# Network of advisory services to improve the health of dairy cows in Baden-Württemberg

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### **Abstract**

In Baden-Württemberg the milk recording organization (MRO) initiated an advisory service network (Verbundberatung) together with farmers, veterinaries and own technicians for the health improvement of dairy cows. The advice of all partners in the network is based on a common data base, using the software of the "Rinderdatenverbund" (RDV). All partner organizations in the RDV offer a health data recording and monitoring system in dairy herds, simultaneously used by veterinaries (vets) and farmers.

#### Introduction

The MRO's from Austria, Bavaria, Schleswig-Holstein and Baden-Württemberg came together in the Rinderdatenverbund (RDV) with the aim to jointly develop software. One focus of this developer community is to evolve internet based programs for farmers and vets. With the program RDV-Farm (RDV4M) an internet based herd management program for farmers is available, offering certain analysis in the field of animal health. Analogue to the RDV4M an internet based application was developed for vets (RDV4T), using the common data base.

All RDV partners offer their members a health monitoring system in dairy herds in cooperation with their responsible vets. Veterinary diagnosis and observation of farmers are recorded, processed and made available via RDV4M and RDV4T to farmer and vet respectively (LKV BW, 2014).

With the financial support of the "Landwirtschaftliche Rentenbank" an advisory service network in Baden-Württemberg will be set-up to coordinate the activities of the individual partners (farmers, veterinarians and MRO technicians).

This will be achieved by:

- ➤ Common thresholds for animal health in the herd management program RDV4M and RDV4T
- > Synchronization of advisory objectives and course of action for the individual farm
- > Group consultation

Keywords: Advisory network, milk recording, animal health, herd monitoring

## Point of departure of the advisory service network

#### **Animal health**

Since October 2010 the MRO of Baden-Württemberg and practicing vets run a state-wide health data recording and monitoring system in dairy herds. The diagnoses, provided by vets, together with the observations of farmers are recorded and stored in the RDV. This data is linked with the milk performance testing data and available via the online-programs RDV4M / RDV4T for farmers and vets respectively.

Currently around 1000 dairy cow farmers and 155 veterinary practices are engaged in the health monitoring in Baden-Württemberg. Thus, the prerequisites for an advisory service network are met.

#### **Online-tools**

- ➤ RDV-Farm (RDV4M): Software for herd management and analysis in dairy farms (Zuchtdata, 2013);
  - Module Animal: Summarizes all animal information, e.g. all results of the official milk controls, the artificial inseminations, calving's and veterinary diagnoses, representing an electronic version of the stable register.
  - Module Farm: Display of data from the monthly official milk control, which can be sorted according to different criteria. The module allows an easy and fast identification of suspicious animals. Inseminations can be recorded and the module facilitates to generate action and work plans.
  - Module Animal health: This module is divided into several sections, e.g. overview on diagnoses, udder health, fertility and metabolism. Further sections are scheduled for the future. The section "diagnoses overview" displays all records of the vet's diagnoses and all observations of the farmers made in the frame of the health monitoring. The section udder health, fertility and metabolism offer a detailed description of the herd's health status and an exact benchmarking.
- ➤ RDV-App: Android and IOS-App for farmers to determine, access and record data directly on the spot.
- ➤ RDV-Vet (RDV4T): Online application for an integrated veterinary health care of the herd. Analogue to the RDV4M for farmers, this application was designed for vets participating in the health monitoring of dairy farms. The RDV4T has a similar structure as the RDV4M, being divided into the following parts: alarm lists, overview on diagnoses, udder health, fertility and metabolism. The benchmarking and alarm lists are graphically upgraded by a traffic light system. RDV4T enables the vet to observe those farms supervised by him. Together with the farmer under his supervision, the vet is able to identify and to analyze suspicious animals and dairy

stock problems, before acute problems arise. As veterinarians serve several farmers, it was set great value upon the clearness of the program.

➤ RDF-Feed: For the MRO technicians of the RDV partners, an online program for the calculation of feed rations is available. Results of feed analysis are transferred automatically to this program via interface. All necessary animal data are available through the RDV. The feed data base is maintained and regularly up-dated centrally by the administration of the MRO's and facilitates its use.

### Coordination

In joint meetings farmer and vet define together thresholds for evaluation of udder health, fertility and metabolism stability to be set in the program RDV4T. These thresholds are automatically transferred into the program RDV4M for farmers. The network benefits from the fact that all partners work on a common data base, having the same health agenda for the herd, facilitating the definition of a corresponding course of action. The definition of objectives and the set-up of an action plan are achieved in cooperation with all partners. This will be realized in arranged consultation meetings (Schwarzmaier, 2013).

### **Implementation**

The assistance of farmers during the implementation of agreed actions is carried out by vet and MRO-advisor in coordinated steps.

There is a clear assignment of activities in the advisory network: while veterinaries have their focus on udder health, fertility and metabolism, MRO-advisors are in charge of animal husbandry and feeding. The MRO-advisors are also supporting the farmers during the implementation of the action plan.

Group advice in form of workshops with focus on animal health will be carried out by vets and MRO-advisors for all those farmers, participating in the health monitoring and advisory service network.

### **Summary**

The advisory network service is a cooperation of MRO, vet and farmer and is focusing on problems of udder health, fertility and metabolism. In joint meetings the farmer, vet and advisor define objectives of their work and ways of implementation. The progress is evaluated in consecutive meetings. This network benefits from the fact that all partners work on a common data base, having common thresholds and a corresponding course of action.

This advisory network service corresponds to the political agenda of improving animal health and welfare and started acting in Baden-Württemberg since the end of 2013.

# Acknowledgements

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## References

LKV BW, 2014; Gesundheitsmonitoring Rind BW, Suttgart, Germany, <a href="http://www.lkvbw.de/gmon\_aktuell.html">http://www.lkvbw.de/gmon\_aktuell.html</a>, accessed 11.04.2014.

Schwarzmaier, A., 2013; Vorbeugen statt behandeln, Badische Bauern Zeitung (BBZ) (32): 24-25.

Zuchtdata EDV Dienstleistungen GmbH, 2013; RDV4M-User Manual, Vienna, Austria, <a href="http://cgi.zar.at/download/Newsletter/RDV4M-Doku-neu.pdf">http://cgi.zar.at/download/Newsletter/RDV4M-Doku-neu.pdf</a>, accessed 11.04.2014.