

**CENTRE FOR EVIDENCE-BASED
VETERINARY MEDICINE**
Putting research into practice

Consultations in small animal practice: Does reaching a diagnosis affect outcome?

Natalie Robinson¹, R. Dean, J. Jones-Diette, J. Stavisky, M. Brennan
Centre for Evidence-based Veterinary Medicine,

School of Veterinary Medicine and Science, The University of Nottingham, UK

¹Email: svxnjr@nottingham.ac.uk

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What is a diagnosis?: "A diagnosis is the label given to a disease with certain clinical or pathologic characteristics applicable to a particular case" (Radostits et al, 2000). This is not always easy to define, for example:

- **Congestive Heart Failure:** Is this a diagnosis? Or can we only reach a diagnosis if we know the inciting cause e.g. Dilated Cardiomyopathy?
- **Otitis externa:** Again, is this a diagnosis in its own right? Or must we know if it is secondary to atopy, ear mites, ear conformation etc?
- **Atopy:** When does it become appropriate to treat for atopy in a pruritic dog? Based on consistent history, clinical signs, signalment and skin lesions? After exclusion of all other causes? Only after specific allergen testing? Or variable depending on the case?

Aims: The aim of this study was to conduct practice-based research in order to collect data on commonly encountered conditions and presentations in small animal practice. In particular, the aim was to look at the type of diagnosis made and whether this impacted upon the outcome of the consultation

Methods:

- Development of diagnosis definitions, a data collection form and a network of 8 sentinel practices
- Collection of data by direct observation of consultations
- Data recorded for all presenting complaints as well as additional problems raised by the owner or vet during the consultation
- Each problem discussed was assigned only one diagnosis type but could be assigned multiple outcome types if necessary e.g. Treat and Manage
- Pilot study complete: single day of data collection at each sentinel (n=8)
- Future plan: collection of data for three separate one week periods at each practice over a 1-2 year period

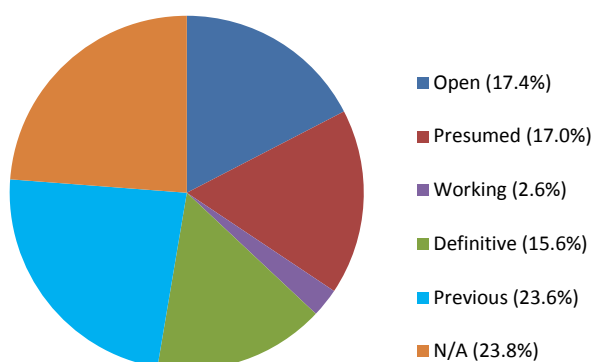
Definitions of Diagnosis Type:

- **Open Diagnosis:** No single diagnosis is significantly more likely, multiple differentials are being considered at the conclusion of the consult
- **Presumed Diagnosis:** A diagnosis based on minimal evidence/clinical suspicion, upon which therapy or other non-diagnostic interventions may be based
- **Working Diagnosis:** A diagnosis based on early confirmatory evidence, allowing early management of the disease while awaiting confirmation from the results of further diagnostic tests
- **Definitive Diagnosis:** A diagnosis with a high level of confidence, where any necessary diagnostic s including 'gold standard' tests have been completed
- **Previous Diagnosis:** A diagnosis made during a previous consultation or diagnostic work-up
- **N/A:** A diagnosis is not applicable as the problem or 'complaint' being discussed relates to preventive medicine

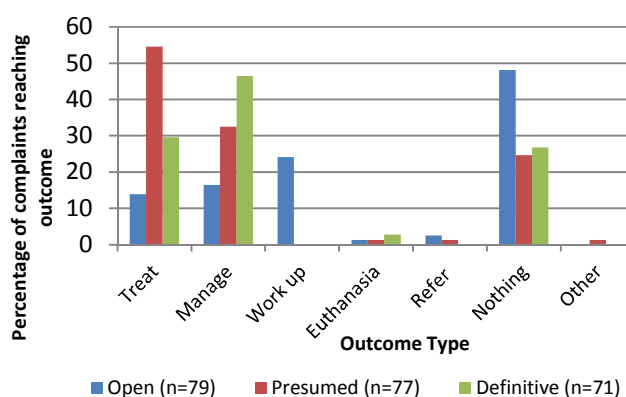
Results:

Data collected from 181 consultations involving 199 animals with 454 separate problems, during a single day at each of the 8 sentinel practices

Pie chart showing frequency of diagnosis types reached for all problems discussed (n=454)



Bar chart showing frequency of consultation outcomes for different diagnosis types



Conclusions: The initial results from this pilot study suggest that definitive diagnoses are made relatively infrequently in the consult room, while vets spend almost a quarter of their time dealing with previously diagnosed cases. Comparison of diagnosis and outcome types suggests that the consultation outcome of seems to vary considerably depending upon on the diagnosis made. Perhaps unsurprisingly an open diagnosis is more likely to results in a diagnostic work up, however it is also more likely to result in the decision to do nothing, and less likely to result in therapeutic treatment or management compared with presumed or definitive diagnoses. However, further investigation is needed to make more meaningful conclusions from this and to determine what other factors influence the likelihood of a particular diagnosis or outcome type. Diagnosis is a difficult term to define and the consideration of different types or levels of diagnosis may be useful when interpreting data from first opinion practice.

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References:

Radostits, O.M. Et al (2000). "Making a diagnosis" In: Veterinary Clinical Examination and Diagnosis, W.B. Saunders, London, p11-52