

Beyond the Buzzwords: How AI Is Actually Helping Veterinary Practices Today

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Continuing Education Notes / Attendee Handout

Overview

Artificial intelligence (AI) is increasingly present in veterinary medicine, particularly in areas that reduce administrative burden and support clinical workflows. While marketing claims around AI can be confusing, this lecture focuses on **evidence-based, practical applications** that are currently in use and emphasizes how veterinarians can evaluate and implement these tools responsibly.

Why AI Is Entering Veterinary Medicine Now

Veterinary medicine is experiencing:

- Increased documentation burden
- High cognitive load and burnout risk
- Staffing shortages and workflow inefficiencies

AI tools are being adopted not to replace veterinarians, but to **augment clinical efficiency**, particularly in areas that do not require autonomous medical decision-making.

Most Common AI Applications in Veterinary Practice

1. AI Medical Scribes & Documentation Assistants

- Ambient transcription and SOAP note generation
- Structured documentation support
- Terminology correction (lay language → medical terms)

Evidence suggests these are currently the **most widely adopted AI tools** in veterinary medicine, particularly among specialists, due to their low clinical risk and high workflow impact.

Key benefit: Reduced documentation time and improved consistency

Key limitation: Requires clinician review; not autonomous

2. Diagnostic Support & Pattern Recognition (Adjunctive Use)

- Imaging assistance (e.g., radiographs)
- Clinical pathology trend recognition
- Flagging abnormalities for review

These tools **support**, but do not replace, clinical interpretation.

3. Client Communication & Workflow Automation

- Appointment reminders
- Pre-visit data collection
- Post-visit follow-up and education

These applications are generally considered **low-risk, high-impact** when used appropriately.

Understanding AI Limitations

AI systems are **probabilistic**, meaning:

- Outputs are based on likelihood, not certainty
- Confidence scores guide review intensity, not acceptance
- AI may be wrong even when confidence is high

A critical safety principle is that **AI should never invent clinical facts**, such as diagnoses, medications, or test results.

Acceptable vs. Unacceptable AI Errors

Acceptable (with human review):

- Transcription ambiguity
- Formatting issues
- Visible, correctable omissions

Unacceptable:

- Fabricated diagnoses
- Invented medications or dosages
- False diagnostic findings

Veterinarians must understand where AI should **stop**, not just what it can do.

Human-in-the-Loop Is Essential

Responsible AI use requires:

- Clinician oversight
- Clear accountability
- Training of staff and designated “super users”

AI tools are only as effective as the teams trained to use them.

Regulation & Professional Responsibility

Veterinary AI is currently regulated indirectly through:

- Professional standards
- Ethical guidance
- Risk-based evaluation

Veterinarians remain fully responsible for clinical decisions, regardless of AI involvement.

Key Takeaways

- AI augments clinical judgment; it does not replace it
 - Adoption success depends on training, not technology alone
 - Understanding AI limitations is essential for patient safety
 - Veterinarians must lead responsible AI implementation
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Selected References

- Bertin F.R. et al. (2026). *Use of AI in veterinary specialty medicine*. Journal of Veterinary Internal Medicine.
- Bertin F.R. et al. (2026). *Influence and perils of AI in veterinary medicine*. JVIM.

- Chu C.P. (2024). *ChatGPT and generative AI in veterinary clinics*. *Frontiers in Veterinary Science*.
- NAVC (2025). *What Veterinary Professionals Need to Know About Artificial Intelligence*.
- Gomes C. et al. (2025). *Multimodal AI systems in veterinary medicine*. *IEEE*.