

Why Your Dog's Frailty Matters More Than You Think

Frailty is a complex syndrome of aging that involves physical, mental and emotional changes, and as such, it's a much more precise indicator of the body's condition and overall health than a dog's age by itself.

Analysis by Dr. Karen Shaw Becker

STORY AT-A-GLANCE

- In human medicine, doctors who work with the elderly view frailty as a vital aspect of their care; in veterinary medicine, frailty in dogs hasn't typically been measured except in the case of research and laboratory animals
- Frailty is a complex syndrome of aging that involves physical, mental, and emotional changes; it's actually a much more precise indicator of the body's condition and overall health than age by itself
- A team from the Dog Aging Project is working to create a canine frailty instrument for use by veterinarians and pet parents to better guide the care and treatment protocols for senior and geriatric dogs
- The ultimate goal is to develop a three-tiered frailty instrument that includes a screening portion for owners, a scale for general practitioners and a triage scale for emergency veterinarians and specialists

In human medicine, physicians who work with senior and geriatric patients view frailty as a vital aspect of their care. According to the American Academy of Family Physicians, frailty is "a state of increased vulnerability across multiple health domains that leads to adverse health outcomes."¹ MDs use an elderly patient's frailty score in determining treatment protocols, and nursing homes often adjust those protocols as frailty increases.

In veterinary medicine, no such measure exists except in the case of research and laboratory animals. However, this is about to change thanks to the **Dog Aging Project** led by the Texas A&M School of Veterinary Medicine & Biomedical Sciences (VMBS) and the University of Washington School of Medicine. Working with tens of thousands of dog parents across the U.S., researchers with the project are creating a canine frailty instrument for use by veterinarians and pet parents to guide the care of **older dogs**.

Why Detecting Frailty in Older Dogs Is so Important

The Dog Aging Project veterinary team recently published its plan in *Frontiers in Veterinary Science*, outlining how they're developing the tool using a variety of simple tests and questionnaires that can be used by both dog owners and veterinarians.²

*"Dogs are living longer and longer because of the improving health care system and better nutrition," said Dr. Rachel Melvin, a Dog Aging Project research team member, VMBS clinical trials intern, and lead study author. "We now have a bunch of old dogs whose owners want to do the best by them, and frailty scores help us do that by improving the personalized veterinary care those dogs receive."*³

Frailty is a complex syndrome of aging that involves physical, mental, and emotional changes, and as such, it's a much more precise indicator of the body's condition and overall health than a **dog's age** by itself.

"Age is just a number, but it is a number that can carry a lot of baggage," says Melvin. "Frailty is a way for us to measure aging more accurately, which we only could measure with years before."

"The higher their frailty score, the more likely a person is to fall down, need to be hospitalized, or to have complications while in a hospital. Likewise, a dog with a higher frailty score may be more at risk for complications after surgery and take longer to recover than a less-frail dog."

Frailty has perhaps even greater significance in veterinary medicine due to the tremendous variation in the **size of dogs** depending on their breed. For example, a 12-year-old Great Dane and a 12-year-old Chihuahua are vastly different animals when it comes to their health and body condition.

"Knowing a dog's frailty score helps us measure and explain things like prognosis to owners, which then helps with making medical decisions," Melvin explains.

Measuring Frailty

The goal of a veterinary frailty measure involves turning an objective description of a dog's health into a numerical score using tools that can suggest risk of death. According to Melvin:

"In human medicine, grip strength is one common measurement used because losing strength is a good indication that your body is aging. In dogs, it gets a little more difficult because we can't ask them to do a simple, repeatable task like gripping something. So, our surveys will have lots of questions that correlate with some of the common measurements used in human frailty scales."

Melvin and her colleagues are currently evaluating a number of measurements that will be narrowed down once the team can determine which are the best indicators of frailty in dogs. Some of the measurements include **body condition score**, thigh girth deterioration, unintentional weight loss, gait speed, ability to climb stairs, and willingness to participate in normal activities like going for walks.

The team is determined that the measurements they ultimately settle on will be simple and easy and won't require blood work or other diagnostic tests.

"We want everyone to be able to know if their dog is frail without there being a cost or technical limitation," says Melvin.

The frailty surveys will also include questions about mental and emotional changes associated with aging, since there are many ways the body reveals frailty beyond physical changes. Some of the measurements under evaluation are short-term memory, recall of learned behaviors, general anxiety, and social avoidance, all of which must be quantifiable using simple tests and dog owners' interpretations of their pet's behavior.

The Ultimate Goal Is a 'Three-Tiered Frailty Instrument'

Once Melvin and her colleagues are able to narrow down the questions that are most effective at determining a dog's frailty, the next steps will be to develop a numerical frailty scale that veterinarians can use, and then expand the scale into a full "Frailty Instrument for Dogs (FIDo)" to increase its application in real-life situations.

"Our plan is to develop a three-tiered frailty instrument," Melvin explains. "There will be a screening portion with questions for the owner, a scale for general practitioners and a triage scale for emergency veterinarians and specialists. They won't be interchangeable; they will be designed to work together."

In the case of emergencies, a dog's frailty score can help the care team manage the owner's expectations while also ensuring that sound medical decisions are made based on the dog's prognosis and quality of life.

The Dog Aging Project team believes that ultimately, measuring frailty will enhance their mission to help dogs enjoy longer, healthier lives.

"To be able to fight frailty, you have to be able to detect frailty," says Melvin. "If we can identify dogs that are frail, there are potentially steps we can take to prevent or delay progression and help them stay healthier longer."

Set the Stage for a Happy, Healthy Aging Dog

If your dog is 7 years or older, she's considered a senior, and while she may still be a puppy in your eyes — and even behave like one most days — it's still important to acknowledge she's aging. It's crucial to begin making plans to transition from puppy or adult dog parent to devoted guardian of a senior and ultimately, geriatric dog.

Older canine family members require different things from us than younger dogs do, and since I know you want to not only help your pet live as long as possible, but also with an excellent quality of life as she ages, now is a good time to give the subject some careful thought.

Thankfully, as our dogs get up in years, we're given a unique and wonderful opportunity to make the second half of their lives as healthy and happy as the first half. Please see [**How to Help Your Senior Dog Stay Vibrant Into Old Age**](#) for more information on what you can do today to get the ball rolling.

Sources and References

¹ Allison II, R. et al. Am Fam Physician. 2021;103(4):219-226

² Melvin, R.L. et al. Front Vet Sci. 2023 Jun 27;10:1139308

³ Texas A&M Today, September 13, 2023
