



## Development of an Adverse Event Reporting Button for a Veterinary Practice Management System

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### Introduction

Veterinary professionals practising in the UK are required by their code of professional conduct to report adverse events (AEs) to either the product manufacturer or the UK competent authority for veterinary products, the Veterinary Medicines Directorate (VMD) [1,2]. Despite this, there is growing evidence to demonstrate the under-reporting of AEs [3,4]. It has been suggested that the ability to report AEs directly from the practice management system could facilitate the reporting of AEs [3].

The Small Animal Veterinary Surveillance Network (SAVSNET) collects electronic health records from participating first opinion veterinary practices in the UK. In addition to passive data collection, veterinary practices are asked to select the main presenting complaint (MPC) via a window that appears after each consult. The MPC window provides an opportunity to deploy an AE reporting button to allow direct reporting to the VMD by professionals in practice with the aim of facilitating reporting.

### Methods

We developed an electronic AE report form based on the existing online form used for reporting AEs to the VMD. The report form was integrated into the SAVSNET MPC window (Figure 1). Upon selection of the 'report an adverse drug reaction' button the report form is pre-populated with the animal's information and drug history. Additional functionalities were incorporated including the ability to append recent clinical history with one-click and the option to receive a copy of the report for record keeping. We also developed an XML schema to allow reports to be expedited once daily to the VMD via a gateway connection.

Following testing, the button was launched to approximately 500 veterinary practice sites on 18-Sep-2020. Practices received information about the button via email and the button was promoted via advertisements in the veterinary press and SAVSNET social media channels. A demonstration was given during a lunchtime learning session to a large corporate veterinary group.



Figure 1: SAVSNET MPC window incorporating the reporting button.

### Results

In the 12 months following the launch of the reporting button 46 events were submitted. The median number of reports received per month was 3 (range 1-7). The number of reports received per species is shown in Figure 2.

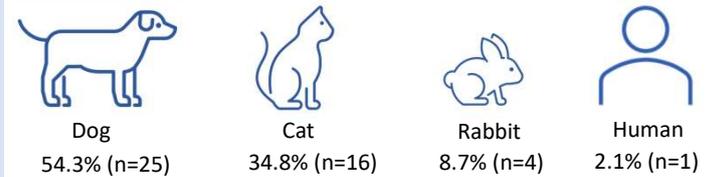


Figure 2: Reports received per species.

Vaccine products were the most commonly mentioned suspect drug, accounting for 60.7% of all suspect drugs. Macrocytic lactones and antithyroid preparations were the next two most frequently listed suspect drugs (Table 1). One report related to a suture and is not shown below.

| ATCvet therapeutic subgroup (3rd level)                   | %    | n  |
|---|------|----|
| Agents against protozoal diseases                         | 1.8  | 1  |
| Anthelmintics   | 5.5  | 3  |
| Antiepileptics  | 1.8  | 1  |
| Antiinflammatory and antirheumatic products, non-steroids | 3.6  | 2  |
| Antithyroid preparations                                  | 7.1  | 4  |
| Cardiac stimulants excl. cardiac glycosides               | 1.8  | 1  |
| Ectoparasitides for systemic use                          | 5.5  | 3  |
| Ectoparasitides for topical use, incl. insecticides       | 5.5  | 3  |
| Immunologicals* (grouped by 1 <sup>st</sup> level)        | 60.7 | 34 |
| Macrocytic lactones                                       | 7.1  | 4  |

Table 1: Suspect drugs, shown as therapeutic subgroups

The majority of events were non-serious (n=36) and expected (n=27). Some 9 serious reports were submitted (Figure 3).



Figure 3: Seriousness and expectedness of submitted reports.

### Discussion & Conclusion

A total of 46 reports have been received via the AE reporting button, including serious and unexpected events. However, this uptake is low relative to the number of reports submitted directly to the VMD via other methods. In part, this may be explained by the impact of COVID-19 on veterinary practice, in particular consultations taking place outside of the consultation room (and therefore away from the computer) and the extra demands on veterinary professionals during this time.

Recently, the VMD logo has been added to the button on the SAVSNET MPC window in an attempt to stimulate reporting. Future work will include deploying the button onto other PMS systems and further promotion to increase uptake.

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 3. De Briyne N, Iatridou D, Gopal R, Diesel G, and O'Rourke, D. Veterinary pharmacovigilance in Europe: A survey of veterinary practitioners. *Vet Rec Open* 2017; 4: e000224. doi: 10.1136/vetreco-2017-000224.  
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