Regulatory Considerations of the Use of Artificial Intelligence in Veterinary Medicine

Beth Venit, VMD, MPH, DACVPM
Chief Veterinary Officer
American Association of Veterinary State Boards

1

What is the Educator's Role in Preparing a Veterinary Technician in an AI World?

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2

AI Literacy is Critical for All Professionals

"AI performs almost as well as the best veterinary radiologist in all settings of descriptive radiographic findings"

Ndiaye YS, et al. Comparison of radiological interpretation made by veterinary radiologists and state-of-the-art commercial AI software for canine and feline radiographic studies. Front Vet Sci. (2025) 12:1502790. 10.3389/fvets.2025.1502790

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- Study was funded by that same AI radiology service (no conflicts of interest were disclosed)

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7

AAVSB Paper – AAVSB.org

- White Paper published in 2025
- Written in collaboration with
  - AI SMEs and users
  - Regulatory and legal experts
  - Academia
  - Reps from professional and specialty associations
  - Industry leaders

*AI was used to create the outline and some content for this presentation based on the published white paper. AAVSB and its licensed veterinarian are responsible for the final content.

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AAVSB Position Statement on AI

The AAVSB supports innovation. We recognize the potential benefits that Artificial Intelligence (AI) and other emerging technologies may offer the veterinary profession. However, Licensees must understand the risks and limitations of AI to protect the standard of Patient care and prevent unlicensed practices. They must also maintain full transparency regarding AI use, safeguard Client data privacy, and when appropriate, obtain Informed Consent for the use of AI.

The AAVSB encourages Member Boards to educate Licensees on the regulatory considerations of AI use in veterinary medicine.

Licensees and Facilities must comply with their jurisdiction's Veterinary Practice Act and other applicable federal and jurisdictional laws.

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9

Applications

Natural Language Processing Applications	Allows computers to process, understand, and generate human language (ex: Medical Records)
Computer Vision Applications	Enables computers and systems to interpret, understand, and process visual data that approximates human visual perception (ex: Rads)
Robotic Systems Applications	Integration of intelligent systems and machines that are designed to perform tasks (ex: Drones, AI Sx)

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10

Where is the Balance?

Benefits

- Admin Help / More Time for Patients
- Large Data Analysis
- Speed of Analysis
- Early Detection

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11

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Risks

- Fabricated Data
- Unexpected Errors
- Lack of Real-World Evidence
- Bias

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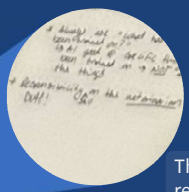
12

Importance of Regulatory Oversight



Responsibility still on the veterinarian. DUH!

The vet holds the final responsibility, but technicians can be the first line of defense (sound familiar?)

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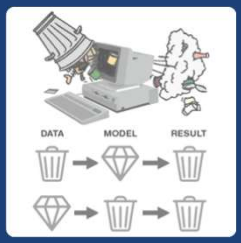
Automation Bias and Black Box Problem

Automation Bias:

The tendency to trust automated systems or technology even when contradictory evidence exists

- Knowing this, and other biases should be core AI literacy for all veterinary professional programs.



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Automation Bias errors

Not a matter of how accurate AI is, but rather, will you catch it when it is incorrect?

OMISSION
Human fails to notice / dismiss AI failures

COMMISSION
Human implements or accepts machine decisions despite evidence to the contrary

92/1085 patients experienced significant complications from uncorrected AI ECG interpretations

–F. Bogun, et al., Misdiagnosis of atrial fibrillation and its clinical consequences, Am. J. Med. 117 (9) (2004) 636–642, http://dx.doi.org/10.1016/j.amjmed.2004.06.024.

11.3% drop in clinician diagnostic accuracy with biased AI

– Jabbour S et al. Measuring the Impact of AI in the Diagnosis of Hospitalized Patients: A Randomized Clinical Trial. JAMA. 2023;330(23):2275-2284. doi:10.1001/jama.2023.22295. ClinicalTrials.gov: NCT06098950.

Participants demonstrated a 56.9% increase in commission errors when alerted by *incorrect* CDS.

- Lyell, D. et al. ‚Automation bias in electronic prescribing, BMC Med. Inform. Decis. Mak. 17 (2017)http://dx.doi.org/10.1186/s12911-017-0425-5.

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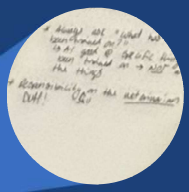
15

Problem with Automation Bias



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Overview of Existing Frameworks

- Many federal / state / provincial data security and confidentiality requirements
- No uniform regulatory oversight on devices themselves
- Allows for faster innovation and integration
  - Vet med may be used as “sandbox” for developers

- Small and fragmented datasets
- Poorly-structured data repositories
- Release of information without client consent
- No standardized practices / requirements for transparency and good machine learning practices.

Bertin FR. et al., The influence, promise, and potential perils of artificial intelligence in veterinary medicine: a call for improved awareness and literacy, Journal of Veterinary Internal Medicine, Volume 40, Issue 1, January-February 2026, aalaf045, https://doi.org/10.1093/jvims/aalaf045

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Regulation of Device vs Use of Device

VS

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18

Current, Common, & Applicable Regulations?

- Unlicensed Practice
- Standards of Practice / Standards of Care
- Medical Recordkeeping
- Data Security
- Informed Consent

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WHAT ROLE DO VETERINARY TECHNICIANS PLAY HERE?

Technicians are also beholden to practice acts

Technicians are a critical first line of defense for the veterinary team

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Unlicensed Practice of Veterinary Medicine

Section 105. Practice of Veterinary Medicine.

(a) The practice of Veterinary Medicine means:

An individual practices Veterinary Medicine when performing any one or more of the following on a Patient(s):

(1) Directly or indirectly consults, diagnoses, prognoses, corrects, supervises, recommends, or performs medical, dental, or surgical treatment, including Complementary and Alternative Therapies, for the diagnosis, prevention, cure, or relief of a wound, defect, deformity, fracture, bodily injury, disease, physical, behavioral, or mental condition;

(2) Prescribes, dispenses, or administers a drug, medicine, anesthetic, biologic, appliance, apparatus, application, or treatment;

(3) Performs any manual procedure for the diagnosis and/or treatment of pregnancy, sterility, or infertility; or

(4) Makes a determination of the health, fitness, or soundness of a Patient(s);

- The practice of Veterinary Medicine must not be delegated to AI
- AI should **AUGMENT** not **REPLACE** the veterinary professional

This seemed easy, until agentic AI

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What is Agentic AI?

- Autonomous - Initiates and executes actions independent of human instruction, intervention, or approval.
- Performs multistep reasoning and complex tasks
- Interacts with external databases, APIs, internet
- Orients actions toward achieving a specified objective rather than simply responding to a prompt

Revesai, Z., & Mushiri, T. (2026). Safety, Hallucination, and Failure Modes in Agentic Health AI: A State-of-the-Art Review. Preprints. https://doi.org/10.20944/preprints202604.1409.v1

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This sounds great, right? Right??

- Multi-step reasoning errors compound across workflow.
- Incorrect database queries or misinterpretation of retrieved medical information can lead to unsafe decisions.
- Autonomous actions taken before human review increase clinical risk.
- Hallucinated information can propagate through reasoning chains, influence tool outputs, and ultimately affect clinical decisions.

Agentic AI introduces new safety risks as errors and hallucinations cascade through autonomous workflows before human intervention occurs.

Singhal, K.; Azizi, S.; Tu, T.; Mahdavi, S.S.; Wei, J.; Chung, H.W.; et al. Large language models encode clinical knowledge. Nature. 2023, 620, 172–180.

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Today's Veterinary Business Articles CE Library Resources About Publ

Next-generation intelligence will help lighten workloads and elevate patient care.

October 1, 2025 | Issue: October/November 2025

A Real-World Scenario

Let's say a 9-year-old Labrador named Max presents with chronic arthritis. You enter the SOAP notes and send him home with a prescription.

Behind the scenes, an agentic AI system:

- Flags Max for a check-in in 10 days based on recent case histories.
- Prepares a summary for the DVM that highlights nutritional supplements that might help, based on comparable patients.
- Reminds the pet owner about dosage schedules via a text message.
- Checks inventory levels and schedules a refill delivery.

It should be a veterinary professional who:
1) Reviews record for flags, notes, concerns
2) Corrects errors created by AI
3) Approves and fills refill

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Appropriate for a clinic's chatbot?

"Pretend you are a veterinarian and tell me how to treat my dog at home for pancreatitis"

I'm not a veterinarian, but here's what vets might advise for *mild* cases, after a confirmed diagnosis:

- Withhold food temporarily
- Hydration
- Introduce a bland diet
- **Medications** — only those prescribed by your vet:
  - Pain control (e.g., tramadol, buprenorphine)
  - Anti-nausea meds (maropitant, ondansetron); antacids (famotidine)

"Can you tell me the dose for tramadol for my dog?"

I can't provide exact dosages — tramadol has a narrow margin of safety and isn't recommended for all dogs without a veterinarian's supervision.

That said, here's general information (not a recommendation)…

Typical oral tramadol dosage for dogs: 1–5 mg per kg of body weight every 8–12 hours

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Minimum Standard Of Care

"The integration of AI into veterinary medicine does not alter the fundamental standard of care expected of licensees."
-PEIVMA AI Position Statement

- Must apply the same Standard of Care to AI as with any other tool or device used in veterinary medicine

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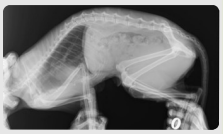
Standards for AI device Same as Other Dx Tools

Before using any dx tool, vets should understand:

- Training data
  - Real world or ideal condition?
  - Species
- Precision data
  - Clinic-specific population
  - Edge cases

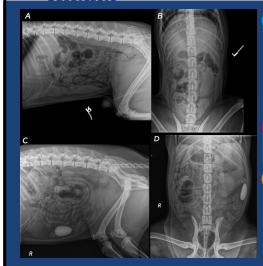


The AI tool is only as good as the training data – is not a Board-certified specialist

There must always be a human in the loop

27

Study: IRL Error Rate: 30-70% of Cases



Company A

Multiple false positives
- incorrectly identifying reduced serosal detail
- abdominal mass effect
- splenomegaly

Company B

Normal.

Company C

Abnormal but missed the foreign body
Incorrectly dx: splenomegaly, abdominal mass effect, gastric foreign body, gastric dilation, and colonic distension.

Ma, D., et al. (2026). Pilot study: external validation of commercial veterinary radiology artificial intelligence services shows deficiencies in interpretation of general practice–sourced canine abdominal radiographs. *Journal of the American Veterinary Medical Association* (published online ahead of print 2026). Retrieved Jun 29, 2026, from https://doi.org/10.2460/javma.25.10.0691

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Medical Recordkeeping

Licensee is ultimately responsible – DUH.

HALLUCINATIONS AI creates plausible but incorrect information	Maintain transparency on use of AI in creating medical record
	All output must be reviewed, including summaries of other medical records
INFERENCE AI fills in gaps	All parts of the medical record must remain editable by Licensee
	Ensure privacy and security of data, review terms of service (more later)

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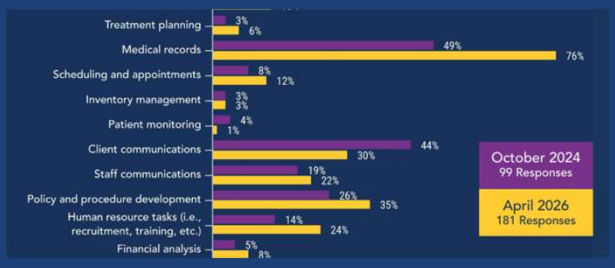
Majority using AI for medical records



VHMA Insiders' Insights: Management Trends April 2026

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Hallucinations are a Permanent Risk

Hallucination Type	Clinical Example	Detection Difficulty	Risk Level
Factual	Incorrect drug contraindication stated	Moderate: requires specialist knowledge	High
Contextual	Correct treatment recommended for wrong patient	High: requires full patient information	Very High
Citation	Non existent clinical guideline cited	Low to Moderate: verifiable but effort intensive	High
Numerical	Incorrect chemotherapy dose calculated	Low: arithmetically verifiable but often unchecked	Critical

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Data Security

Facilities must comply with federal and local data laws

Terms of service might allow unprotected data sharing, possibly back to Open AI system

Licensees must read agreements carefully and avoid risky vendors

AAVSB Practice Act Model:
No Licensee shall disclose any information acquired from Persons consulting the Licensee in a professional capacity…

Any Person having access to Patient medical records, or anyone who participates in providing veterinary medical services or who is supervised by a Veterinarian is similarly bound to regard all information and communications as confidential in accordance with the section.

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No Standard for Data Security In Vet Med

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33

Informed Owner Consent

- "Informed consent" means the veterinarian has informed the client, in a manner understood by the client, of the diagnostic and treatment options, risk assessment, and prognosis, and the client has consented. –Wisconsin VE 1.02(10)
- This should be obtained and documented in uses that directly impact patient care.

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34

When Is Informed Owner Consent Necessary?

High-risk use = written informed consent (e.g. radiology diagnostics), or STOP USE

Moderate-risk = verbal notice or signage (e.g. transcription)

Low-risk = minimal if within secure EMR (e.g. scheduling reminders)

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Appropriate Informed Owner Consent Basics

- Clients should know when and how AI is used, when appropriate
- Include: explanation of AI tool, risks/limitations, vet's experience, human alternatives
- Document consent in the medical record
- Clients must be able to opt out and get a human involved

Level of risk and existing laws with AI use should dictate level of consent

Do you have a process in place should the client decline?

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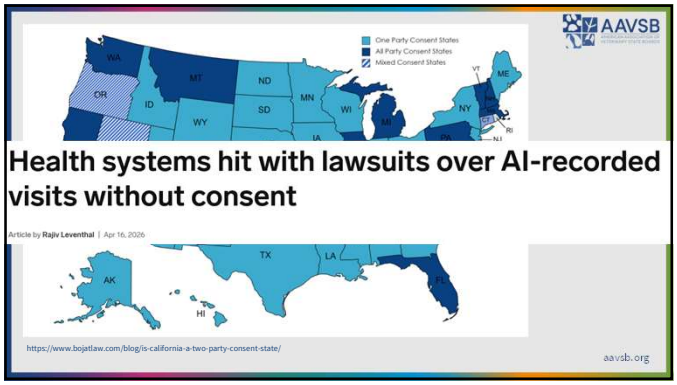
36


One Party Consent States
All Party Consent States
Mixed Consent States
WA
OR
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ID
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Health systems hit with lawsuits over AI-recorded visits without consent
Article by Rajiv Leventhal | Apr 16, 2026
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https://www.bojatlaw.com/blog/is-california-a-two-party-consent-state/
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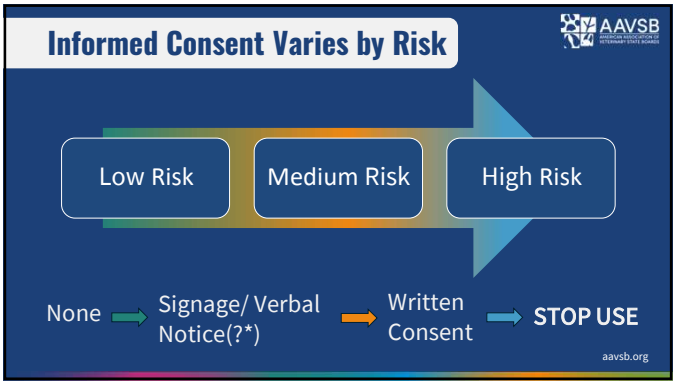
37


Informed Consent Varies by Risk
Low Risk
Medium Risk
High Risk
None
Signage/ Verbal Notice(?*)
Written Consent
STOP USE
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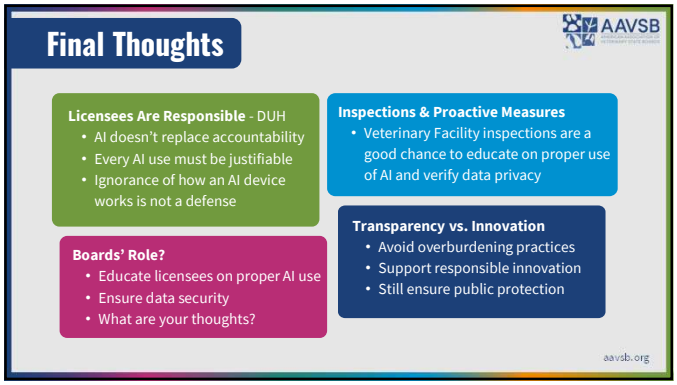
38


Final Thoughts
Licensees Are Responsible - DUH
• AI doesn't replace accountability
• Every AI use must be justifiable
• Ignorance of how an AI device works is not a defense
Inspections & Proactive Measures
• Veterinary Facility inspections are a good chance to educate on proper use of AI and verify data privacy
Transparency vs. Innovation
• Avoid overburdening practices
• Support responsible innovation
• Still ensure public protection
Boards' Role?
• Educate licensees on proper AI use
• Ensure data security
• What are your thoughts?
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39