

## Innovation in Veterinary Medicine. Understanding and Using Veterinary Telemedicine

Emilia Forlani\*

Specialist in Pathology and Clinic of Pets - Faculty of Veterinary Medicine, University of Pisa, Pisa, Italy

\*Corresponding authors: Emilia Forlani, Specialist in Pathology and Clinic of Pets - Faculty of Veterinary Medicine, University of Pisa, Pisa, Italy, Tel: +393286945083, E-mail: forlani.e@gmail.com

Received Date: January 10, 2022 Accepted Date: February 10, 2022 Published Date: February 12, 2022

Citation: Emilia Forlani (2022) Innovation in Veterinary Medicine. Understanding and Using Veterinary Telemedicine. J Anim Biol Vet Sci 1: 1-4.

### State of the art

#### State of the art of Veterinary Telemedicine (VTM) not yet known

The first indications come from Italy. In 2007, the Italian Society of Veterinary Science recognised the opportunities in the veterinary field and endorsed the idea of a conference about ICT and telemedicine. One aim of the conference was to provide an opportunity for meetings between those who usually work in different sectors. The conference was also expected to stimulate awareness concerning emerging projects and ideas in the field of veterinary telemedicine in Italy.

There are many cases in which ICT has been used to support health care in veterinary medicine. In particular, information technology is commonly used for surgery management and veterinary health records. There are also collaborative networks of research groups in field such as cardiology and dermatology, which conduct teleconsultation using videoconferencing and other methods. Less commonly, email is used for telediagnosis

- this is usually based on exchanges between specific colleagues. Distance training is becoming more popular among veterinarians. Most experience has been in the US where the use of ICT in support of veterinary telemedicine is common.

In order to discover the experience in Italy, my group and I conducted an informal survey, with the aim of drawing up a scientific programme for a conference. This activity lasted for about one year. The results of the review of Italian veterinary telemedicine can be summarized as follows:

(1) there was immediate interest from people who already had a background in the subject area;

(2) there was also interest from researchers not traditionally associated with veterinary medicine, such as those developing numerical models to analyze the effects of drugs on coronary blood flow;

(3) some planned initiatives had not taken place, perhaps because of a lack of knowledge about the specific professional sector and the potential market;

(4) the initiatives identified were fragmented and there seemed to be little practical scientific experience in this field;

(5) because of the lack of practical experience, validation studies were planned.

With regard to the interdisciplinary sector not related to veterinary medicine the following was found:

(1) some researchers, mainly from clinical engineering and bioengineering, have recognized aspects of their research work that are closely aligned with the animal field;

(2) considerable interest was shown by the participation of human medicine that manifested open-minded and precise appreciation in the interdisciplinary issues discussed.

Six months after the review was completed, the first conference “ICT, Telemedicine and Knowledge Networks in Veterinary Medicine” took place in June 2008. It produced a useful exchange of opinions between the participants and improved mutual understanding. The contacts made in this first conference have led to the first Italian interdisciplinary group in the field of veterinary telemedicine, made up of veterinarians, physicians, clinical engineers, health physicists and lawyers.

### **Principal qualities of originality and innovation**

The development of Information and Communication Technologies (ICT) is revolutionizing the processes of distribution of goods and services, increasingly connected to knowledge and innovative ideas of internet access.

Modernization processes require a research system that incorporates technological competencies and awareness to elaborate and develop innovation.

Telemedicine bases its technological foundation on the use of networks to distribute methods and practices for the exchange of data, signals, images and reports. This requires a profound organizational innovation and cultural adaptation to new operative models, as well as centering the research on applications of new technologies. Veterinary Medicine intends to participate in this evolution responding to the demand for proximity, in order to increase the offers of professional services and to add value through Telemedicine.

Veterinary Telemedicine intends to increase the development of future telematic applications oriented to solutions of the specific needs of the veterinary medical assistance, uniting competencies, new technologies, interdisciplinarity and the capacity for innovation.

It is of primary importance make available the first research group in the field of Veterinary Telemedicine with the aim of Identify the fields of application of VTM, improve quality of medical information for prevention and cure through the use of VTM, increase the databases generated by data-processing useful for research objectives, teaching and training, disseminate the best practices in VTM.

### **Possible geographic, cultural, economic, age limitations.**

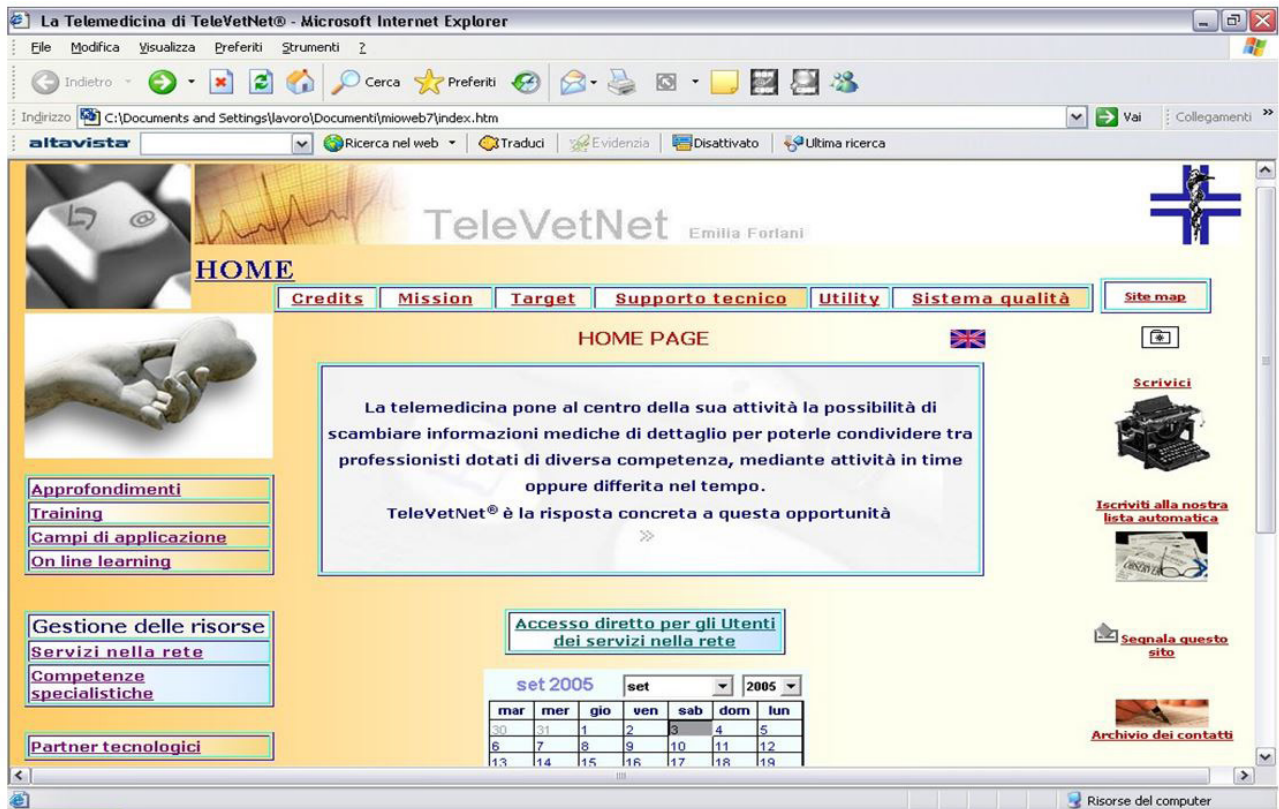
Veterinary Telemedicine it is not limited geographically but only by technology and transmission, in a context where the costs of internet connectivity are decreasing like the costs of new technologies. These factors facilitate the choice for their greater use in veterinary medical fields.

The appropriation of a major “service culture” in sanitary professional areas would permit to rethink them, improve them and generate a greater satisfaction for the client/owner, that in fact expresses important expectations for the health and welfare of their animal.

Presently, there are still few people that understand what solutions Veterinary Telemedicine is able to offer. In particular, the old school of Veterinarians has little technological awareness and tends to have difficulties understanding the use of computers and networks regarding the practices of the profession.

Thus, a large part of the success of Veterinary Telemedicine will depend on the capacity to train and communicate the efficiency and appropriateness of the use of Telemedicine, through manuals, reports, seminars, conventions, training courses, scientific publications and all that increases competency and knowledge in this new field of innovation in Veterinary Medicine.

## Editorial prototype



**Submit your manuscript to a JScholar journal and benefit from:**

- ¶ Convenient online submission
- ¶ Rigorous peer review
- ¶ Immediate publication on acceptance
- ¶ Open access: articles freely available online
- ¶ High visibility within the field
- ¶ Retaining the copyright to your article

Submit your manuscript at  
<http://www.jscholaronline.org/submit-manuscript.php>