Dairy benchmarks: Using data to add value to dairy farms

Gabe Middleton, DVM, DABVP (Dairy)
Orrville Veterinary Clinic, Orrville, OH 44667

Abstract

Dairy farms have a tremendous amount of data available for consultants to evaluate and interpret. Veterinarians are in a unique position on most dairy farms to be trusted consultants because of their observational skills, frequent exposure to the cows, and knowledge surrounding many different biological processes on the farm. Benchmarking means to evaluate something compared to a standard. Benchmarking data on farms can be both helpful and dangerous at the same time due to several factors. Dairy managers should be encouraged to set goals, monitor trends, suggest changes, and evaluate results. Again, the herd veterinarian is in the position to be able to consult with the farm on all of these items. If veterinarians do not get involved in the analysis, other consultants will likely fill that void.

Key words: benchmarking, data, records analysis

Résumé

Les fermes laitières génèrent un volume considérable de données que les consultants peuvent évaluer et interpréter. Les vétérinaires dans la plupart des fermes laitières sont des consultants de confiance dans une unique position en raison de leur pouvoir d'observation, de leur exposition fréquente aux vaches et de leurs connaissances sur plusieurs processus biologiques à la ferme. L'étalonnage consiste à évaluer quelque chose par rapport à une référence. Les données d'étalonnage dans une ferme peuvent être pratiques mais dangereuses en même temps en raison de plusieurs facteurs. Les gestionnaires d'une ferme laitière devraient être encouragés à déterminer des objectifs, surveiller les tendances, suggérer des changements et évaluer les résultats. Encore une fois, le vétérinaire du troupeau est dans une position qui lui permet de conseiller la ferme sur tous ces aspects. Si les vétérinaires ne s'impliquent pas dans cette analyse, d'autres consultants vont probablement combler ce vide.

Introduction

Dairy veterinarians need to be involved in several different aspects of the operation, not just reproductive ultrasound or palpation. One value-added service that the veterinarian is in a unique position to perform is analysis of data and Dairy Herd Improvement Association (DHIA) test day records. These records are typically analyzed via PCDART or DairyComp305 dairy records software. Other helpful programs exist, such as TMR Tracker, that veterinarians can use to analyze data to evaluate dry-matter intake between groups.

Benchmarking is a common term that is used to compare something to a standard. However, veterinarians might be better served setting goals on dairy farms rather than comparing data to an industry-wide benchmark. After attainable and smart goals are set, trends can be monitored over time to determine if action items have produced positive results. Developing a consistent method to evaluate and interpret data is critically important to ensuring that the producer finds value in the analysis. The veterinarian may struggle to break through into analysis of data on the farm due to insecurity on whether the producer is willing to pay for the service as well as their own level of comfort interpreting the data. Finding a mentor to help instill confidence and starting with simple data points may be helpful for the practitioner to break through into records analysis.

Veterinarians should develop a list of data points from test day data that they review every month with the producer or farm manager. These data points may involve several aspects of the operation, such as reproduction, culling, disease monitoring, milk quality, and heifer inventory just to name a few. Interpretation of data points should be monitored for trends over time. The veterinarian should also understand how factors within the data affect the final number. For example, if the herd does not have solid parameters in which to identify and record different transition cow diseases, the analysis of disease incidence may be flawed. This is an excellent opportunity for the veterinarian to help the producer understand the importance of quality data in regards to transition cow disease identification.

Veterinarians should also have an understanding that test day data is only 1 part of the equation when it comes to analysis of dairy farm records. Reproductive data can be analyzed more frequently, as those numbers are typically updated in real time. Bulk tank somatic cell count and milk component data should be analyzed daily along with test day data to identify any changes that are occurring in real time. This can be accomplished more frequently by observing information provided by federal milk marketing order testing.

Many veterinarians provide services to dairy farms with very little data available for analysis due to multiple factors. Perhaps the herd does not perform DHIA testing and there is no herd management software. Veterinarians

are once again in a unique position to help manage data on these herds. Microsoft Excel is an excellent option to track data points such as transition cow disease data, culling and death, production trends, milk components, and other reproductive parameters.

Veterinarians can also provide tremendous value to producers by analyzing data points such as heifer growth rates, lung ultrasound scoring, colostrum management data collection, and calf serum total proteins. Producers are often more than willing to pay for collection and analysis of this data if the results are meaningful and appropriately interpreted.

Conclusion

Veterinarians need to step into the realm of data analysis help secure their position on the farm as 1 of the most trusted consultants. Others will fill the void if veterinarians do not show interest or take the time to analyze records. Young veterinarians are in a particularly appropriate position to analyze data on farms because they are more likely to be able to take the time to perform the analysis due to potentially less daily workload relative to the seasoned veterinarians. This provides an excellent opportunity to begin to gain confidence and build rapport with dairy clients.