

Disorders recorded in Cavalier King Charles Spaniels attending primary-care veterinary practices in England

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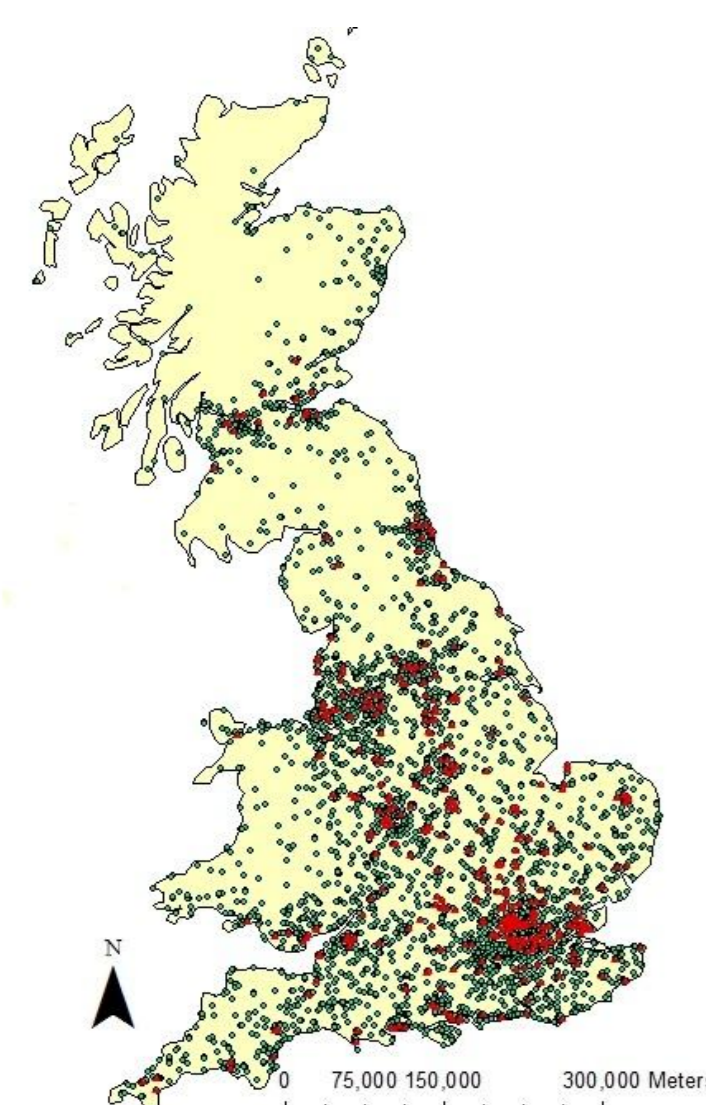
Background

Cavalier King Charles Spaniels (CKCSs) are a popular canine breed in the UK. Concerns have been raised over breed-related health issues in CKCSs & other purebred dogs¹ but reliable, breed-specific disorder prevalence estimates based on large numbers of dogs are required.

Aims

- Identify & describe a large group of CKCSs within electronic patient record (EPR) data from UK primary-care clinics (through the VetCompass companion animal health surveillance initiative²).
- Characterise the most frequently recorded specific disorders & disorder categories in a random sample of these dogs.

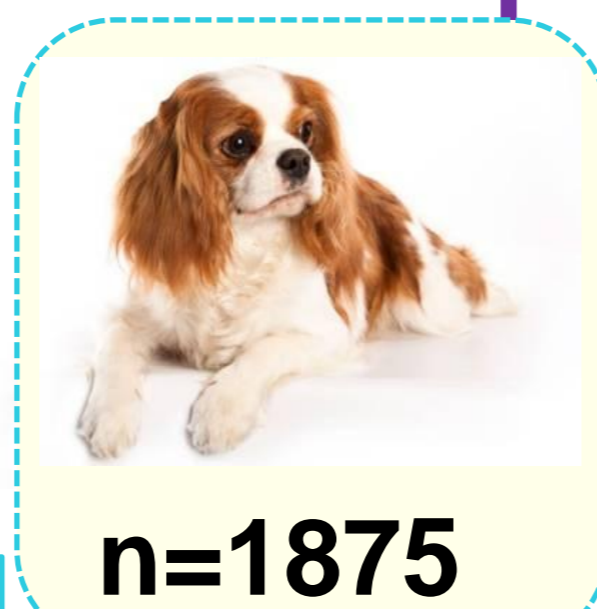
Methods



1) All dogs with breed recorded as CKCSs identified in EPRs of 151 VetCompass-participating, primary-care clinics in England.



2) Study sample (52%) randomly selected. Demographics described. (Table 1)



3) Detailed review of clinical data for dogs with 1 or more clinical EPR entry (Table 2, Figure 1)



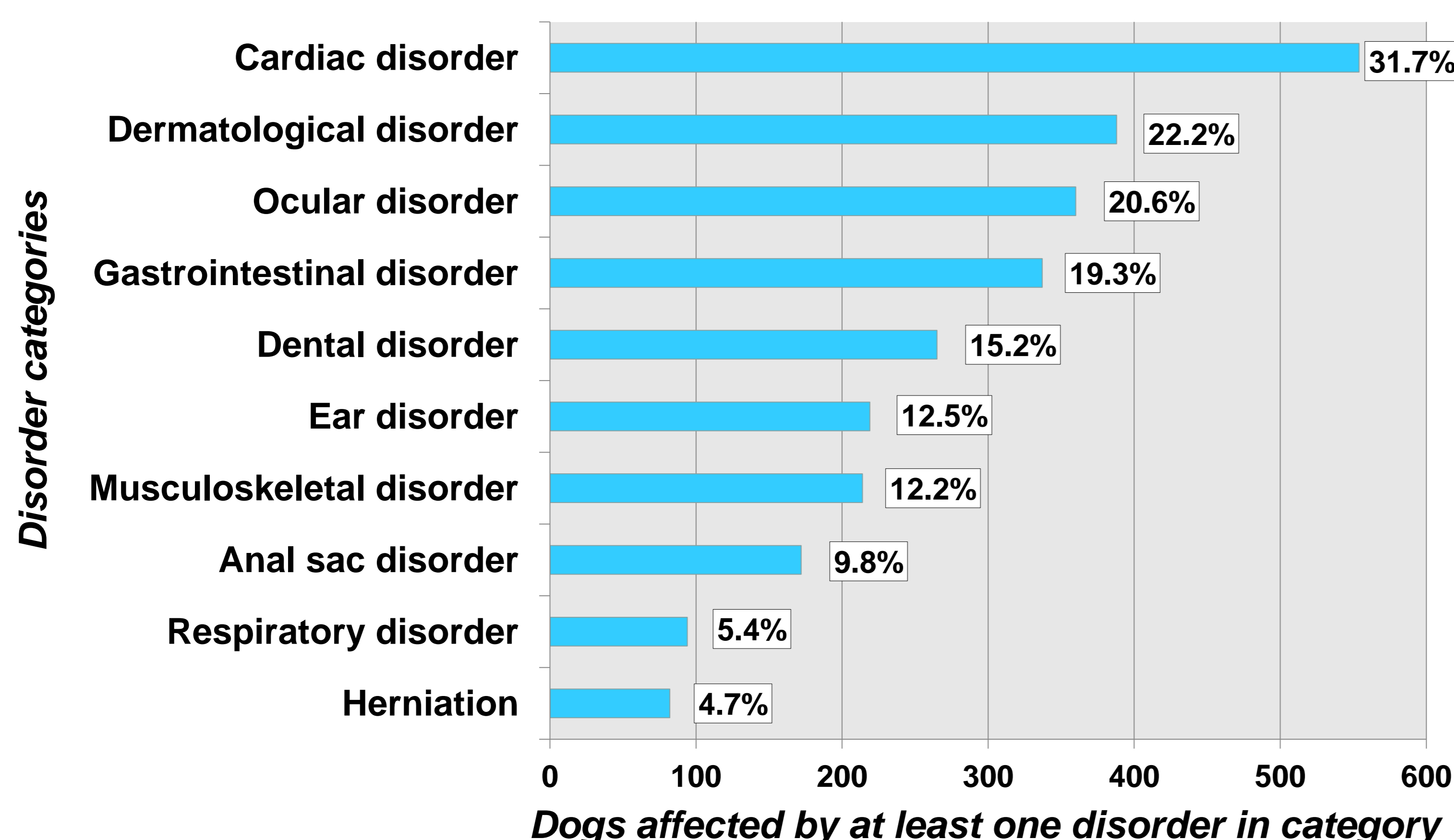
Results



Variable	Variable Category	Total dogs (% of study dogs*)
Sex	Male	965 (51.5)
	Female	905 (48.3)
	Unspecified	5 (0.2)
Coat colour	Blenheim	828 (44.2)
	Tri-colour	576 (30.7)
	Ruby	227 (12.1)
	Black & white	103 (5.5)
	Other	141 (7.5)
Totals per variable		1875* (100%)

Table 1: Study sample demographics

Figure 1: Top 10 disorder categories affecting study CKCSs



Specific diagnosis recorded	Total dogs diagnosed	Prevalence estimate for UK CKCS pop ⁿ (% with 95% CI)
Heart murmur	541	30.9 (28.8 - 33.1)
Diarrhoea - unspecified cause	193	11.0 (9.7 - 12.6)
Dental disease	166	9.5 (8.2 - 11.0)
Otitis externa	161	9.2 (7.9 - 10.7)
Conjunctivitis	131	7.5 (6.3 - 8.8)
Anal sac infection	129	7.4 (6.2 - 8.7)
Heart (cardiac) disease - unspecified	128	7.3 (6.2 - 8.6)
Corneal disorder - unspecified	114	6.5 (5.5 - 7.8)
Periodontal disease	98	5.6 (4.6 - 6.8)
Mitral valve disorder (MVD)	88	5.0 (4.1 - 6.2)
Umbilical hernia	72	4.1 (3.3 - 5.2)
Flea infestation	64	3.7 (2.9 - 4.7)
Anal sac impaction	63	3.6 (2.8 - 4.6)
Cutaneous mass lesion - unspecified	62	3.5 (2.8 - 4.5)
Keratoconjunctivitis sicca (Dry Eye)	61	3.5 (2.7 - 4.5)
Gastroenteritis	59	3.4 (2.6 - 4.3)
Patellar luxation	58	3.3 (2.6 - 4.3)
Otitis - unspecified	48	2.7 (2.1 - 3.6)
Osteoarthritis (osteoarthrosis, DJD)	46	2.6 (2.0 - 3.5)
Colitis	44	2.5 (1.9 - 3.4)

Table 2: Top 20 specific disorders recorded in study CKCSs

Conclusions

- Common disorders in study CKCSs largely reflect reports relating to the general UK vet-visiting canine population³. However, cardiac disease (MVD in particular) remains of particular concern in this breed.
- Breed-specific epidemiological studies using veterinary primary-care EPR data can highlight potential disease predispositions within breeds to inform evidence-based, targeted canine health policies.



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References

1. Bateson P: Independent inquiry into dog breeding. In. Cambridge: University of Cambridge; 2010.
2. VetCompass Project: Health Surveillance for UK Companion Animals [http://www.rvc.ac.uk/VetCompass/Index.cfm]
3. O'Neill D, Church DB, McGreevy PD, Thomson PC, Brodbelt DC: Prevalence of disorders recorded in dogs attending primary-care veterinary practices in England. PLoS One 2014, 9(3):e90501.