# North Carolina Veterinary Medical Board

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### From the NCVMB website (FAQs) http://www.ncvmb.org/

#### Maintaining / Ownership of Patient Records

Veterinarian must maintain patient records for a period of three (3) years per <u>Administrative Code .0207b(12)(B)</u>. These records would include written notations, computerized or digital data, radiographs, communication logs and laboratory reports. Clients often contact the Board office seeking help in obtaining a copy of their medical records. *The owner of the patient or group of animals is entitled to a copy of the patient/animals' medical records. The veterinarian or practice to which a request for copies is made shall respond within a reasonable time and may charge a reasonable cost relating to time and expense of reproduction of those copies.* 

NCVMB FACEBOOK Page https://www.facebook.com/NCVetMedicalBoard

The NCVMB Facebook page has a vast variety of information available for veterinarians, technicians, and pet owners. Examples of recent posting include the following topics:

- Are Country Veterinarians becoming an endangered species?
- An Uncommon Guide to thriving as a new veterinary graduate
- Veterinary Technicians: So Vital to Good Medicine
- Top 5 Viral Dermatoses in Cats
- Handout: Why puppies need vaccines
- Veterinarians and suicide: the pain that comes with perseverance





North Carolina Veterinary Practice Act

"Veterinary Technician"

A person who has successfully completed a post-high school course in the care and treatment of animals that conforms to the standards required for accreditation by the American Veterinary Medical Association and who is registered with the Board as a veterinary technician.

Do not refer to or state that an employee is a technician if they are not registered with the NCVMB.

## Anesthesia Monitoring...it's more than visual observation

#### 1. Monitoring Heart Rate and Rhythm

<u>What:</u> Heart rate and rhythm are ideally monitored by an electrocardiogram, often displayed on a portable laptop screen. An electrocardiogram detects and amplifies tiny electrical changes on the skin that are caused when the heart muscle "fires" electrical impulses during each heart-beat. It produces a graph of electrical "firing" from the heart, as well as displays the heart-rate of the patient.

<u>How:</u> This is hooked up to the patient by means of either small conductible clips on the limbs, or through an esophageal stethoscope. Which method used often depends on the procedure. A technician should also double check the heart rate readings with their stethoscope to ensure accuracy.

<u>Importance</u>: The graph produced by this monitoring system helps to detect changes in rhythm that can be caused by anesthesia or an underlying condition. The veterinarian can adjust drugs or anesthesia accordingly. In the rare case of an anesthetic cardiac arrest, the electrocardiogram is crucial in assessing what life-saving measures are necessary. Finally, the heart rate itself provides a wealth of information, including assessing anesthetic depth (making sure the patient is adequately 'asleep'), drug reactions, and pain.

#### 2. Monitoring Respiratory Rate and Oxygen Saturation

<u>What:</u> Respiratory rate (breaths taken per minute by the patient) and the level of oxygen dissolved in the blood stream are monitored by a 'pulse-oximeter'. This small clip is placed between the toes of the patient, or sometimes on their tongue.

<u>How:</u> This paddle-like clip illuminates the skin and measures changes in light absorption. This determines how much oxygen is being carried by the red blood cells of the patient. This parameter is also displayed (based upon the model) on a portable laptop screen.

<u>Importance</u>: Lowered oxygen saturation can be a result of inadequate breathing or other underlying conditions preventing adequate ventilation. Ultimately, if the tissues are not getting enough oxygen during anesthesia, the anesthesiologist will 'breathe for the patient' to ensure every organ is receiving enough oxygen and/or adjust the anesthesia.

#### 3. Monitoring Blood Pressure

<u>What:</u> Blood pressure drives oxygen-delivering blood through vessels to organs and tissue beds of the body. Heart rate and anesthetic drugs directly affect blood pressure.

<u>How:</u> Ideally, a non-invasive blood pressure monitor is hooked up to the pet at all times. It is an inflated cuff around a limb, which can be programmed to take readings at regular intervals. In this way, changes in blood pressure can be determined quickly and accurately.

<u>Importance</u>: Low blood pressure results in decreased oxygen delivery, resulting in the death of important cells and organ damage. Health professionals worry most about the kidney and the brain. Because lowered blood pressure is a common side effect of many anesthetic drugs, monitoring these values under anesthesia is crucial.

#### 4. IV Catheter and Fluids

*Every* patient undergoing any length of anesthesia should have an intravenous (IV) catheter placed prior to anesthesia. This provides direct and rapid access to the patient's venous system for drug administration in case of emergency. Additionally, fluids are given through this IV catheter to maintain blood pressure (as discussed above) and to keep the animal hydrated during surgery. Extra pain management drugs may also be incorporated into these fluids.

#### 5. Temperature

<u>What:</u> Core body temperature is reduced by anesthesia. This is especially true in long procedures and with smaller patients. Temperature can be taken with just a thermometer. However, ask if the clinic has invested in either a rectal

probe or an esophageal stethoscope for a *continuous* reading of temperature. This way trends can be monitored and warmth added even if there is a drop in temperature by 0.1 degrees.

<u>How:</u> It is much easier and more beneficial to the patient to prevent a drop in temperature, rather than to try and warm them up after a drop has occurred. To this end, attention to temperature should start when the patient has their premedication prior to putting them under anesthesia.

<u>Importance</u>: Decreased body temperature is associated with prolonged recovery and an increase in post-surgical infections. It adds incredible stress to the body; stress that is very preventable through proper monitoring and protocol.

## Necropsy (offer pet owners the option if the unexpected occurs)

Performing necropsies is an important part of veterinary medicine. Frequently, veterinarians are presented with animals that had "died suddenly" at home. Pets can be very sensitive to airborne toxins, poisons or other potential household hazards so they can sometimes die suddenly at home. However, some pets tend to hide their illnesses, so quite often they are near death or dead by the time an owner notices that there is a disease condition. Necropsies can help determine the cause of these "mysterious" deaths. It is of utmost importance to have a necropsy performed if the cause of death is uncertain or may have a possible infectious origin, especially if there are other animals (or people) who may have had contact with the deceased pet. In addition, the risk always exists for zoonotic diseases (diseases of animals that can be transmitted to people), which should be ruled out to protect your family.

If a veterinarian had an animal under their treatment for a disease condition die, it is good practice to recommend a necropsy if the cause of death is uncertain, as both the veterinarian and pet owner will benefit from the knowledge gained. A gross necropsy can be performed, where the tissues are visually examined and no samples are taken for further study. In certain cases, the cause is obvious on gross necropsy so no further investigation is required.

Sometimes the cause of death may not be readily obvious on gross necropsy. In those cases, tissue samples may need to be collected and sent out for histopathologic evaluation by a veterinary pathologist.

Many times clients are hesitant to have a necropsy performed because they would like to take the pet home for burial or do not want the pet dissected. These fears can be alleviated by the option of a "cosmetic" necropsy. In a "cosmetic" necropsy an opening is made just large enough to adequately evaluate the internal organs and obtain whatever samples are necessary. The incision is then sutured or tissue glued so that minimal disturbance is evident. However, depending upon the circumstances, a complete and thorough necropsy is preferred.

The necropsy should be performed as soon as possible, otherwise the pet should be refrigerated, as autolysis (tissue breakdown) can occur very quickly. The animal should never be frozen as tissue changes will occur, making histologic interpretation difficult. If the pet cannot be brought in for a long period before a necropsy can be performed, then it could be frozen. Freezing/thawing will make gross observations difficult and severely hamper histopathologic analysis as the ice crystals damage the tissues.

## Prescribing Controlled Drugs (for the patient...not the owner)

The notion of people consuming veterinary drugs, whether for recreational use or otherwise, is not a new concept. This shows that veterinarians should be more vigilant when dispensing medications and wielding their prescription pad. These simple steps can help veterinarians protect themselves, their clients, and their patients.

Unfortunately, people can purposely abuse many veterinary medications, including opiate-based painkillers and behavior-modifying benzodiazepines such as tramadol and diazepam, respectively. Veterinarians and their team

members must be able to recognize the signs that a client may be consuming his or her pet's medications. These may include:

- Requesting higher doses of a medication: If a client is abusing a medication, his or her body slowly develops a tolerance, so the original dose becomes insufficient. Such requests are often accompanied by complaints that the pet is getting worse and will only improve with more medication.
- Decreased time between refill requests: The client comes in earlier and earlier for refills; often the reasons become more bizarre each time. Excuses seen on VIN's message boards have included loss or theft of the medication, a relative using it for his or her own pet, and washing the medication bottle.
- Signs specific to drug addiction: A client taking his or her pet's diazepam, for example, may have dilated pupils.

Veterinarians must tread lightly, because a false accusation could result in false claims or lawsuits. A frank discussion with the client, without any accusations, may head off any potential problems with abuse.

A practice policy regarding refills of medications is crucial. Such a policy could include:

- > Refilling a patient's medication no more than 2 days before it is due to run out
- > Dispensing no more than, say, 2 weeks or one month's supply of drugs at a time
- Allowing a client no more than one refill if he or she says the previous prescription was lost—the date and reason for the refill should be clearly documented in the client's record; more than one refill request is definitely cause for suspicion.

Multiple refills should never be provided without examining the patient, which allows the veterinarian to assess whether the pet patient does require additional medication and to suggest other treatments that do not involve potentially addicting drugs. For example, for chronic pain, an NSAID such as meloxicam may be more appropriate than tramadol.

Unfortunately, if a veterinarian believes he or she has exhausted every avenue with the client and his or her pet's medications, it may be necessary to stop treating that patient and terminate the veterinarian-client-patient relationship. Again, any discussion about terminating the relationship, as well as the reasons, should be documented in the medical record.

Veterinarians are obligated to use their privilege to prescribe drugs wisely and effectively. Many medications that they regularly dispense can cause severe problems for people, so it is important to mitigate any risks to themselves and their clients. Use these precautions and policies to be good stewards of clients' and patients' health, as well as the public's trust.

