**Introduction** ► It is an unfortunate reality that each of us will be required to make end-of-life decisions on behalf of the dogs that we cherish. These decisions will be based on our own knowledge and values, the expertise of our veterinarians, and the options for end-of-life care available to us. This is not an easy topic, but thinking about it before we find ourselves in a crisis allows for more thoughtful, sound decision-making about these matters.

The purpose of this *Info Sheet* is to present a wide range of options from early euthanasia before or with the onset of complicated symptoms to palliative care and pain management strategies. This is a set of decisions in which there is no single right answer. The goal is to select a path from a number of available options, including euthanasia, that makes sense for both you and your dog. This material also identifies additional resources for those seeking to maximize choice in end-of-life care for their dogs. Most of us are familiar with the concept of hospice, which provides end-of-life care for those no longer seeking a cure for a terminal illness is fully informed and supported in whatever decisions are best for him/her in the context of his/her life.

The first line of pain management in dogs is typically anti-inflammatory and anti-steroidal. These are only the beginning of what is available to the owner committed to effective pain management. In human medicine there are pain management specialists/teams, because effective control of pain is a specialized skill. Therefore, it is no slight to our veterinary community that each of us is expected to become very effective. In animals, where the end-of-life decision is often euthanasia, symptom control is far less advanced, and requires educated and proactive owners as well as committed veterinarians.

Here a 10- and-a-half year old Berner is receiving palliative radiation therapy from a linear accelerator as part of a pain management strategy for Osteosarcoma in her left humeral head. This will be followed by chemotherapy. A regional specialty veterinary practice with board certified oncologists and radiation specialists teamed up with North Carolina State University radiation oncologists to plan and deliver this advanced cancer treatment. This therapy is very expensive and does not offer a cure. At best, it might impede the spread of the tumor and possibly offer additional months of life with improved quality. A recent study reported a median survival time of seven months for dogs receiving radiation therapy and chemotherapy.

Recognizing that we are not likely to have the array of services that could help us at the end of a dog’s life, there are actions that each of us can take to help our dogs and ourselves when we arrive at the critical time. First, we can begin to consider the options for end-of-life care that we want available to our dogs. Some of us will choose euthanasia and others will prefer to manage symptoms and allow natural death—both of these can be loving options.

**Managing Symptoms At The End-Of-Life** ► How does one manage symptoms at the end of life? Is it even possible? Yes, it is. For humans euthanasia is typically not a viable option, and so perhaps by necessity symptom control has become very effective. In animals, where the end-of-life decision is often euthanasia, symptom control is far less advanced, and requires educated and proactive owners as well as committed veterinarians.

The reason for euthanasia of a sick animal is typically our perceptions of the animal’s pain and suffering, but there is a middle road between pain and death—management of that pain. The first line of pain management in dogs is typically NSAIDs (non-steroidal anti-inflammatory drugs), but those are only the beginning of what is available to the owner committed to effective pain management. In human medicine there are pain management specialists/teams, because effective control of pain is a specialized skill. Therefore, it is no slight to our veterinary community that each of us is expected to become very effective.

**Defining Palliative Care** ► Palliative care is symptom control in the face of a life-threatening illness. It is about making informed choices, which requires that we be fully knowledgeable about our choices. Palliative care can and should be delivered while curative care is underway, if that choice has been made. If we look to human studies, recent research showed increased survival and quality of life among lung cancer patients who were receiving palliative care.

Unfortunately, veterinarians are not always equipped with a palliative-care team to help us make difficult decisions and manage our dog’s symptoms. In human medicine, a good palliative care team consists of a variety of professionals who meet with the newly diagnosed patient and his/her loved ones to discuss and evaluate treatment options. The benefits and burdens are identified, and these are considered broadly—socially, spiritually, emotionally, and physically. There is no agenda except to ensure that the person living with a life-threatening illness is fully informed and supported in whatever decisions are best for him/her in the context of his/her life.

Symptoms, also broadly defined, are addressed through the use of an interdisciplinary palliative care team, with support from specialists. This is quite a contrast to what is typically available to a dog and his/her owner. No matter how skilled and well intentioned a veterinarian is there is no substitute for the expertise of a full team approach.
veterinarians when we require a pain management consultation with a veterinary professional who has that level of expertise.

The Importance Of Locating Resources In Advance ► Anticipating and planning ahead will make a stressful time a little easier to handle. The first task that you are likely to face is finding the necessary expertise. How does one locate a pain specialist? One can ask a veterinarian for a referral, check with area veterinary specialty clinics, and/or explore the website of the International Veterinary Academy of Pain Management (http://www.ivapm.org/) to locate pain management specialists in your area. Because we do not have a palliative care team at our disposal, we must develop our own team, and that means we must seek out information from a variety of professionals who can help us make difficult decisions before those decisions need to be made. For example, if a dog is diagnosed with cancer one can locate a pain management specialist and make an appointment even though the dog is undergoing chemotherapy and doing well (i.e., not in pain). The purpose of that appointment would be to gather information about the expected trajectory of the disease in relation to pain and learn about the options for managing that pain. During that discussion the benefits and burdens of each option can be explored. Then, by carefully weighing all of this input and experience, the owner can make an informed choice on behalf of his or her dog when required.

Pain is not the only distressing symptom at the end of life. Loss of appetite is a normal part of the process of dying, and forcing nutrition and hydration can over burden a system that is shutting down. Again, the time to decide what to do when your dog stops eating is not the day the dog stops eating—it is now. Other possible symptoms at the end-of-life include:

- Discomfort/pain
- Decrease/loss of appetite
- Decreased interest in others
- Changes in mood (i.e., depression)
- Change/loss of consciousness
- Difficulty swallowing
- Lethargy and weakness
- Changes in mobility
- Changes in breathing
- Confusion
- Loss of bowel control
- We should educate ourselves, and also talk with our veterinarians, and knowledgeable others (e.g., our dogs’ breeders), about how we want to handle these symptoms.

In addition to mentally preparing ourselves for symptom management by gathering information, we should learn any skills that may be needed if we want to provide this kind of care at home. For example, we may need to learn to give injections or administer fluids, and these are skills best learned when one is not in crisis. We also will want to know what services will be available to us if we intend to provide home-based end-of-life care. For example, will our veterinarian and/or a technician make home visits? Will we have access to medical supplies? Another question we may wish to ask is what we do with our dog’s body if our dog passes at home. Thinking ahead is critical to achieving the goals we set for end-of-life care.

Accessing BMDCA and Berner-Garde Resources ► Staying abreast of Berner health issues and health care implications of research studies is an important part of being a responsible owner. Tapping into available information resources and networks could be critical to you and your veterinarian when making an informed choice for your Berner.

The BMDCA website (www.bmdca.org) houses a wealth of BMD health information, which includes a link to current BMD research (http://www.bernergarde.org/home/healthstudies.aspx), health articles, BMD Health Reports, health links, the vocabulary of cancer, a listing of current health clinics, and more. There is also a link to the BMDCA Health Committee should you wish to make contact to ask a question or seek assistance.

The Berner-Garde Foundation (“BGF”) is another source of health information (http://www.berngerade.org/). It was established to collect, maintain and disseminate information about genetic diseases observed in the Bernese Mountain Dog. The database contains information, which has been compiled over many years from voluntary submissions of data from owners and from other public sources of information, including the Orthopedic Foundation for Animals (OFA), and the Canine Eye Registration Foundation (CERF).

If your dog has been diagnosed with one of these illnesses or has a tumor, please participate in the current studies on BMDs. It is difficult, but only by your participation in these studies will we have a hope of eliminating these diseases. Often participation in research studies can be done simply by providing data you already have or by providing simple lab tests performed or collected by your veterinarian. The information you share with researchers will enable them to offer breeders legitimate, scientifically proven information about diseases, and to develop tools breeders can use to produce healthier dogs. Also, please inform your veterinarian about how to submit tissue to the BMD DNA & Tissue Repository. All of this information can be found on the on the BGF website.

Concluding Thoughts ► A dog gets just one life—and one death—and, we are in control of both. Just as we prepare for that new puppy, so too should we prepare to gracefully and kindly walk our friend toward the end of life. There is much we can do now before we find ourselves on that dark path to ensure that our wonderful dogs receive optimal care at the end of life. This is a challenging topic and a difficult one to think about but it is important and inevitable. The bottom line is that your dog deserves it, and by preparing in advance, it might help with the “I can’t handle this” syndrome, which can be overwhelming. Do what is right for you, and in your informed opinion, for your dog. That includes a wide range of options discussed here and others that you may consider in your decision making process. Then select what will be the end-of-life goals for your dog that are best for your very personal and unique situation.

Websites of Interest ► The American Veterinary Medical Association has published Guidelines for Veterinary Hospice Care that can serve as a resource to owners opting for palliative care. http://www.avma.org/products/hab/hospice.asp.

Portions of this Info Sheet are adapted with permission from Bowman, M. "Making Hard Decisions: Ensuring Choice and Optimal Care at the End of Life," The Alpenhorn (Veterans Issue), December 2010, pp 40-42.