Guidelines for veterinary diagnostic imaging records and image retention

Purpose

These guidelines are intended to assist veterinarians in maintaining diagnostic imaging records in a manner that supports patient care, facilitates specialist review, and enables effective regulatory oversight where required.

APPLICATION OF THESE GUIDELINES

These Guidelines apply from and including [Date].

These Guidelines may be superseded by subsequent versions. To ascertain whether this version has been superseded view the current version on the Veterinary Practice Board of Western Australia (**Board**) website at www.vpbwa.org.au.

It is the responsibility of veterinarians, veterinary nurses and authorised persons registered with the Board to be conversant with the current version of these Guidelines.

1. General Principles

Diagnostic imaging forms part of the animal's clinical record. Imaging records should be retained in a format that preserves image quality, patient identification, examination details, and associated clinical information.

Veterinarians should maintain imaging records in a manner that allows subsequent review, sharing, and retrieval for clinical, legal, educational, and regulatory purposes.

2. Imaging Format

2.1 DICOM Standard

Diagnostic images should be stored and retained in Digital Imaging and Communications in Medicine (DICOM) format.

DICOM is the internationally recognised standard for medical imaging and incorporates both image data and associated patient and examination information.

At a minimum, DICOM files should contain:

- Patient identification
- Owner identification
- Practice identification
- Date and time of image acquisition
- Examination details
- Anatomical region examined

- Image acquisition parameters where available

2.2 Scope

DICOM compliance is recommended for all diagnostic imaging modalities, including:

- Radiography (X-ray)
- Ultrasound
- Computed Tomography (CT)
- Magnetic Resonance Imaging (MRI)
- Fluoroscopy
- Nuclear medicine and scintigraphy

As a minimum standard, all digital radiographic systems should be capable of producing and retaining DICOM-compliant images.

3. Image Quality

Images should be of sufficient quality to permit diagnostic interpretation.

Veterinarians should ensure:

- Appropriate patient positioning
- Adequate image exposure
- Accurate anatomical labelling
- Identification of laterality where applicable
- Appropriate collimation
- Minimal motion artefact

Images that have been significantly compressed, resized, altered, or converted to low-resolution formats may compromise diagnostic quality and should not replace the original diagnostic image record.

4. Image Storage and Retention

Practices should maintain secure storage systems capable of preserving original diagnostic images without loss of quality.

Storage systems may include:

- On-site servers
- Practice-based PACS (Picture Archiving and Communication Systems)
- Secure cloud-based storage platforms

Imaging records should be retained for the period required under applicable legislation and professional obligations.

Storage systems should permit:

- Retrieval of original images
- Export of DICOM studies
- Secure sharing with specialists, referral centres, and regulators
- Protection against accidental loss or corruption

5. Specialist Consultation and Teleradiology

When seeking specialist interpretation, practitioners should provide:

- Original DICOM image files wherever available
- Relevant clinical history
- Patient signalment
- Examination date
- Specific clinical questions where relevant

JPEG images, screenshots, photographs of monitors, or other reduced-quality formats should not be relied upon when original DICOM files are available.

6. Practice Information Systems

Practices acquiring new imaging equipment or software should seek confirmation from vendors that systems are DICOM-compliant.

Where possible, imaging systems should integrate with practice management software and support:

- DICOM storage
- DICOM query and retrieval
- DICOM export
- Secure image sharing

7. Regulatory and Complaint Investigations

Where imaging records are requested by the Board, veterinarians should provide the original diagnostic image files, including DICOM data where available.

Provision of original image files assists independent review and reduces the risk of loss of clinically relevant information that may occur when images are converted to alternative formats.

8. Continuous Improvement

Veterinarians should ensure that staff involved in diagnostic imaging receive appropriate training in:

- Image acquisition
- DICOM export and management
- Image storage and retrieval

- Data security
- Teleradiology submission requirements

Practices should periodically review imaging systems to ensure continued compliance with evolving professional and technological standards.

DISCLAIMER

These Guidelines (printed, electronic or any other medium) do not constitute legal advice.

Readers are encouraged to seek their own professional advice to determine their obligations under the Act, subsidiary legislation made under the Act and other applicable laws. It is the responsibility of those persons regulated by the Act to determine their obligations. The authors, the Veterinary Practice Board of Western Australia, the members of the Board and the staff of the Board accept no liability for losses caused by reliance on any of the material in these Guidelines.