

## Analyzing veterinary data: It's all about the 'why' axis

AVMA committed to developing a robust picture of profession's economic situation.



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In April's *dvm360*, I noted that the first step to producing a more efficient, better-performing veterinary services market is to collect, analyze and distribute better

information. However, a California veterinarian recently noted that the American Veterinary Medical Association "has been collecting, analyzing and distributing economic and market information for decades." This, he reasons, implies that a "great amount of time, money and effort expended heretofore by the AVMA and its hires has largely been wasted, inasmuch as the information gathered does not adequately answer the essential needs."

I want to address this apparent contradiction—why the AVMA is conducting more research when its efforts to this point have not prevented the problems we're experiencing—both here and in upcoming issues of *dvm360*. In the AVMA Eye on Economics column, I'll outline how the AVMA is approaching the economics of our profession, both in terms of data analysis and the crafting of solutions.

### **The current situation**

Even before I arrived at the AVMA as economics director, I took stock of the data that was being collected and found it to be generally of sufficient statistical quality to perform a basic economic analysis. But I also found considerable gaps that made it difficult to analyze the markets adequately. For instance, when I started hunting for information, I found that the price and quantity of veterinary services (taken together) was unavailable.

I also noted that AVMA data was routinely "cherry-picked" to deliver a specific message. To quote an old adage, the data was used the way a drunk uses a lamppost: for support and not illumination. In most of the published literature regarding veterinary medicine, I found that the hypothesis often steered the collection and use of data in its own support, rather than the data being objectively collected and analyzed to prove or disprove the hypothesis.

### **So what's the problem?**

When veterinary organizations present survey data and statistical summaries, they often leave important questions unanswered. For instance:

- > What was the size of the sample?
- > How valid are the numbers, given the size of the sample?
- > Do the results represent veterinarians demographically?
- > Were the survey recipients chosen through a true random sample or were they self-selected?
- > Has the data been collected in a consistent way over a long enough period of time that the results can be trusted?

The bottom line is that markets function best with solid information. And good information is obtained through the unbiased collection of the same data over time. Collecting only the data that's needed to support a hypothesis infuses bias into the results. Providing data summaries that do not pass the "test of reasonableness" (*i.e.* a measurement to determine their validity) extends the bias, and taking action based on that flawed data cements the bias in reality. You know that old saying: "Ninety-nine percent of all statistics tell only 49 percent of the story." The danger is that misleading information often leads to misguided allocations of resources in the market.

### **What do we do about it?**

So how should we strategically address the problem of misleading data tabulations and the lack of robust analysis? For one thing, we can gain greater awareness of these problems. During the 2013 AVMA Economic Summit held last October, numerous industry and association representatives indicated that "validity of data" about the profession was a major concern. The AVMA will be holding its second Economic Summit on Oct. 27 of this year.

Meanwhile, we have begun to systematically collect data on the markets for veterinary students, veterinarians and veterinary services. These findings will help define supply and demand functions for each market so we can better understand the forces that have produced the current economic situation and help guide actions for more efficient markets in the future.

### **Focusing on why—not what**

The take-home message is this: the better the analysis, the clearer the picture that emerges and the fewer the inaccurate messages promulgated. The profession can help by focusing on "why" rather than "what."

We can devise strategies to deal with a problem only if we know why the problem exists. Many people respond to a problem by demanding to fix it with regulation. Think student debt is too high? Mandate a cap on tuition. Too many veterinarians? Put a cap on the number of new veterinarians. Non-veterinarians providing veterinary services? Pass a law to prevent it. Mobile clinics stealing my business? Outlaw them. The list goes on.

The question that hasn't been asked is why. Why is student debt too high? Why are there too many veterinarians? Why are non-veterinarians providing veterinary services? Answer the why, and we can figure out the how to move forward. That's exactly what we aim to do.

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