

General Sessions

Moderators: Nigel Cook, Jerome Carrier, Christine Navarre

Grumpy old vets revisited

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Abstract

Veterinarians can thrive in large-scale dairies by positioning themselves to be a part of the management team. There appear to be a number of common characteristics of veterinarians who succeed in management teams. They tend to “own” herd performance data. They are more likely to advise decision-making processes, and are less likely to position themselves as holding the answers. They work with outside consultants, but position themselves alongside management to evaluate and implement the proposals. These roles contrast with the traditional expectations of veterinary medicine.

Résumé

Les vétérinaires peuvent prospérer dans de grandes fermes laitières en se positionnant pour faire partie de l'équipe de gestion. Il semble y avoir un certain nombre de caractéristiques communes aux vétérinaires qui connaissent du succès au sein d'équipes de gestion. Ils ont tendance à assumer la « responsabilité » des données sur la performance des troupeaux. Il est plus probable qu'ils participent aux processus décisionnels et moins probable qu'ils se présentent comme les détenteurs de toutes les réponses. Ils travaillent avec des consultants externes, mais ils collaborent avec la direction pour évaluer et mettre en œuvre les diverses propositions. Ces rôles contrastent avec les attentes classiques que l'on peut avoir envers la médecine vétérinaire.

Introduction

While many veterinarians are very confident of their role and their future in dairy practice, there is also a palpable uncertainty regarding the future of veterinary medicine on large dairies that is expressed by many others. I occasionally meet former dairy-oriented students from a decade ago who have drifted toward companion animal practice and seem obligated to justify their choice to me. The uncertainty is trans-

mitted to current students who have asked middle-aged practitioners for advice about pursuing a career in food animal medicine. The uncertainty appears in discussions on AABP-L regarding topics about animal pharmaceutical sales, lay pregnancy diagnosis, and technical service veterinarians from industry. Grumpy? Some are. Uncertain? Many are. Why do some individuals seem to thrive in the world of large dairies and why do others withdraw?

This is the third time I have approached a keyboard to write about the topic of advisory services to dairy herds. I wrote the first paper when I was a young private practitioner working to deliver herd consultation services to relatively small herds.¹ I prepared my second attempt as a middle-aged, but relatively new, academic clinician with a few years of experience providing consultations to the emerging large-scale dairies in Wisconsin.² This third paper, prepared after 20-some years as a herd-problem investigator at the University of Wisconsin, will focus primarily on observations of the relationships between referring veterinarians and the managers of large dairy herds.

In the past decade, the average herd size of dairies investigated by our group now exceeds 700 cows, with a range from 50 to 10,000. These herds exist primarily in Wisconsin, but stretch from New York to California. The referrals come primarily from practicing veterinarians, some enthusiastically initiated by them and others requested reluctantly under pressure from a herd owner. In many situations, we have at least one interaction with the “herd management team.” As we gather background information on the problem, conduct the investigation, and attempt to monitor the results, I observe a wide variety of roles and postures assumed by the referring veterinarians. What are the characteristics of veterinarians who seem to thrive in the world of larger dairies?

The Physician Model of Health Care no Longer Works for Us

Veterinarians are trained primarily in the model of a physician health care delivery system where the

patient seeks medical care for an injury or ailment, the physician conducts an examination, orders some diagnostic procedures, and recommends some intervention. The variant for our profession is that the animal owner must seek medical care for the patient, because the patient can't talk and doesn't have a credit card. While this model serves companion animal practice reasonably well, it also served smaller traditional farms sufficiently. The farmer would call regarding a problem and the veterinarian would attend, discussing the case and options with the herd owner who was also the herd manager, who was also the milker, and who also fed the cows.

However, the physician model fails veterinary medicine completely in large-scale animal production systems. Most individual animal health problems are handled by farm staff. Calls for veterinary assistance are unusual, and the conditions that warrant a call are typically specified and delegated by the herd manager to the herds person, who initiates the call and interacts with the veterinarian who attends. Contacts between the veterinarian and the herd manager and/or owner become uncommon unless the herd veterinarian is viewed as an advisor to herd-level problems and management. Veterinarians who see their work in terms of the physician model express frustration with their work under these terms. If we step around and consider the issue from the point of the owner or manager, the situation becomes completely understandable. I've heard veterinarians who have become managers of large herds say that they get up every day with a primary focus of making sure that the entire herd gets fed and milked and that everything else is secondary. While we should have no reason to think that they do not care about the individual sick cow, her value at perhaps \$1,500 is far less than the daily milk yield of the dairy, which may exceed her value by 30 times or more. In contrast, that same \$1,500 cow may be worth two days of milk produced in a 50-cow dairy, where the herd owner will be intensely focused on the outcome of the cow. Dairy herd managers tend to focus on the things appropriate for their dairies, and their relationship to the veterinarian is dependent upon where their attention is focused.

For veterinarians to secure the valued role in large dairies that they enjoy with small herd owners, they must provide counsel, advice, and services that influence the performance of the herd. In his comments to a group of my students about future opportunities in dairy practice, Dr. Jerry Gaska of Columbus, WI said: "Position yourself to be a part of the management team" (Gaska JM. Personal communication, June 25, 2012). So the question remains: how does one do that? The following paragraphs summarize my impressions of the characteristics that distinguish the veterinarians who seem to have integrated their services most fully into the operation of large-scale dairies.

Write it up!

In the larger herd of today, interaction with herd decision makers usually takes place at a desk in an office or at a conference table on the dairy. Increasingly, the interactions take place during "management team meetings" that usually consist of the herd manager, the nutritionist, veterinarian, other consultants, and sometimes a financial advisor or loan officer. About a decade ago, I had the opportunity to interact repeatedly with a group of approximately 30 agricultural loan officers from Farm Credit Services, one of the major dairy lenders in Wisconsin. I would inquire about the role that vets played at team meetings. Some would reply that the herd veterinarian was the primary facilitator of the meeting and most essential and influential member of the group. In contrast, another replied that in his experience, the vet "usually arrived late, left early, and contributed nothing while there!" The statement still wounds after 10 years.

Whatever the topic, the management team will expect a report. It may be a summary of herd performance records for reproduction, somatic cell count (SCC), or milk. It may be a special analysis of some problem or question. It needs to be concise. If there is an extensive workup, it needs an "executive summary." You need to write it and bring it to the meeting. To quote one of my old professors from veterinary college, "The strongest memory is weaker than the palest ink." And now another old professor myself, I cannot resist the reminder that it needs to be dated!

"Own" the Herd Data

It is likely that the single most apparent characteristic of veterinarians who thrive in large herds is that they are viewed as the authoritative person with the herd health and production data. While the herd owner or manager will certainly have the data and may have some competence with the records, the veterinarian who has truly mastered the software will acquire special responsibilities on the dairy. Specialized data operations to access files, set up customized searches, export data to output files, and other operations appear to be essential skills. Veterinarians who work with the herds person to record health data in a consistent manner acquire a special position with management. There will be ongoing responsibilities to train new dairy employees in their use. Capable of accessing both health and production information, the veterinarian is turned to for information on almost any question that arises.

Not the "Answer" Man!

The posture of the successful herd veterinarian appears to differ between small and large herds. In smaller

herds, the successful herd vet usually provides the “answers.” A problem arises, the vet proposes the solutions and advises that “you need to do this and you need to do that.” We view ourselves as having the answers.

In larger herds, the vet may identify a problem: the calf mortality rate is higher than industry targets, the pregnancy rate is lower than other local herds, or milk yield of the first-lactation cows is below expectation. While this same veterinarian will frequently propose solutions, it is common to see these very successful veterinarians assume a role of advising the decision-making process, especially when the interventions are very costly or less than certain. Rather than take a strongly held position with “their” answer, they position themselves alongside the herd owner or manager to hear the findings and proposals made by outside consultants and subsequently assist and shape the decision.

Large dairy herds have access to a large number of consultants and advisors, many provided at no direct cost to the dairy by various companies who supply products. It is my impression that the most secure herd veterinarians are the most likely to invite and cooperate with outsiders to look at a problem, or in our terms, to seek a referral. In contrast, the veterinarians who have the most tenuous relationships with their clients seem to be the most threatened by technical service veterinarians and other consultants or investigators.

In a number of situations over the past decades, I have been invited to investigate herd problems by referring veterinarians who were fully knowledgeable and capable of performing the investigation themselves. I used to wonder why they invited me when they could have done it and offered essentially the same opinions and recommendations as me. With experience, I have come to see their role more clearly. If the herd veterinarian makes a recommendation that is rejected at a later date by the owner or manager, their position with the management is also diminished. By having me take the advocacy role, they can sit next to management and evaluate my recommendations. They can examine the recommendations and help to shape the decision, but if the recommendations are rejected, their advisory role can continue without jeopardy.

By serving as a decision-making advisor rather than the provider of the answer, the herd veterinarian becomes superbly positioned to implement interventions. Often, the diagnosis and recommendations are relatively simple to make, but implementation of the recommendations into a large dairy can be extremely complex. It can involve preparing a detailed plan and schedules, training the people, monitoring performance of new routines, and evaluation of outcomes. Veterinarians who may already be quite familiar with the operation of a dairy can avail themselves of major new opportunities in implementation of new programs.

Use of Decision-Making Tools

Increasingly, I see the use of two specific tools by highly regarded veterinarians in large dairies: the use of partial budgets and statistical analysis. Partial budgets are used to model the estimated economic effects of a proposed change. The veterinarian will hear proposals from outsiders and offer to prepare a partial budget. At the management team meeting, the group will list some anticipated increases and decreases in costs, along with increases and decreases in revenue. Veterinarians who know how to construct a partial budget will then construct it, focusing primarily on developing the logic and equations. At a subsequent team meeting, the entries of specific prices and hours and expected milk yield or morbidity rates are made. The partial budget can be used to explore the minimal outcomes for “break-even” analysis. The partial budget can be used for a “sensitivity” analysis to identify the most important factors that influence feasibility. While the partial budget should not be used as the sole tool to make a decision, the construction and use of it will help to clarify thinking about the problem and give greater confidence to the decision makers.

Partial budgets are typically constructed in electronic spreadsheet programs. Training programs have sometimes been offered as pre-convention seminars at the AABP conventions. All dairy-oriented veterinary students at the University of Wisconsin have had training in the technique for the past decade. Information and courses on partial budgets are sometimes offered through extension services from agricultural colleges.

Increasingly, I see herd veterinarians using relatively simple statistical tests to evaluate results of on-farm questions. Two techniques seem to be the most widely used. First, the student’s *t*-test is used to assess the difference between the averages of normally distributed data, i.e., the milk yield of two different groups of cows. Second, relative risk is used to calculate differences between groups based upon the proportions of cows above or below a cut-point, or the proportion that get sick. Most veterinary graduates in the past few decades have some formal training in these topics. Again, seminars on these topics are sometimes offered through the AABP, and materials for self-study are available.

While neither the partial budget nor a statistical analysis ultimately make the decision, the veterinarian who can provide these tools in combination with their respected clinical skills becomes a formidable contributor to herd management decisions. They will find a place at the table.

Specific and Comparative Knowledge

Conceptual knowledge is helpful, but it is not sufficient to earn a place at the table. It is not sufficient

to know that a practice is associated with a benefit. Valued advisors will know the principles and will back that knowledge up with product names, sources, phone numbers, and estimates of prices.

Comparative knowledge of operations of other dairies is highly valued in larger herds. I had a small group of students on a larger dairy when the owner mentioned that she was looking to change veterinarians. Knowing the herd veterinarian personally, I inquired about her motivation for a change. She said that she and her husband had great respect and confidence in the capability of their current veterinarian, but they felt that the progress of their dairy was being limited because theirs was the only larger herd served by this veterinarian. She expressed the wish that, when facing new questions or problems, she could turn to the herd veterinarian for information on how other similar dairies approached the issue. In a group practice with limited numbers of large herds, it would be appropriate to cluster those large herds within the responsibility of one or two veterinarians. In a solo practice with limited numbers of large herds, it would be appropriate to develop a network with other veterinarians who serve large herds and spend a

number of days each year traveling and observing the work of those colleagues.

Conclusion

Veterinarians can grow and thrive in their work with large-scale dairy herds. Changes are required in the tasks that they perform and in the roles that they assume. Essential skills include herd data management. Frequently, the role becomes one of assisting a decision-making process more than one of providing answers. Skills in partial budgeting and basic statistics become powerful tools in this environment. Finally, the veterinarian who learns to thrive in these operations can have a huge and positive effect on the health and welfare of tremendous numbers of the humble cows and calves entrusted to our care.

References

1. Nordlund KV. Developing the production medicine practice. *Vet Clin North Am Food Anim Pract* 1989;5:501-515.
2. Nordlund KV. Grumpy old vets: The 1960s practice hits the 21st century. *Bov Pract* 1998;32:58-62.

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A safety study was conducted in 23-day-old calves using doses of 5, 15 and 25 mg/kg for 15 consecutive days. No clinical signs of toxicity or changes in clinical pathology parameters were observed. No articular cartilage lesions were observed in the stifle joints at any dose level at 2 days and 9 days following 15 days of drug administration.

An injection site study conducted in feeder calves demonstrated that the formulation may induce a transient reaction in the subcutaneous tissue and underlying muscle. No painful responses to administration were observed.

Swine: A safety study was conducted in 32 pigs weighing approximately 57 kg (125 lb) using single doses of 5, 15, or 25 mg/kg daily for 15 consecutive days. Incidental lameness of short duration was observed in all groups, including the saline-treated controls. Musculoskeletal stiffness was observed following the 15 and 25 mg/kg treatments with clinical signs appearing during the second week of treatment. Clinical signs of lameness improved after treatment ceased and most animals were clinically normal at necropsy.

A second study was conducted in two pigs weighing approximately 23 kg (50 lb), treated with 50 mg/kg for 5 consecutive days. There were no clinical signs of toxicity or pathological changes.

An injection site study conducted in pigs demonstrated that the formulation may induce a transient reaction in the subcutaneous tissue. No painful responses to administration were observed.

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