Capturing patient data in small animal veterinary practice

CENTRE FOR EVIDENCE-BASED VETERINARY MEDICINE
Putting research into practice

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School of Veterinary Medicine and Science

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Introduction

The principle of Evidence-based Veterinary Medicine (EVM) is to employ the best relevant, most up-to-date information used by veterinarians in clinical practice to enhance clinical decision making. In order to identify areas in which research is needed, it is necessary to understand which conditions present most commonly, and determine perceived gaps in information. A relatively new methodology which may assist in identifying these gaps in veterinary knowledge is the extraction of clinical data from practice management software (PMS) systems to identify common conditions. This type of methodology has been used effectively in human healthcare; however veterinary medicine has only recently begun to realise its potential.

Background

Many methods are currently in place to capture emerging or prevalent disease. These systems rely on collecting new data as cases present and assimilating a dataset of diagnoses and presenting complaints. However the increasing reliance on PMS systems to record clinical data means much of this information is already captured in vet PMS systems. Methods that access this information will allow examination of historical data, including treatment success.

Alongside current systems, this new methodology will provide a complete picture of the owned vet visiting companion animal population within the UK and enable epidemiological studies to be performed on a much larger scale.

Method Development

A pilot study has been designed between the Centre for Evidence based Veterinary Medicine (CEVM) and a commercial PMS system and their clients. This collaboration will allow access to historical data providing an initial clinical portfolio for further method development. This will include retrospective records searching.

The aim of the study will be to evaluate the use of PMS systems for capturing veterinary clinical information and to examine the health of the UK vet visiting companion animal population. Summaries of medical records from real time consultations will be examined in situ and via PMS extraction and compared, to validate the efficiency of the extraction. Once validated the method will allow the extraction of clinical data for veterinary epidemiology and evidence-based research.

Next Steps

Further work will examine how much information is actually recorded by the veterinarian on the PMS system, a second aim will be an epidemiological study using data extracted from PMS systems to examine the role of clinical nutrition in the management of disease.

Discussion

It is thought that up to 90% of practices in the UK use a computerised practice management system for their clinical records with many different systems currently available. Developing efficient ways of accessing the PMS data for analysis across different practice systems would enable vast amounts of clinical data to be collated and analysed. Until standard methods of recording data between and across practices are in place, this extraction will be an invaluable tool for evidence-based veterinary research. Potential limitations of the method may include under or over reporting of certain diseases, in particular those that are easily diagnosed may be recorded more frequently[1].

Acknowledgement

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References

[1] Elizabeth M. Lund, P. Jane Armstrong, Claudia A. Kirk, Linda M. Kolar, Jeffrey S. Klausner (1999) *JAVMA*, Vol 214, No. 9.

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