POSITION STATEMENT

Embracing Innovation and the Digital Age in Veterinary Medicine

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Introduction

The College exists to promote and ensure the safe practice of veterinary medicine on behalf of the public. In doing so, its governing Board, the Council, has a duty to anticipate and understand the future of the delivery of veterinary care and determine what, if any guidance or parameters, will be necessary to consider to assure quality outcomes for animal health and welfare over time. In this age of innovation, where the advancement of technology and the emphasis on precision medicine are at the forefront, the Council takes a principled approach to determining the risks of digital innovation in veterinary practice and aims to provide guidance that supports veterinarians in the accountable experimentation and use of the tools of the future.

Context

The evolution of the delivery of veterinary medicine has been occurring at an increasingly more rapid pace. The present and emerging technological tools utilizing varied and complex digital platforms extend across a continuum from telemetric devices to robotics to electronic record keeping to diagnostics. The most challenging of these advancements is software as a medical device (SaMD) which is fueled by the increasing capability of levels of artificial intelligence and data analytics.

While transformative change is not new, this is without question a next period of great change that will alter the work and the practice of veterinary medicine as it has been understood. While every transformation comes with associated risks, the adoption of new tools will continue to be dependent on the competency and good judgement of the practitioner that chooses to integrate them into the care of animals under their oversight.

Definition

Software as a Medical Device (SaMD): software intended to be used for one or more medical purposes that perform these purposes without being part of a hardware medical device (e.g., mobile app).

Position

Every licenced veterinarian is accountable for their practise choices and decisions, which is underscored by their societal commitment to do no harm.

In a landscape of rapidly developing tools and processes relying on technological platforms which have **no** government regulatory oversight, veterinarians are challenged to select options and opportunities that are trustworthy. Risks must be assessed in the choices made and it is the obligation of a veterinarian to use their judgement in the selection of new approaches as they are introduced.

The Council of the College of Veterinarians of Ontario supports and encourages innovation within the veterinary community. The College acknowledges the need to experiment with new models of practice, new models of delivery, new diagnostic tools, and new approaches to treatment. Veterinarians faced with this future need to develop skills that support curiosity, critical analysis, balanced skepticism, and experimentation with the knowledge that this environment is largely **unregulated**.

Regulation of a profession is not intended to be a barrier to change, but rather to be an avenue which creates safe forward movement. In keeping with its principled approach to profession-based regulation, the College urges veterinarians to consider the following as they make choices to embrace innovation and digital technology:

- transparency of the potential biases which may exist in the analysis of data or the auto-population of clinical assessment (neutrality)
- explainability of the outcomes produced by the tool (basis for prediction, consistency)
- robust and relevant prelaunch testing which gives confidence to the product (evidence informed)
- data privacy and security

Veterinary medicine will and must advance, however, the importance of the benefit and positive outcomes for animal health and welfare must remain paramount in the decisions and choices made at point of care by every veterinarian.

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