTHs.

The VTH must be maximally user-friendly to the referring veterinarian. Two universities have referral coordinators that handle complaints, give updates on cases, address any other issues related to the referring veterinarian, and actually act as an advocate for the referring veterinarian. One also has a referral notebook for veterinarians, which contains faculty information, VTH operational information, referral protocols, and forms needed for easy referrals. It is important for practitioners to receive professionally prepared referral letters, in a timely manner, after a case was managed. This could include an e-mail message, a fax upon discharge, or a mailed letter. One contributor reminded the discussion group that both referring veterinarians and clients have choices for specialty referral care.

It was suggested that referring veterinarians should have a separate phone line to access the VTH. Prompt callbacks were viewed as important, but it was considered acceptable to involve students in follow-up communications. However, one university participant questioned how to provide good service yet manage the veterinarian who calls frequently but does not refer cases.

One concern that surfaced in most university and two practitioner forums was faculty attitudes toward referring veterinarians. Negative comments about referring veterinarians to students were believed to reduce the students' interest in referring cases once they graduate and enter practice. Training residents to truly value and be positive and professional toward referring veterinarians was considered very important. Positive comments about referring veterinarians to clients were seen as a good measure. One suggestion was to keep the referring veterinarian involved with case management and not try to "take it over" completely. This was viewed as particularly helpful to and for clients if the case outlook became poor. Finally, one practitioner commented that outside consulting by VTH faculty was counterproductive and sent the wrong message to referring veterinarians.

Clients. Marketing initiatives with a client focus bear many similarities to those whose emphasis is the referring veterinarian. As previously mentioned, the geographic distribution of customers is important, and at least two universities currently use client geographic mapping. Client satisfaction surveys are also important to more fully understand clients' needs, and how well those needs are being met by the VTH. The success of client satisfaction surveys can be enhanced by designing methods to let clients know that the survey information has been shared

with VTH staff, and has been/is being used. As a result of geographic and survey information, effective targeted marketing initiatives can be developed.

In addition to assessing client satisfaction via surveys, it was agreed that excellent client service is important for marketing the VTH. An emphasis on customer service and satisfaction stands to increase return visits and provides a good model for students to emulate. The first telephone call and “welcoming” client information were suggested to be important. Effective and efficient phone triage is critical, and when clients must be placed on hold, a telephone “education on hold” program might be considered. Along the way, clients should be reassured that it’s ok to spend money on their pet(s). And timely communication with clients regarding VTH cases, including both patient and financial updates, is crucial. Additional suggestions that might enhance the clients’ VTH experience might include:

- A gift shop
- A computer in the lobby/reception area containing pet health care information
- Pet loss services
- Interesting artifacts in the lobby/reception area
- A faculty and staff focus on minimized wait times
- Customer service volunteers
- A suggestion box
- Electronic (or hard copy) reminders

As indicated previously, satisfied clients ultimately lead to more referrals.

Newsletters (either regular or electronic) to VTH clients that provide information on special VTH services, equipment, people, etc. were suggested as a way to do direct marketing without offending private practitioners. In addition, it was suggested that special continuing education or short courses could be developed specifically for VTH clients. Direct contacts with VTH clients

as part of a fund raising or development campaign have also been found to be beneficial for the VTH.

Community. The importance of marketing the VTH to the general public (including the greater university community) was widely discussed. Positive public relations with the media were important to several participants just to let people know that the VTH exists. From the VTH perspective, this should be a proactive relationship and should include news items, general information and recommendations, documentaries, centers of excellence, research development announcements, coverage for new equipment and new procedures offered, and introductions of new faculty. It was pointed out several times that the media image should be one of “cutting edge” technology and state-of-the-art expertise – the *premier* veterinary hospital. Two contributors suggested having a PR specialist or officer to announce medical advances and keep the positive image of the VTH in the media. It was mentioned that having a good image benefits capital campaigns and increases the number of clients that asked to be referred.

Both television and radio should be included in marketing the VTH to the broader community, along with newspapers and magazines. Another suggestion involved use of the Internet. One participant encouraged the use of web-based marketing, but also provided a strong warning against giving specific advice over the Internet. Support systems are needed, however, to deal with the follow-up contacts that inevitably result from Internet exposure. Ideas for using web marketing include initiatives to showcase programs and services, price lists, and faculty information.

Being visible and active in the community was also suggested. Community outreach ideas included:

- Puppy socialization classes (could be taught by students)
- Annual open houses
- Newsletters
- Behavior classes for dogs
- Public service announcements
- Evening education classes on animal ownership and health management
- Seminars on special topics, such as dental disease

Operational Issue #5: Operations

The discussions related to operations management touched on topics such as the physical environment, procedures and systems management, efficiency, and customer service.

Contributors also specifically discussed operation of food animal sections and the impact of veterinary students on VTH operations.

One participant noted that human healthcare delivery systems should be examined to attain insight on procedures and policies useful for operations in a VTH. In evaluating VTH operations, it was suggested that internal surveys or having VTH personnel analyze the strengths, weaknesses, opportunities, and threats (SWOT analysis) for their particular service would be useful. It was recommended that outside facilitators be engaged for this purpose.

To provide a useful model for students, one practitioner noted that the VTH must become efficient in workflow issues, work place facilities, and time management. Both a university group and the consultant group noted that sometimes the buildings were not designed for

efficient flow, and this can be the rate-limiting step in VTH operations. For example, convenient rounds rooms and phone rooms are both vital, but there is often competing workflow between clinical service and teaching because the buildings were designed for teaching. It was noted that the constant change of student rotations compounds the workflow challenges due to the learning curve associated with each new student group; when you rely on students to carry a substantial portion of the workload, but you get a new group of students every two or three weeks, operational efficiency can be seriously affected. University participants recognized that bottlenecks frequently develop in radiology and anesthesia when caseloads are high. The coordination between services is difficult and requires “rigid” scheduling and adequate staffing (techs) to prevent problems. Scheduling exam rooms was also mentioned as a challenge. One suggestion involved keeping services small when workflow issues are present.

A concept that was discussed in both university and practitioner forums was the idea of a “lab” that mirrors a functioning small animal hospital. This “lab” (involving parallel services where one is used for teaching and the other just to see cases) would demonstrate workflow issues, time management, and other efficiencies as appropriate for a companion animal practice. On a related note, two practitioner forums discussed developing a hybrid model with the system being considered at the Western University of Health Science, College of Veterinary Medicine. At Western University, students will be receiving clinical training at local private practices. Alternatively, the prospect of satellite practices/clinics was discussed as a method of providing a high-volume, efficient general practice model for students. It was suggested that more extensive primary care experience might actually be closer to what hiring practitioners want, as opposed to the “specialty practice” experience that students receive in most VTHs.

Capital investments were discussed in a practitioner forum. The suggestion was to guard against *needing* to have all the latest technology just to have it. It was important to understand the impact of the investment on the business as a whole, not just the specific procedure or service. The need to understand payback was also stressed.

Procedures and systems management issues were discussed with regard to medical records, invoicing, operating efficiencies, and efficiency benchmarks. It was suggested that VTHs should improve their systems before expanding clientele. Effective work plans and the means to evaluate them should be in place. One practitioner commented that all protocols for procedures should be standardized and have outcomes measurements. This was one area, it was suggested, to look at successful private practices as a model. A successful private practice model also involves delegation of technical skills to less expensive, non-DVM employees whenever possible. VTHs should be encouraged to adopt some of those procedures, recognizing that this might require a philosophical change and faculty support/input. It was suggested that ideas should be shared with other VTHs and outside laboratories to identify new systems and methods that might be beneficial to adopt.

Current VTH computer systems were discussed; it was generally agreed that these systems do not provide a good model for practice. Somehow the gap needs to be bridged between the systems currently used in practice and at the university. One concern was an inventory tracking system that prevented “slippage” and “shrinkage.” This also included a reexamination of medical records and the invoicing systems. It was suggested that medical records should be easily

accessed and reports should be generated automatically. The prospect of referring veterinarians having on-line access to records from referred cases was discussed, as was the potential desirability of VTHs moving toward paperless medical records systems. The possibility of developing a patient flow chart that helps to succinctly define a “case” was also discussed as a system that might facilitate transfer of cases between services.

Invoicing was discussed, including the importance of providing an accurate estimate for every client. Because faculty members don’t often want to participate in the financial aspects of a case, it was suggested that estimates should be discussed with clients by technicians or students.

Billing methods suggested for the VTH included retainer, hourly, or in-house receiving. One concern that surfaced in several university groups was the importance of the invoicing system being able to stop write-offs and discourage give-aways of products and services. Participants thought that faculty should not be making economic decisions for clients. One practitioner suggested adding a line on economics to the SOAP. Clients should be able to see any discounts given for teaching, and students should be able to see the cost of teaching. Other suggestions included having the bills be very “readable” without excessive detail, although it should explain all charges and professional fees; bills should not be “commoditized.”

VTH credit policies were also discussed. Having a credit policy and following it was recognized as being very important. Several participants wondered if Care Credit would help at the university level. Having a good deposit up front was viewed as important. One university has seen success by changing its policies and asking for a deposit and requiring the balance on

discharge; they previously didn't ask for payment on discharge. If billing is an option, it was recommended to send invoices out promptly and collect account receivables aggressively.

Operational efficiency was discussed with many different ideas expressed. It was suggested that students aren't always responsible for all of the "slow down" in VTHs – often faculty and staff are perceived to be quite inefficient. And it was suggested that teaching doesn't always need to take as long as it does in some VTHs. The question was asked, "Can we do the same work and get home earlier and have the same outcomes?" The point was made that VTHs should not take measures to increase service efficiency without monitoring the impact on teaching. It was suggested that outside consultants be engaged to provide ideas for improving efficiency, but university representatives suggested also asking the people in the system periodically (clinicians, technicians, other staff, and students).

Having an appropriate number of staff (veterinary technicians in particular) per DVM was mentioned several times, as was the importance of allowing technicians to do as much as possible (including teaching). A practitioner believed this would reduce the opportunity cost associated with allowing (or requiring) specialists to teach routine procedures. Perhaps, they suggested, general practitioners could also become directly involved in the teaching program for routine procedures. Taking advantage of technicians and practitioners for teaching in this manner would facilitate the specialists more fully emphasizing their individual specialties. One contributor actually thought there might be too many doctors for the VTH caseload and not enough technicians.

Participants mentioned a number of areas to consider when looking for improvements in efficiency. Two different universities described their discharge system as contributing to client wait time. Using common sense scheduling was recommended to avoid bottlenecks as much as possible.

University participants and consultants listed efficiency benchmarks they felt would be useful both for internal management and to compare with other VTHs. Again it was suggested that AAVMC play a role in defining these benchmarks. Benchmarks suggested were:

- Number of cases/surgery day
- Clinician time/case
- Number of students/FTE DVM
- Client wait times
- Client time to get an appointment
- Transactions/unit of time
- Utilization of exam rooms
- Space/use capacity

In addition, measurements should include: production (revenue), number of cases, academic output, hours worked, manuscripts published, research, and presentations per FTE veterinarian on the clinical faculty. It was also suggested that the NCVEI benchmarking website be used for the VTH community practice service. It was noted that this service should be “in line” with private practices.

Communication was the most frequent topic of discussion related to the customer service aspect of operations. Regular and frequent communication with clients should include both patient and financial updates. With the referring veterinarian, prompt call-backs should be a priority. One university has a staff member designated as an advocate for the referring veterinarian. They also have a separate phone line for them. The idea of hiring a quality improvement specialist was

suggested as well as the importance of exceeding client expectations. Ideas for providing excellent customer service included:

- Continuity of care with the same clinician.
- Respecting client time
- Operational hours convenient for clients
- Drop off service

Again it was stressed that having well-trained technicians involved with client care and student training is important to providing top quality customer service.

A few comments were made specific to operations in the food animal (FA) service. One university participant specified that FA services tend to be driven by lameness exams, referrals, and ambulatory work. Practitioners commented that perhaps a FA ambulatory service more closely mimics private practice than other services. One questioned that perhaps FA needed to be taught more on a regional basis or by private practices.

The degree of desired student exposure to operations management in the VTH was also discussed. University participants suggested that operations discussions should be incorporated into rounds. Specific issues that surfaced included:

- A student check-off sheet as a part of the medical record
- Training residents was thought to decrease hospital efficiency
- Students should be involved in charging, billing procedures, and customer service issues
- Students should be responsible for case estimates

Finally, an administrator raised the concern that if students see discounts being given and faculty still get paid the same, they may not fully appreciate the direct connection that exists between charges and compensation in private practice.

Operational Issue #6: Legal and Ethical Considerations

A few legal concerns were raised in each forum but most comments were from consultants.

Legal issues were viewed as especially important in light of the increasing size of awards being granted by courts today.

Concern was raised that failure to follow OSHA requirements in the VTH could result in students or others being harmed. It also sets a bad example. VTHs should be held to the same standard as private practices. It was acknowledged that some legal requirements have changed and clients may have access to medical records as a public documents. The importance of documenting all procedures in the medical record was emphasized, as this is considered a legal document. Also, the importance of thorough communication with regard to potential malpractice lawsuits was discussed. It was also noted that the university should support faculty when involved in malpractice issues.

In general, it was suggested that faculty should be aware of the legal requirements and follow them. Some states don't require faculty to be licensed but participants who commented believed all faculty should be licensed in the state where they are practicing. Other legal issues viewed as important for VTHs to follow include:

- Sexual harassment guidelines
- Workmen's compensation regulations
- ELUD
- AMDUCA
- Zoonotic disease communications
- Management of controlled substances
- Biohazard management

In addition, several comments were made regarding the legal and ethical importance of informed consent for clinical trials.

With regard to ethical concerns, it was suggested that VTHs should have clear policies regarding the following:

- Suspected animal abuse cases
- Unusual situations such as the treatment of monkeys
- Staff/students opinions about animal use
- Treatment of client-owned animals
- How to handle complaints
- Shelter and/or abandoned animals
- Pain management

A concern was also raised about the increase in corporate influence within the VTH. Any potential conflicts of interest need to be addressed proactively.

Several comments were recorded with regard to the ethical responsibility of a model VTH. One university participant questioned if the slow teaching system at most VTHs contributed to the poor work ethic of some students, but a practitioner believed that the admission process is where students with a good work ethic should be identified. One practitioner wondered if business ethics should be formally taught. Another recognized that practicing veterinarians have an ethical responsibility to help their business succeed, but questioned if this could be effectively taught in the VTH. On a related topic, several comments were made concerning the unethical behavior of “writing off” services for friends; it was suggested that VTHs must model the behavior of to “do as I say” as well as “do as I do.” In addition, the ethical dimensions of universities competing with local private practices and certain related pricing policies were discussed. Finally, concern with the ethical issues related to potential tradeoffs between humane

care and financial gain for the hospital surfaced, along with the potential conflicts that can arise when balancing teaching needs with patient needs.

Implementation Constraints

Participants also discussed a number of noteworthy constraints to the implementation of a model VTH. It was recognized that the absence of strong, effective leadership in a college of veterinary medicine would make it very difficult to successfully adopt a new approach in the VTH.

Participants expressed the opinion that not all veterinary school deans fully appreciate the importance of the VTH, nor do they always fully appreciate the challenges faced in private veterinary practice. To the extent that these conditions exist, participants felt that the VTH and its contributions to clinical veterinary education may not be appropriately and consistently valued by all of the critical academic leaders. As a result, faculty and staff may receive mixed messages when seeking to develop and implement new policies and programs as suggested throughout this report.

Mixed messages lead back to the challenge of balancing the mission, which was also recognized as an important constraint. On one extreme, participants indicated that the VTH could essentially become a “servant” to the academic departments. At the other end, VTH management could easily get caught too strictly in a “it’s got to pay for itself” loop. Either situation would represent a failure to achieve an appropriate balance between service and teaching. Participants cautioned that if adopting a model VTH became perceived as a thinly veiled method of shifting the emphasis away from the teaching mission toward a more purely

service-driven operation, the level of faculty acceptance of proposed changes would undoubtedly be very low.

Considering the faculty perspective, the difficulty in achieving an effective change in culture was also viewed as a serious constraint. It was noted that change can be frightening for anyone, including faculty and staff. However, the faculty mindset was viewed as critical if effective modeling of the desired skills for students was to be expected, and staff members need to be on board as well. Faculty and staff need to be able to move beyond “this is the way we’ve always done it,” and be willing to consider new approaches such as sharing ideas school-to-school, talking/working with outside consultants, and even developing an active interest in the business of veterinary medicine. It was noted that a widespread perception exists that faculty don’t like to talk about money – that’s why they are faculty. In this case, it was suggested that faculty might not be the best ones to lead implementation of changes such as those suggested in this report. So, the importance of having the right people involved was strongly emphasized. In addition to having the right people, it was suggested that professional development programs for faculty and staff might need to precede full-scale adoption of a new approach to VTH management.

Cultural change was also recognized as important for the students. Improved VTH management was expected to be more effective in producing an improved veterinary graduate if the students being admitted to veterinary school are receptive to the concepts and principles of leadership and management. The opinion was expressed that the tendency for students to “push back” on management and leadership topics is quite prevalent in today’s students. In that regard, admissions processes were noted as a potential constraint. Also, changes in the VTH were

viewed as more likely to be effective if the principles espoused in this report were consistently implemented throughout the curriculum and the entire college.

Beyond the issues associated with administrators, faculty, staff, and students, other potential constraints were recognized. Several comments related to the frequent difficulty encountered in working with university policies and systems. For example, the restrictions that accompany a unionized labor force can be particularly challenging for achieving effective change in a VTH. Pay scales and other policies can prove to be problematic. Also, university bureaucracies and administrative structures were cited as often posing very real constraints. Participants expressed the opinion that decisions at the university are often based on politics rather than issues truly aligned with the mission, and accountability can often be elusive. Administrative structures that are sufficiently flexible as to not stifle vision and innovation were viewed as desirable, but not always present.

Finally, several other potential constraints surfaced during discussions. These included tight budgets that may make change difficult – but might actually drive change. Also, because faculty and staff are already perceived as being very busy, the question of how to find time to pursue new initiatives was raised.

DISCUSSION

Before heading into a discussion of this project's results, it warrants re-emphasis that virtually all participants recognized that VTHs cannot/should not be judged by the same standards as private veterinary practices. However, it was also widely agreed that basic principles of leadership and management are fundamental, and can be successfully applied across organization types. Even so, a single prescriptive model for leadership and management in the VTH cannot be expected to be applicable in identical fashion across all colleges/schools of veterinary medicine. Sufficient variation exists from campus-to-campus in critical factors such as the context, culture, and administrative support that a "franchise approach" is not only impractical, but would not even be desirable.

Overall, the degree of consistency between the issues and comments raised by discussants and the review of the literature conducted on the topic was noteworthy.⁸ Interestingly, two major themes emerged from this project's discussions: one related to strategic issues and one related to operations. Although these topics are treated separately in the following sections (and were largely separated in the presentation of results), it is important to remember that strategy and operations are closely intertwined in real time. Strategy sets the direction for the organization and provides the framework and context for operations. At the same time, operations provide the mechanism for an organization to pursue its mission and achieve its vision. Monitoring progress in operations, in effect, monitors progress toward achieving strategic objectives. Strategic planning and management provide an effective way to link strategy and operations on a day-to-day basis.

Strategic Issues

Why is this topic important? The momentum to improve VTH management comes at a time of increased awareness of how certain non-technical SKAs increase the success of veterinary students both during and after veterinary school.^{1,2} As colleges move toward accepting students with certain non-technical SKAs,^{13,14} as well as increasing students' exposure to the importance of business acumen,^{5,15} improving VTH management will continue to reinforce the importance of these skills to the students. The largest obstacles to achieving success in implementing any of these changes will undoubtedly be having adequate leadership and achieving acceptance and buy-in by faculty. In addition, administrators will have to work with their unique university structures to develop workable HR policies, marketing plans, and financial management programs that will generate useful reports and benchmarks to continuously improve VTH management. Because of decreased funding and increased competition (both for cases and income), all VTHs must, at a minimum, improve efficiencies; some may also need to increase business activity. However, this cannot be accomplished at the expense of producing a quality product, namely graduate veterinarians.

Balancing the Mission. Each VTH has responsibilities to the public, the university, clients, students, faculty, and staff. With so many stakeholders, it is imperative that each VTH have a functional strategic plan with goals and objectives that are aligned with their individual missions and visions. However, participants in the current study indicated a general lack of strategic planning within the VTH management (at least on an open level involving faculty and staff). In

contrast, academic health centers (AHCs) seem to have well-developed strategic planning processes, perhaps related to their own budget crisis in the 1990s. With the promotion of mission-based management programs, AHCs began to align their individual resources with their institutional missions.^{16,17,18} VTHs would do well to follow the lead of the AHCs in this regard.

Balancing the mission is a key challenge for the VTH that rests at the foundation of success. Avoiding/resolving potential conflicts between service and teaching, balancing primary care and specialty service, and achieving the right mix of cases between and within species can all be greatly assisted through active strategic planning and management. In this approach, *strategic planning* is vital to development of vision, mission, and strategic objectives. *Strategic management*, then, seeks to align the day-to-day activities with the vision/mission and to measure progress toward strategic objectives. A critical factor for the success of strategic management is having an appropriate administrative structure and using compensation/reward systems to help create alignment. These issues are particularly true for the VTH, where faculty and staff are routinely pulled in multiple directions as a result of the teaching/research/service missions involved. Appropriate alignment would create mission-based accountability at the service level for faculty and staff.

Although operational issues are also of critical importance to VTH success, without the guiding influence of appropriately developed strategy, the day-to-day activities of any organization become almost of secondary interest. It is important to get the strategic issues right before becoming overly concerned with operations.

A potentially useful approach to strategic management being employed by at least one college of veterinary medicine involves development and implementation of a balanced scorecard.^{20, 21}

Regardless of the specific approach and methods involved, it is often beneficial to engage outside consultants to assist with strategic planning and management.

Operational Issues

Financial Management. Considering today's challenging funding environment for higher education, progressive and adept financial management is becoming more and more crucial to the success of VTHs. Fundamental approaches suggested by participants in this study included cost accounting, budgeting, regular financial reporting, and use of financial benchmarks.

Beyond these practices, however, a basic understanding of balance sheets, income statements, profit and loss statements, and financial ratios is essential to the management of any institution. All of these methods and reports, though, are only as good as the technology used to track data for their formulation. Having an adequate computer system able to do the analysis, which can then generate the needed reports, is imperative. Without having faith in their information, administrators will not be able to make decisions, formulate recommendations, and perform outcome assessments on changes made within VTH management. Having the needed technology and software is a recognized constraint to improving financial management.

With adequate support systems, VTHs should produce frequent financial reports and develop "what if" scenarios to assist decision making when changes have financial implications. One of

the benefits of having adequate financial information is being able to develop benchmarks and financial ratios to monitor financial performance over time. Financial ratios considered in isolation offer limited management value. However, monitoring ratios over time for a given service or comparing ratios between similar departments or organizations can reveal both positive and negative trends.

It is important to have a clear and deep understanding of the benchmarks desired and what they mean and don't mean. Knowing which benchmarks are important for measuring VTH financial performance would assist decision-makers when selecting or developing a financial software program. A number of useful benchmarks for private veterinary practices can be accessed at the NCVEI website (www.ncvei.org).

In addition to providing benefits, however, benchmarks and financial reports can be misused in management. Faculty expressed concern about financial reports being used against them, especially if they felt they had no control over inputs. It would be imperative that faculty understand and feel "ownership" of the process as benchmarks and reports are developed and used to guide management decisions. Suggested financial ratios are average client transaction; gross and net revenue by clinician, service, and procedure; and costs per hour of operation by service. As VTHs move toward more complete analysis of financial data, clear definitions of what goes into various ratios and benchmarks need to be established if industry comparisons are to be made. A leader, perhaps AAVMC, needs to provide the groundwork for these definitions and develop an industry database of comparables.

The majority of businesses today use cost accounting to set prices, improve efficiencies, establish budgets and payback schedules, and monitor costs. With the increased financial pressure most VTHs are feeling, it is critical that costs are clearly understood, even if the information is not used for price setting or budgets. Cost accounting is already being used to assist administrators in a few, more progressive VTHs. These institutions should become leaders in helping the others understand the pros and cons of establishing a cost accounting system. It is believed that “any hospital trying to plan its future needs to know its relative operating condition.”²¹ Cost accounting is a step toward understanding the relative operating condition.

It is a commonly held belief that VTH administrators should develop workable budgets *with* faculty input. These budgets should be based on expected revenue sources and historical cost figures. Here again, cost accounting would benefit the budgetary process. Each service/department within the VTH should have its own budget, which needs to fit into the overall VTH budget. These can be adjusted upwards or downwards and can be based on any of the suggested data sets mentioned in the results section.

As VTHs become more forward thinking in their financial management and as faculty become more comfortable with, and understand, financial considerations, students will naturally be more commonly exposed to these aspects. Conscious efforts must be made, however, to help students understand the financial side of veterinary health care, as a part of case management, before they enter practice.

Pricing. Among other things, the KPMG study¹ concluded that current prices for veterinary services may not appropriately reflect the true value of the services as perceived by animal owners. Contrary to comments in our focus groups revealing a strong concern that price is an important choice factor for VTH clients, the KPMG study found that price was a relatively *unimportant* factor in a client's choice of veterinarian. Pet owners rated price the 9th of 12 most important considerations in choosing a veterinarian. Also in that study, owners of both small animals and horses indicated that they were relatively insensitive to changes in veterinary fees by stating that most would not change veterinarians if prices were increased by as much as twenty percent (20%). Furthermore, ninety percent (90%) of horse owners responded that they do not price shop for veterinary services when facing life-threatening or emergency situations.

When studying the issue of prices specific for a VTH, Lloyd et al²² found that both clients and referring veterinarians ranked price low in importance as a factor for choosing where to seek veterinary services. Other studies have also concluded that the demand for veterinary services is fairly inelastic with respect to price, and all of these studies have focused on general practice services. It only stands to reason that price might be even lower in importance for animal owners seeking the highly technical, specialized services characteristic of most VTHs.

Consistent with this idea, a considerable number of participants strongly emphasized the critical link between prices and the ability to provide and sustain a high quality of service over time.

Because of the apparent disconnect between how clients view prices and how VTH faculty and staff view prices, it may be prudent to consider implementing faculty/staff development programs that emphasize the inelasticity of demand for veterinary services with regard to prices.

Faculty and staff need to understand the true value of the services they provide as viewed through the clients' eyes. It appears as though the situation in academia is consistent with the KPMG findings that veterinarians don't consistently value their own services as highly as do their clients.¹

Although veterinarians' clients are generally not very price sensitive, the VTH does operate in a marketplace where price is an important component of the overall economic picture. In that regard, participants' recommendation that VTHs carefully avoid price competition with general practices seems appropriate.

Pricing decisions can be pivotal to the success of the VTH, and a number of methods are available to assist with this management challenge. Ideally, prices should be set using a combination cost- and value-based approach, with adjustments on at least an annual basis.²² Prices should be set by administrators, with faculty input, and based on facts as opposed to assumptions and emotions. Carefully developed protocols for periodic price evaluations should be followed closely. Financial achievements made by setting appropriate prices initially, can be quickly erased if not evaluated on a regular basis. Useful benchmarks for non-specialty services are published on a regular basis by AAHA,⁹ and can be found on the NCVEI website (www.ncvei.org).

Participants generally viewed discounts as a negative aspect of pricing policies for the VTH. If used frequently in the VTH for any reason, the concern is that students will learn to view discounts as a viable option when the client bill happens to grow beyond their own individual

comfort zone (regardless of what the might client think), and then carry this “right to give discounts” into practice after graduation. Based on the views of participants in the current study, any discounts a VTH may allow faculty to authorize should be transparent to both the student and the client.

Human Resource Management. Human resource management at the VTH involves administrators, faculty, staff, residents, interns, and (in some cases) students. Administrators often set HR policies but it needs to be recognized that many HR policies are governed by university procedures and guidelines. This includes union restrictions as well as governmental laws (sexual harassment, OSHA, etc.).

Faculty management applies to both academic and clinical appointments. As various VTHs explore options related to the two types of appointments, forums for idea exchange and communications will be important to develop a fair and workable system to benefit both students and clients. This system needs to consider comparable pay, professional development and advancement opportunities, and student exposure. Based on comments from participants, the tenure system presents some very real challenges with regard to accommodating clinical productivity goals where appropriate to foster and reward outstanding clinical service.

Each VTH will need to explore methods for encouraging faculty responsibility for the financial success of their section, and by inference the entire VTH. Perhaps just receiving productivity reports, with both revenues and costs revealed, will encourage responsibility in some VTHs. In others, administrators may want to link a reward system more directly to VTH financial goals.

Many systems were suggested, including having the target profits (or a portion thereof) returned to the sections for additional staff, equipment, or bonuses. Having reward systems tied to financial goals should effectively discourage discounts and reduce missed charges.

Loss of faculty to private practice is becoming an issue of widespread concern. Development of innovative methods of compensation, along with increasing emphasis on the unique benefits associated with faculty positions, should help address this issue. Non-compete clauses that are defensible in court may also be useful. Perhaps the suggestion of having general practitioners teach routine procedures should be considered as an option in colleges/schools experiencing this problem. The opportunity costs of having specialists teach general procedures seems very real, and should be recognized and reduced when possible.

At the top of the list of staff issues expressed in most of the VTH focus groups was the desire for a culture that fosters and promotes teamwork, respect, and responsibility. As suggested, development of such an environment can be aided by progressive hiring practice that are successful in identifying the right people for the job. In addition, personal and professional development seminars and an administration that doesn't tolerate a "doctor-centered" atmosphere would be useful. Staff members need frequent staff meetings (at least monthly), opportunities for merit promotions, regular performance reviews, well-developed job descriptions, the opportunity to use their job skills, and adequate base pay. A common frustration expressed within the focus groups was the inability to pay good technicians enough to keep them because of union pay restrictions. Students who experience a respectful workplace

and who observe technicians being used to their full extent will be more likely to expect and achieve this in private practice.

Marketing. Marketing includes (but is not limited to) promotion, pricing, and determining and satisfying customers' needs.²³ Customer satisfaction is linked to customer benefits and values. A customer is satisfied or finds value in a product or service when the benefit to the customer is higher, in their opinion, than the costs.

Because customer needs in each situation are unique, every individual VTH marketing plan needs to be tailored accordingly. It is, however, imperative that each VTH have a marketing plan that fits into the overall strategic and tactical plans for business development. The first step is to determine the desired primary and secondary markets. Once a VTH determines the market(s) they serve (or want to serve), it is critical to explore the appropriate markets' needs and wants. Surveys and focus groups are timely methods of gathering useful information. Faculty input in the process will encourage buy-in when the results are used as a basis for management decisions.

It was generally accepted by study participants that faculty involvement in the community, both the public at large and the veterinary community, is an important aspect of VTH marketing.

Now is the best time to market the VTH for what it is – a premier veterinary health care center.

A plethora of ideas were presented in the results section for developing community outreach programs, many of which could even be run by students as a learning opportunity. The Internet should also be explored as a means of reaching and educating potential clients. Each VTH should

have a public relations person to report public programs, college events, and animal related public service announcements. This person should work to build the “brand” of expertise for the teaching hospital.

Faculty should be strongly encouraged to actively participate in organized veterinary medicine. Incentives should be provided for participation in the leadership of these organizations, or at least to provide continuing education opportunities for practicing veterinarians. This is another opportunity to showcase faculty expertise and VTH equipment, facilities, and technology.

For most VTHs, the referring veterinarian is viewed as the key customer. For others it is the veterinary student, and still others focus on the client. Whichever is the case, the key customer should be appropriately reflected in the strategic plan. For faculty and administrators, particularly those who have never been in private practice, it is often difficult to know what services are important to the referring veterinarian. It became apparent in the focus groups that practitioners can be a valuable source of potentially workable ideas that might benefit referring veterinarians, students, and clients. Bringing practitioners more actively into the VTH workings would also help them understand the constraints of managing a teaching hospital. If the VTH views the referring veterinarian as its primary customer, then having a specially assigned advocate or contact person just for referring veterinarians within the VTH system seems like one useful approach toward improving communication and handling issues quickly and efficiently.

Regardless of who the VTH views as the key customer, success in veterinary medicine is all about relationships. To build strong, sustainable relationships, VTHs need to recognize that

perceptions are critical; it is crucial to know what referring veterinarians, clients, and students think about the VTH. These thoughts/perceptions form the basis for expectations in both clinical expertise and service as they relate to customer needs and wants. For consistent success, it is important that the VTH strives to exceed these expectations.

Operations. Operations management involves the physical environment, systems management, and customer service. As VTHs reexamine their operations, frustration may arise from particular features of the physical environment involved. Some VTHs may have outgrown their current facilities with regard to either staff or equipment. Workflow schedules should be examined to avoid congestion in certain areas of the VTH at certain days and times. However, an equitable balance between flexibility and scheduling is often difficult to achieve. Periodic bottlenecks are unavoidable in a profession where events can change hourly, but flexibility is easier to achieve when a culture of teamwork is promoted. Having scheduling personnel that have been trained in key areas of the operation should be a priority to improve workflow. Conversely, periods of workflow interruption should also be examined, such as senior student rotation switches, resident and intern introduction periods, and the orientation of new faculty. These should have set protocols for training and introduction to prevent workflow obstacles and excessive disruption.

In the financial management section, the importance of a computer system that is capable of generating needed reports and benchmarks was discussed. This same system should be able to generate operational data to determine hospital efficiency. Important efficiency benchmarks to determine include the ratio of veterinary technicians to veterinarians (on the basis of FTEs),

number of transactions per unit of time, client wait times, production per FTE veterinarian, and the number of cases per FTE veterinarian.

Along with these types of data, an adequate computer system should have an efficient system for developing estimates, an easy method of updating case accounts, and accurate, easy-to-read client invoices. The system should also be linked to a medical records program that includes client and referring veterinarian communication tools.

Customer service issues can apply to both the client and the referring veterinarian. Some ideas for improving service to referring veterinarians were discussed in the marketing section. By discovering what the referring veterinarian needs and acting upon those needs, each VTH will be improving their service. Additional emphasis should be placed on structured patient care and case management by an effective healthcare team that includes the clinician, the student, the veterinary technician, and the client. In this scheme, the full capabilities of non-veterinary staff need to be appropriately leveraged.

As VTHs struggle to involve their students in as many realistic cases as possible in an efficient manner, perhaps alliances might be formed with other clinical entities. This has been successful with the AHCs, and may be an option especially worth considering for food animal exposure.

Legal and Ethical Considerations. VTHs should strive for the highest standard with regard to all legal and ethical issues. This includes government regulations regarding the workplace and licensure requirements. Students should be aware of the efforts put forth to keep them safe via

OHSA standards. All staff and faculty should follow sound medical records procedures, including consent forms, declining treatment forms, signed estimates, and communication policies.

The VTH should not avoid controversial ethical conversations, but should be the center of discussing and exploring these issues. Students should be involved in these conversations and provided the opportunity to participate in the associated debates. VTHs should sponsor discussions about ethical controversies within the veterinary community. Students and faculty should have ethical rounds to discuss cases and help students work through difficult situations.

Implementation Constraints

The lack of strong, effective leadership in the college/school of veterinary medicine was seen as one of the key limiting factors for adopting new methods and approaches in the VTH. Most critically, this leadership needs to assist with balancing the mission. In addition, it was recognized that a change in culture will likely be necessary to achieve meaningful change in the VTH. Along these lines, it will be important to have the right people involved in the change process, and perhaps even provide appropriate professional development for faculty and staff.

Recognizing that the VTH is only one part of the non-technical SKA picture for veterinary students, participants emphasized the importance of incorporating non-technical SKAs throughout the curriculum as a method of making any changes incorporated in the VTH more successful.

RECOMMENDATIONS

Toward development of a standardized business model for the VTH, the following recommendations arise from this research project.

Recommendations Across Colleges/School of Veterinary Medicine

1. Communicate the VTH Business Model – To gain the full benefit of this research project, it will be important to communicate the VTH Business Model results to all the schools/colleges of veterinary medicine. Presentations at the schools/colleges should include both administrators and faculty in the audience, and should be followed by roundtable discussions on the relevance of the findings for that particular institution. Items of interest should then be prioritized, and specific plans should be made for initial follow-up (including assigned responsibility and established timeline).
2. Initiate a National Dialogue on Balancing the Mission – Because of its importance and the critical challenges being faced, a national dialogue on “Balancing the Mission” is suggested. Veterinary college administrators from all levels (dean’s office, teaching hospital, and academic department/unit) should join faculty for these discussions to assure a broad representation of perspectives. Presentation of the issues, followed by open discussion of potential solutions and sharing of experiences (both successes and disappointments) would be useful.

3. Enhance Networking – Beyond the broad-based dialogue related to the VTH mission, it will be important to enhance networking among and between VTH directors and administrators. Focus group participants consistently expressed the desire to achieve a greater degree of open exchange of leadership and management ideas between teaching hospitals. In the present situation, the professional affiliation of VTH directors generally lies with the AAVC and the hospital administrators align with NAVCA. As indicated by participants in this project, discussion of current VTH leadership and management issues has not consistently been a part of the agenda for the annual meetings of either of these organizations. Further, because the two groups meet separately (different times and locations), cross fertilization of ideas between directors and hospital administrators has largely been restricted to those interactions that occur within individual teaching hospitals. Opportunities for joint meetings for the specific purpose of considering VTH leadership and management and enhanced networking within and between director and hospital administrator groups should be considered.

4. Develop Benchmarks – One of the key areas of interest related to VTH management involved the lack of available benchmarks for financial performance, operations, and prices. As an outgrowth of the national dialogue and enhanced networking mentioned above, development of a structured, organized approach to the development of benchmarks for VTH management is recommended.

College-level Recommendations

1. **Strategic View/Leadership** – The foundation of a successful VTH business model lies with leadership. The VTH must fit into a global view of what is best for the particular college/school of veterinary medicine, suggesting that strong, effective leaders are needed in the dean’s office. To achieve focus, a clear vision is necessary to provide the context for progressive strategic planning and management. Faculty input is crucial in these exercises to create a clear sense of ownership and commitment. Ultimately, appropriate goals are needed for the numbers and types of cases, and for the desired species mix. Progress toward these goals should be measured and monitored on an ongoing basis. Achieving and maintaining an appropriate balance between teaching and service is paramount, as is the balance between primary care and specialty practice. To increase the likelihood of effectively developing and pursuing such goals, it may be desirable to provide leadership training as a form of professional development for selected administrators, faculty, and staff. In addition, the administrative structure and methods of faculty/staff should be evaluated to consider potential for improving alignment of operations with strategic directions.

2. **Operations Management** – To successfully implement the strategic plan in pursuit of the vision/mission, progressive management is also important. Based on input garnered from this project’s focus group participants, recommendations are offered with regard to finance, pricing, human resources, operations, and legal/ethical issues.
 - a. **Finance** – In the realm of financial management, it will be important to be capable of reliable and credible cost accounting. In addition, budgeting exercises will assist in financial

planning and control. Rigorous and consistent evaluation of financial status and progress will require well-developed financial reporting. These systems should be open and transparent, and training opportunities should be provided to enhance the ability of interested faculty and staff to interpret financial statements. To assist in assessing financial progress, benchmarks should be developed to evaluate progress of an individual institution over time, and to compare performance between institutions.

b. Pricing – To achieve sustained financial success in the VTH, it will be important to develop a solid understanding among faculty and staff that price is not a high ranking choice factor when animal owners are choosing a veterinary service provider, especially in the case of specialty services. Prices in the VTH should use information on the cost of providing individual services as a backdrop, but should be set based on the value of the services to animal owners. VTH prices should be adjusted on at least an annual basis, if not more frequently. Pricing decisions in the VTH should incorporate faculty input, but should be the responsibility of VTH administration/management. Discounting the price of services should be strongly discouraged, and should be transparent on the rare event that they occur.

c. Human resources – The primary, overriding goal of human resource management in the VTH should be to achieve and maintain a foundation culture of respect and responsibility. Active teamwork should be fostered, but doctor-centered teams should be avoided. In considering management of faculty resources, it will be important to provide clear incentives for service/teaching, perhaps related to the success of the affiliated clinical unit(s). In this regard, it will be important to explore non-tenure options for faculty appointments, including

clinical track positions. Faculty involvement in this exploration process will be crucial. Ultimately, performance evaluations for faculty should include consideration of their service work. For management of staff resources, effective and timely communications should be a top priority for the VTH. In addition, active staff development programs are suggested in alignment with overall VTH goals, objectives, and directions. Non-veterinary staff should be appropriately leveraged to enhance VTH efficiency and provide a useful model for students. Staff should have regular, structured, constructive performance evaluations. These should incorporate input from faculty, but should be conducted by non-faculty supervisors.

d. Marketing – The key marketing challenge for the VTH is to clearly identify customers and their needs/wants, and then to provide service that exceeds those needs/wants. To be successful, this marketing plan must be an outgrowth of the VTH (and college/school) strategic plan. To develop a thorough understanding of the VTH market, applied market research is suggested, to include surveys, focus groups, demographic studies, etc. To the extent that referring veterinarians provide a primary target market for the VTH, prompt and thorough communication can be expected to reside near the top of the list of wants/needs. It may be advantageous to consider options such as a single contact person/service used exclusively to build relationships with these doctors. Effective marketing for referring veterinarians should involve faculty in speaking engagements at state and local veterinary medical association meetings on a regular basis. These and other opportunities to showcase the veterinary teaching hospital's expertise and unique services need to be actively pursued with potential referring veterinarians. In addition, it will be important for faculty to get involved as members in, and ideally the leadership of, these state and local associations.

When considering the needs/wants of clients in a VTH marketing context, communication should again be expected to rank as a high priority. In this regard, both case specific and general (e.g. newsletters) communications should be considered. Finally, VTH marketing efforts designed to increase the awareness of the general public will be more effective if a bona fide public relations officer is involved. Vehicles for these marketing activities should include both mass media (newspapers, magazines, television, radio, etc.) and the Internet (web page).

e. Operations – With an overarching emphasis on customer service for both referring veterinarians and clients, the primary recommendation for VTH operations is to develop the capability to measure and monitor efficiency. In this regard, the management information and medical records systems must be able to easily provide key information on operations in a useable format, and in an accurate and timely manner. When compared to benchmarks (either internal or external), such information will be useful to identify bottlenecks in VTH operations (work and/or client flows), and will provide a foundation for developing systems of operation to enhance efficiency and effectiveness. Examples of procedural issues that might be useful to address include a system to produce estimates quickly and accurately; a method for streamlining case management (including internal referrals); creation of an easy-to-read invoice; and design of legally robust consent/decline forms.

f. Legal/Ethical – It will be important for leaders of the VTH to be familiar with pertinent legal issues, and to be sure the VTH is in compliance. This set of issues may well vary somewhat from VTH to VTH, but a common core exists as well as presented in the results

section. To provide a solid base of ethics in the VTH, conducting ethical rounds is suggested as a forum for expanding awareness and addressing any ethical concerns that may arise.

Again, prime topics for inclusion were detailed in the results section.

SUMMARY

Although a number of constraints have been identified, implementation of the VTH business model should be feasible to some degree at all VTHs. Not all such implementations will look the same, nor should they; not all of the recommendations are equally relevant or important to all VTHs. Each institution should prioritize among the options, plan the tactics for successful implementation, assign responsibility to appropriate faculty, staff, and/or administrators, and initiate change. Expected benefits from successful efforts will include improved financial performance, enhanced quality in graduates, and improved relationships with referring veterinarians. Ultimately, colleges/schools of veterinary medicine will be better able to achieve their individual vision/mission and meet stakeholder needs as a result.

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