Customer Case Study





Oniris VetAgroBio and AMA transform veterinary care through remote assistance

Oniris VetAgroBio: Pioneers of veterinary excellence

Veterinary medicine is undergoing significant evolution. Oniris VetAgroBio, a veterinary and agro-food school in Nantes, France, is at the forefront of innovation in teaching, research, and telemedicine. The creation of the veterinary telemedicine chair in 2019, supported by MSD Santé Animale, is evidence of this commitment.

In collaboration with AMA, hospital practitioners and research-teacher teams utilize XpertEye, a remote assistance application that opens new horizons for conventional veterinary practices. It allows experts to diagnose and transmit advice based on their expertise directly to the field.

Context

In rural veterinary clinics, numerous challenges may arise, especially when dealing with epidemics or new risks of animal mortality. Therefore, it is essential for veterinarians to collaborate closely, share expertise, and seek expert opinions. Establishing strong links between clinics and laboratories is equally important. Recognizing these challenges, Oniris VetAgroBio took the initiative to explore how remote assistance could potentially provide a solution.







Use case 1: Optimization of remote animal autopsies or DEXTER-e-T



The DEXTER-e-T project, part of the Oniris VetAgroBio Chair in Veterinary Telemedicine and led by **Dr. Laëtitia Dorso**, optimizes collaborative remote autopsies for veterinarians faced with complex cases of animal mortality by integrating XpertEye.

Dr. Dorso, an experienced veterinarian specializing in anatomical pathology, initiated the DEXTER-e-T project and has been using XpertEye for over two years. For instance, when a veterinarian encounters an unexplained death case on a farm and traditional methods fail to provide answers, XpertEye intervenes. Instead of relying solely on local expertise, the veterinarian can connect remotely to specialists like Dr. Dorso, renowned for advanced skills in anatomical pathology.

Through the integration of video and audio technologies, the remote specialist can virtually examine the animal, discuss observations with the on-site team, and provide real-time guidance on the technical and diagnostic aspects of conducting autopsies.

Veterinarian		Remote	specialist	

Even in regions with unreliable network connectivity, XpertEye ensures a stable connection, enabling the remote specialist to provide uninterrupted information.

This innovative solution has already proven its effectiveness by enhancing diagnostic accuracy and problem-solving in situations where physical presence is logistically challenging. XpertEye facilitates autopsies by bringing expertise directly to the field, eliminating the need to transport animals to distant laboratories.

This accelerates the diagnostic process and ensures proper sample collection. Additionally, it enables rural veterinarians to connect with specialists to collaboratively solve issues, improving overall care and diagnostic accuracy.





Solution Use case 2: Improvement of remote livestock monitoring – Perspectives within research protocols

Dr. Sébastien Assié (Oniris VetAgroBio/INRAE) is currently conducting experiments to assess the health of young cattle. In collaboration with Ana Guintard, an agronomic engineer within the Telemedicine Chair at Oniris VetAgroBio, and using interconnected medical devices and video solutions, they are currently monitoring livestock on farms in the Pays de la Loire region.

XpertEye is being tested today as part of the research protocols. The introduction of **XpertEye represents a significant advancement in the field of veterinary practice by allowing practitioners to provide remote assistance** to field operators conducting comprehensive clinical examinations.

For example, the deployment of a PTZ camera (a Pan Tilt Zoom camera) offers panoramic views of entire farms, revolutionizing how practitioners ensure the well-being of livestock. Progress has also been made in developing «tele-ultrasound» (i.e. the farmer connects the ultra sound to XpertEye so that the remote veterinarian can analyze and comment the video feed).



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This solution opens up exciting prospects by allowing us to transcend geographical constraints. With XpertEye, we can examine cattle located up to 500 kilometers away, enriching our research by including a more diverse range of animals from different farms."



Dr Sébastien Assié Oniris VetAgroBio / INRAE veterinarian





O Use case 3: Training veterinarians of the future - Eye-Vet



Training is at the core of Oniris VetAgroBio concerns, as a veterinary training school. A particularly sensitive aspect of training is preparing future veterinarians for their entry into professional life. Young rural veterinarians face the challenge of isolation, practicing on farms away from the clinic.

Autonomy and self-confidence can be affected. In this context, the EyeVet project was born, aiming to enable a young veterinarian or a final-year student on internship to go alone to a farm but equipped with smart glasses that connect them in real-time to an experienced veterinarian remaining at the clinic. This allows the young veterinarian to gain skills, autonomy, and confidence while having remote support when needed.



Advantages offered by XpertEye

- Early detection of potential risks to the herd
- Reduction of veterinarian travel, fuel savings, minimal environmental impact, and optimization of expertise time
- · Elevation of colleagues' proficiency levels
- Improvement of diagnostic accuracy through aR technology
- Increased efficiency and precision

Per year, this represents:

30,000 kilometers saved (150 km on average per trip)

400 hours travel time reduction

1,000 KgCO₂eq saved

Expanding telemonitoring possibilities

The united efforts of Oniris VetAgroBio and AMA are redefining the landscape of veterinary practices, breaking down geographical barriers and elevating the standards of veterinary care. By uniting their expertise and cutting-edge technology, they are enhancing the accessibility and efficiency of veterinary care, transforming it into a globally impactful endeavor.

