

Digital Radiography

DR technology enables veterinarians to produce X-ray images without the use of film, chemicals or a darkroom ... and save and share the images electronically

Your opportunity

Commissions on \$60,000 to \$80,000 on purchases of digital radiography systems.

Your opportunities are endless with digital radiography, because it has a number of important advantages over traditional X-ray equipment and film processing.

Equipment overview

Digital radiography images are captured on an electronic detector or screen, and then converted into a digital format, which is displayed on a computer monitor. No more film-based X-rays, dark-room processing or messy chemicals. Today's images are practically instant and easier to read – better for patients and clients.

Faster, easier imaging means patients spend less time under anesthesia. Precise digital images can be enlarged and enhanced, facilitating more accurate readings and diagnoses. And, veterinarians can more easily explain the pet's condition to its owner.

Specific advantages of digital radiography over traditional film-based systems include:

- **No hazardous chemicals.** Eliminated: exposure to fumes and handling harmful chemicals.
- **Cost savings.** Darkroom space can be converted for other uses. Film and chemical costs are eliminated.
- **Speed.** Images are generated quicker, decreasing exam time and improving workflow.

Digital Imaging and Communications in Medicine (DICOM) is a medical interoperability standard imaging format. Veterinarians can use various imaging devices to communicate and share images.

- **Fewer retakes.** Images may be viewed immediately and enhanced as needed.
- **Ease of use.** Images can be immediately enlarged to see bone and/or soft tissue in a single exposure.
- **Easy storage and transmission.** Easy to access, add them to patient records or transmit to other doctors.
- **Increased revenue.** Faster service and improved diagnosis can attract more patients to the practice.

There are three types of DR systems, and each relies on different technologies to acquire digital images.

- **Computed radiography (CR):** A reusable coated screen, similar to a film cassette, temporarily captures X-rays. The cassette is positioned below the animal (or in the Bucky tray) for exposure and then inserted into a digital scanner, which converts the latent image into a digital one within minutes.
- **Flat-panel detector (FPD):** This provides direct or indirect image capture within 5-10 seconds, making it desirable in high-volume practices. FPDs employ a plate that replaces a conventional radiography cassette or film and eliminates the need for scanning.
- **Charge-coupled device (CCD):** Similar to digital camera technology, this indirect system captures signals from digital cameras. Computer software converts them into a visible light pulse with a fixed phosphor-coated screen.

DICOM, PACS and Teleradiology: Digital Imaging and Communications in Medicine (DICOM) is a medical interoperability standard imaging format. Veterinarians can use various imaging devices to communicate and share images. Check for DICOM imaging capabilities (send, print, query and retrieve, compress and search). Picture Archiving and Communications Systems (PACS) software enables veterinarians to capture and review images, make enhancements and store them in a centrally located, easy access database. ■

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Prospecting Tips

Prospects likely to buy the latest digital radiography systems

All general veterinary practices are candidates for a switch to digital radiography, or upgrade their system.

Clinic clues for quality leads

When you're visiting a veterinary hospital, look for old X-ray film equipment and a darkroom. This means the practice is probably not using digital radiography and needs to upgrade and eliminate the expense and hazards of X-ray chemicals.

Other practices may simply have older digital radiography systems. After all, DR has been around for 15 to 20 years or so now. Many practices may be ready for an upgrade.



Approaching the sales discussion

By reviewing the various DR options and the many benefits, you can help practices determine which system is ideal for them.

- **Check-off/qualify:** You can initiate a discussion by asking, "Doctor, have you considered adding digital radiography to your practice? Are you aware of its benefits?"
- **Confidence:** If YES, confirm and support benefits. If NO, assert the benefits with confidence. "I'm sure that DR will provide incredible benefits to your practice, including faster, safer care."
- **Invitation to neutral:** "Let's look at how today's DR options support better care and communication."

- **Seek alignment/understanding as the dialogue continues:**

- "Can you help me understand ..."
- "How well is your practice managing with film-based X-rays? What do you most dislike about it?"
- "On average, how many images does your practice take each week?"
- "Have you thought about how digital radiography can factor into your five-year investment plan?" (If they have DR), "Have you thought about upgrading to a new DR system, since many of them have advanced quite a bit in the past few years?"
- "Are you aware of how the Section 179 tax law can help defray the expense?"

- **It's the customer's decision...**

"You can decide if DR is beneficial to your patients and practice." ■