Inter-Professional Collaboration in Animal Rehab Clinical Practice – Veterinary and Physiotherapy Perspectives

Shannon Budiselic, DVM, CVA, CERT, CCRT
Laurie Edge-Hughes, BScPT, MAnimSt, CAFCI, CCRT
The Canine Fitness Centre Ltd, Calgary, AB, Canada

PART ONE

What is interprofessional collaboration? The Canadian Physiotherapy Association's (CPA) November 2009 position statement on Inter-professional Collaboration and Practice utilizes the following description:

> Collaborative practice is one that is patient-centred. It is described as "an interprofessional process for communication and decision-making that enables the separate and shared knowledge and skills of care providers to synergistically influence the patient care provided." Collaborative practice encourages the "active participation of each discipline in patient care" and "enhances patient and family centred goals and values."

To look back into history, there were intra- and inter-occupational rivalries dating back to the late 1800's in parts of Europe regarding physical therapeutics (Terlouw 2009). These rivalries had a negative effect on physical medicine, orthopaedics and physical therapists in the first part of the 20th century. In Canada, in the early 1900's, the fledgling physiotherapy profession was beginning the long quest for professional identification. The professional body sought to remove all vestiges of the label 'technician' and worked to create, capture and document the distinct body of knowledge, that was 'physiotherapy' (Cleather 1995). One begins to wonder if history is repeating itself, but now with animal rehabilitation.

There are some strong points to be made regarding why veterinarians and physiotherapists need to collaborate with each other. Physiotherapists need to collaborate with veterinarians 1) to get established in the animal rehab field, and 2) to provide well-rounded, comprehensive care. Veterinarians need to collaborate with physiotherapists 1) when providing animal rehab themselves (in order to fully learn the concepts and skills), and 2) when referring / delegating to a physiotherapist engaged in animal rehabilitation. Baxter and Brufitt (2008) put forth the concept that before collaboration, both parties need to understand the differences in their interprofessional working. There needs to be a mutual understanding of each discipline's professional knowledge and skills (i.e. the need to understand profession-specific knowledge), there needs to be established professional role and identity (i.e. role clarity), and lastly there needs to be an understanding of power and status (i.e. will work be conducted in a hierarchical or non-hierarchical system, and what has been the history in this regard).

To elucidate the 'workings' of each profession, it is important to know the history of each profession (Table 1) and the current basic educational curricula of each profession (Table 2).

Table 1. History of Veterinary Medicine & Physiotherapy in Canada

Veterinary Medicine	Physiotherapy
• 1864 - Andrew Smith, a graduate of the Edinburgh College (Scotland) established the first formal 'vet school' in Toronto • 2-year diploma course of "Farriers and Veterinary Surgeons" • 1908 – Curricula expanded to 3 years BVSc • With one additional year a DVSc could be obtained. • 1949 – Curricula is expanded to 5 years • 1965 – Curricula changed to a 4-year DVM program with 2-years of pre-vet university study • 1970 – Graduate diplomas are approved	• Beginning around WWI: Wounded service men returned from overseas and were unable to cope with life's demands. • 1916 – 1year physical therapy training courses established • 1929 – 2-year diploma course at University of Toronto • 1954 – BScPT at McGill University • 1970 – The first post-graduate MSc in Rehabilitation was available • 1989 – The first PhD in Rehab Sciences • 2009 – All Schools offer MScPT – entry to practice • 2020 – All Schools to transition to Doctorate in Physical Therapy (currently the US standard).

Table 2. Educational Curricula of Veterinary Medicine and Physiotherapy
(information obtained from the Western College of Veterinary Medicine website and the University of Alberta, Faculty of Rehabilitation Medicine, Department of Physical Therapy website, May 2012)

Veterinary Medicine	Physiotherapy
Veterinary anatomy, neuroscience, embryology, physiology, surgery, production & management, immunology, epidemiology, pharmacology, endocrinology, anesthesiology, toxicology, medical imaging, clinical examination, pathology, dentistry, ophthalmology, virology, parasitology, theriogenology	Human anatomy, physiology, psychology, orthopaedics, manual therapy, kinetics, bio-mechanical sciences, neurology, cardio-respiratory sciences, therapeutic techniques and tools & exercise prescription. - Client health management, case management, research evaluation, design & implementation.

To satisfy the need to establish clarity in the roles and scopes of each profession, one can look at the definitions of each profession. Veterinary Medicine has been described by the Canadian Veterinary Regulators (2001) as:

> "The practice of medicine, surgery, and dentistry on animals, and includes the examining, diagnosing, prescribing, manipulating and treating for the prevention, alleviation or correction of a disease, injury, condition, deformity, defect or lesion in an animal with or without the use of any instrument, appliance, drug or biologics."

The description of the role of physiotherapists, as described on the Canadian Physiotherapy Association website (www.physiotherapy.ca accessed May 2012):

> "Physiotherapists are primary health care professionals that combine in-depth knowledge of how the body works with

> specialized hands-on clinical skills to assess, diagnoses and treat symptoms of illness, injury or disability. Physical therapists aim to restore, maintain and maximize strength, function, movement and overall well-being."

Lastly, to look at power and status (i.e. hierarchical or non-hierarchical systems), it can simply be separated out as follows. Veterinarians have a history and authority of being all things to all animals in regards to medical / healthcare practice. Physical therapists on the other hand have always worked in a system requiring collaboration. Studies report the importance of professional equity and the importance of working in a non-hierarchical system (Malcolm & Scott 2011; Baxter & Brufitt 2008).

Currently, no formalized pathways exist for each profession to learn about the other. A research paper by Doyle & Horgan (2006) reported on the perceptions of animal physiotherapy amongst Irish veterinary surgeons. They found that only 26% of the veterinary surgeons that were aware of animal physiotherapists had referred a case to an animal physiotherapist. Their greatest awareness of physiotherapy related to back (88%) and neck (80%) problems, followed by ligament damage (79%), joint restriction (77%), tendon damage (75%), and post-fracture rehabilitation (74%). 96% of the vets surveyed stated that more research needs to be published on the effect of animal physiotherapy, and 90% were interested in learning more about animal physiotherapy. 91% would be willing to allow animal physiotherapists to choose their own treatments, and 43% believed that animal physiotherapists possess the ability to assess and evaluate musculoskeletal and neurological disorders.

Based on 13 years of teaching both veterinarians and physical therapists, co-presenter/author, Laurie Edge-Hughes, has found some key differences between the two professions. From the standpoint of learning styles, "I have found that vets tend to want to have items to memorize and be told a formula for treating certain types of cases. Physios have been taught theories, concepts and frameworks on which they build skills and approaches to case diagnosis, planning of care, treatment, case management, and follow-up." There are also differences in adapting to practice of animal rehab and the learned skills necessary to practice animal rehab. "The physical therapists need to learn comparative anatomy, canine conditions and common treatments, zoonotic concerns, and handling skills in order to be competent to practice animal rehab. Veterinarians on the other hand need to learn much more: the background science of rehabilitation principles; manual diagnostic skills & clinical reasoning based on findings; recognition of new diagnostic categories; the pathofunctional diagnosis; creation of a problem list, & goal setting; rehabilitative therapies; prognostication regarding rehabilitation; how & when to progress rehab; and understanding of the depth and breadth of physical therapy practice beyond orthopaedic and neurologic rehabilitation." There tends to be differences in how each profession approaches the assessment. "Vets tend to rely heavily on diagnostic imaging and basic manual assessment skills. They conclude with a patho-anatomical diagnosis (i.e. where is the lesion?). Physios have advanced

manual assessment sills, and clinical reasoning based on the manual assessment findings. The physiotherapists conclude with a pathofunctional diagnosis (i.e. where is the lesion and how is if affecting or being affected by the rest of the body?)." There is also a distinct difference when breaking down case management, and in particular for musculoskeletal cases. "Veterinarians tend to prescribe rest, medications and surgery as needed. Physical therapists may employ manual therapies, modalities, specific exercise, advisement and client education, and may undergo a trial of therapy (when deemed appropriate) before referring for surgery." The fundamental messages are that we are different as practitioners. Our viewpoints will be different. Our approaches will be different. Our experiences will be different. The fundamental underpinnings that guide and shape each of our two professions are different. So how do we work together?

To answer this question, we must look to the wealth of human healthcare research that exists on the topic of interprofessional collaboration. It has been reported that what makes for good collaborative practice is role clarification, patient-centred focus, team function, collaborative leadership, interprofessional communication, and dealing with interprofessional conflict (Bainbridge et al 2010). The Canine Fitness Centre (Calgary, Alberta) is a working model of collaborative practice; employing physiotherapists engaged in animal rehab and collaborating with a rehabilitation veterinarian. To address the 6 key areas necessary for good collaboration, the following has been implemented: Regarding role clarification, all rehabilitation practitioners are considered 'equals', and the clinic requests referrals for injured animals to be treated, followed by communication of findings to the referring veterinarian. The care is 'patient-centred' in that the animal is the prime focus, and the clinic views it's function as adjunctive to veterinary care. Regarding team function; staff is aware of the importance of communication and knowledge transfer. Regarding collaborative leadership; staff meetings are regularly scheduled and systems have been implemented to enhance communication (intra-office and to referring veterinarians), and owners of the clinic hold a high regard for collaborative practice. Regarding interprofessional communication between the Canine Fitness Centre therapists and the referring veterinarians; assessment notes, progress notes, and discharge notes are a routine part of practice, and phone calls are encouraged in difficult or unusual cases. Regarding dealing with interprofessional conflict; in-office disputes are dealt with quickly, communication is encouraged, and the rehabilitation practitioners do not shy away from making those 'tough phone calls' to the occasional disgruntled veterinarian when necessary.

From part one of this presentation / paper, any animal rehabilitation practitioner (or individual veterinarian or physiotherapist, or regulatory body of either of these professions) with the goal to practice and work collaboratively should ask themselves the following:

1. What is your knowledge of the other's profession?
2. How can we all become focused on patient care versus territorialism?
3. How do we create an animal healthcare system that incorporates and welcomes paraprofessionals?

4. Do you communicate enough or well enough?
5. Can you establish planned interprofessional interactions? (i.e. journal club, rounds, lectures, written articles)
6. Do you have plans for knowledge and skill acquisition? (i.e. learning from each other)

PART TWO

There are a few different 'types' of practitioners engaged in or impacted by the field of animal rehabilitation (e.g. Animal rehab physio, rehab-trained DVM, General Practitioner DVM, Specialist DVM – Ortho or Neuro, and Rehab-trained technician). The purpose of this section is to provide an analysis of the 'strengths, weaknesses, opportunities and threats (SWOT analysis) for each type of practitioner based on the personal and professional experiences of a rehab-DVM who works closely and collaboratively with physiotherapists engaged in animal rehab. Barriers to collaborative practice and action points to further champion interprofessional collaboration in animal rehabilitation practice will also be discussed.

As a background to this section, Dr. Shannon Budiselic has achieved a biology degree, a doctorate of veterinary medicine, and certifications in equine and canine rehabilitation therapy and is also certified in veterinary acupuncture. Her career has been primarily rehab-focused, and she has had experience as a solo-practitioner and as part of a collaborative team at The Canine Fitness Centre.

The SWOT Analysis is typically utilized as a strategic planning method. It identifies the positive, negative, internal and external factors involved in achieving a specified objective. A SWOT analysis was conducted for each 'key player' in the animal rehab field in order to objectively define and understand the roles of each.

Table 3. The Physical Therapist Engaged in Animal Rehab

Strengths	Weaknesses
• Problem-based/Evidence-Based approach is novel • Already collaborative in human practice. • Transferable functional reasoning from 2 legs to 4 legs • Not usually modality oriented in treatment prescription	• Knowledge or organizational barriers to start • Animal handling skills may be insufficient • Takes opportunity and time to build an animal caseload & build animal clinical reasoning (if not focused on animal rehab)
Opportunities	**Threats**
• Functional diagnosis major "selling" feature. • Report case outcomes and communicate well • Advocate patient-centred care. • Ensure continuing education (CE) is current • Align with like-minded DVMs or PTs. • Understand "pain"; join/certify with I.V.A.P.M. (the International Veterinary Academy of Pain Management)	• Regulatory issues • Territoriality • Lay people performing "rehab" • Need for CE and higher education opportunities for animal rehab specifically. • Time, opportunity (& regulatory framework) needed to build caseload and experience

Table 4. The Rehab-Trained DVM	
Strengths • Obvious integration & veterinary knowledge. • Ease of communication with other DVMs & common regulation. • Regularity accountability and liability coverage • Direct referral	Weaknesses • May rely heavily on diagnostics and/or modalities. • May not use problem-based approach • May not collaborate with other rehab professionals • May over-utilize Techs. • May be overly-confident with level of rehab knowledge • Limited opportunity to build rehab caseload if regular medicine is a priority
Opportunities • Educate other DVMs regarding rehab • Collaborate 'horizontally' with a PT • Have a dedicated rehab service • Utilize Techs properly and effectively	Threats • Not recognizing personal or educational limitations • Legislation or regulation complicates interprofessional collaboration • Territoriality • Lay people performing "rehab", public perception • Terminology may confuse (CCRP designation- from University of Tennessee for both DVM/Tech) • Cost-pricing other rehab professionals (DVM/non-DVM)

Table 5. The General Practice DVM	
Strengths • Concerned about their patients (eg. want to make their clients & patients happy) • Management of co-morbidities • Level of rehab knowledge is limited (so may be able to rely on others) • Generally have a large body of patients who will benefit from rehab	Weaknesses • Limited knowledge-base in rehab (eg. when, or how to refer, perceptions of modality-focused therapy) • May attempt "own" version of rehab (eg. Have a laser, or refer to a modality-based practitioner) • May be accustomed to being the total care provider
Opportunities • Attend seminars by rehab professionals for the purposes of knowing when to refer • Can learn from each case they submit to you • Two conditions readily facilitate interprofessional collaboration (pain management, & weight loss programs)	Threats • "Referral" system and VMA regulatory organization may not define path for interprofessional collaboration to a paraprofessional (i.e. "referral" terminology) • May fear repercussion or liability if referring to a paraprofessional • May fear losing patient to rehab-trained DVM who still practices regular medicine (territoriality)

Table 6. The Specialist DVM (Orthopedic Surgeon or Neurologist)	
Strengths • Refined concerns regarding rehab and will want highly skilled professionals working on patients • Some may have rehab-training themselves and have a better idea of knowing when to refer • Access to an elaborate network of other specialists • Clientele willing to seek rehab service	Weaknesses • Often have difficult work-ups (liability) so may prolong time to rehab referral • May have rehab-training, or the referral practice may have a rehab service but not do enough rehab to build a caseload or provide effective service, may not engage in interprofessional collaboration • As a specialist, may only want to refer to another veterinary specialist (DVM or well established paraprofessional)
Opportunities • May be willing to discuss EBM PT regarding their specialty (educational) • Objective findings/measures important (communicate) • May be interested in facilitating an in-house or outpatient rehabilitation consultation service • Multiple communications and points of contact for patient-centred care.	Threats • "Referral" system and VMA regulatory organization may not define path for interprofessional collaboration to a paraprofessional (term "referral" different intent in human vs. vet med.) • Busy referral practices may not have time or resources to dedicate to an effective in-house rehab service

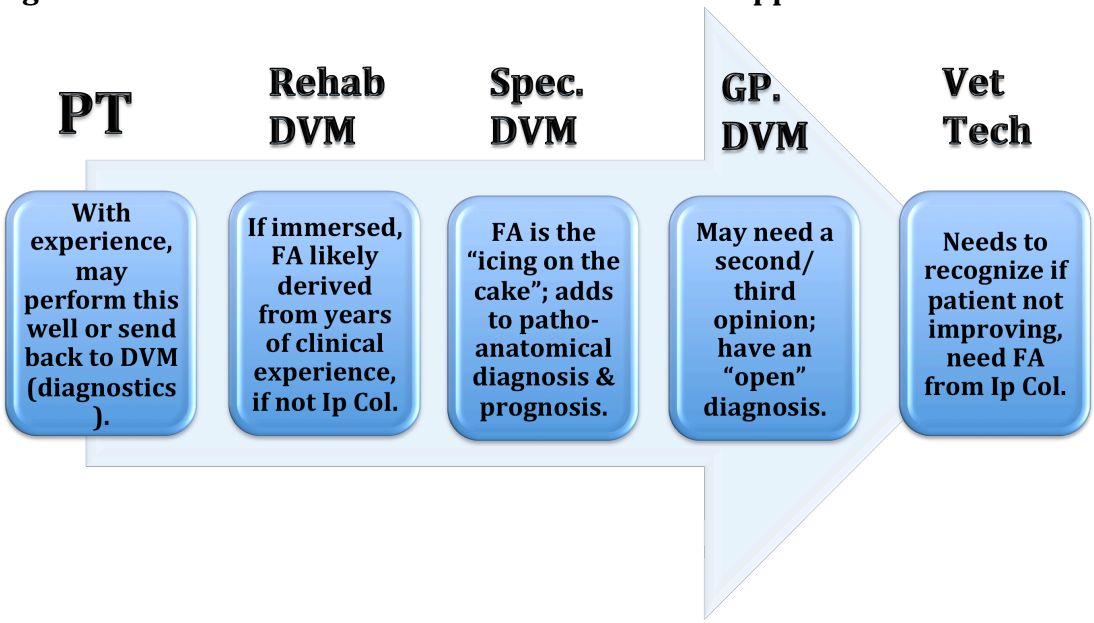
Table 7. The Rehab-Trained Veterinary Technician	
Strengths • Veterinary knowledge base • Regulated and integrated • Established working relationships with DVMs • Generally service and team-oriented	Weaknesses • Require DVM supervision; cannot truly operate autonomously • Blurred terminology (i.e. CCRP designation-from University of Tennessee for both DVM/Tech) and limited involvement with a rehab professional (e.g. DVM, PT) may infer or encourage practice outside of their scope of education and skill, thus increasing their liability
Opportunities • Can integrate rehab services into an established clinic • Identify need for further assessment (DVM/PT) and facilitate interprofessional collaboration • Help the DVM with non-specific veterinary (but rehab related) case management (i.e. weight loss)	Threats • Scope of practice regulated by supervising DVM (DVM is ultimately responsible for the extent of appropriate care, including managing the assessment aspects, with interprofessional collaboration or not) • May not recognizing personal or educational limitations • Lay people performing "rehab"

Grant and Finnocchio (1995) identified key barriers to collaborative practice, and this presenter/author (SB) would like to present them in the context of the PT-DVM relationship. Organizational barriers exist, in that PTs and DVMs need to learn about each other's profession. There are issues in regards to regulation, legality, scope of practice and liability. Additionally, in order for collaboration to be achievable there needs to be a non-hierarchical (i.e. horizontal) organizational structure. Barriers can be found at the team level, in particular, because

veterinarians lack any formal training in or exposure to interprofessional collaboration. The veterinary profession has a tradition of exclusivity and hierarchy in practice. There may be a lack of commitment of apathy on the part of the VMAs or individual veterinarians to foster interprofessional collaboration. Lack of interprofessional collaboration at the academic or educational levels in veterinary colleges can hinder advancements in veterinary science. Barriers may exist at the level of the individual. The sense of competition may hinder collaboration (inter- or intra-professionally), as financial, political, egotistical and territorial concerns are exaggerated. A DVMs lack of formal training in interprofessional collaboration hinders collaboration at the individual level as well. Independent care providers can also put up barriers to collaboration. These individuals may be accustomed to assuming total responsibility for all patient care. They may be reluctant to allow others to be involved in clinical decision-making. They may additionally be concerned about the legal liability for the decisions of others.

The pathofunctional diagnosis is the cornerstone of professional animal rehab practice. Sahrmann (1998) proposed that a medical diagnosis is insufficient to direct physical rehabilitation, and that a functional diagnosis (i.e. a physical therapy diagnosis) is required to clarify practice, provide a means of communicating and classifies conditions (allowing for evidence-based medicine and research). Veterinary medicine relies on a patho-anatomical diagnosis. However, it is the pathofunctional assessment / diagnosis that is the key that can tie physiotherapy and veterinary medicine together, as it augments a veterinary diagnosis. Figure 1 shows the pathofunctional assessment skills (or needs) of each 'type' of practitioner engaged in the animal rehab field.

Figure 1. The Patho-Functional Assessment Team Approach



S. Budiselic, 2012

Upon reflection, Dr. Budiselic has ascertained the following:

> "I am a better practitioner because of interprofessional collaboration. I feel that solo practice may potential tunnel vision, dogmatism, and hamper professional growth. It has been my experience that I will arrive at the same conclusion as my PT colleagues but my path to the conclusions may be a bit different. I have found that PTs and DVMs can offer unique, and complementary thoughts and viewpoints when interprofessional collaboration is adopted. Lastly, I personally feel that physical rehabilitation should be held in the same regard as any other specialty (i.e. ortho or neuro)."
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> "From a team perspective, I think that all of the players in the animal rehab field need to be open minded – each professional has a unique perspective. I feel strongly that it is the patho-functional assessment that can bind the two professions (PTs & Vets). Communication is vital. I would suggest that practitioners seek more opportunities to establish and foster communication. There may be a particular need for general practice veterinarians to solicit a patho-functional assessment, especially with non-traditional orthopaedic or sports medicine cases."
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> "The public, in particular the more educated clients, want the option of rehab. They seek out veterinarians for veterinary medicine and expect a referral to any 'specialist' of their choice. There is a need and a demand for animal rehabilitation services, and clients are willing to pay for it."
>
> "Regulatory issues hinder advancement. Veterinary medicine is historically exclusive, reductionist, and generalist. The PT professions needs appropriate professional considerations by regulatory bodies but there are currently problems with jurisdiction and regulation. The two professions typically have defined roles, but role 'blurring' also exists which may warrant further regulatory considerations. I would also like to see more collaborative learning opportunities for each profession."

It is important to consider that, as rehab professionals, we are currently the pioneers, leaders, and ambassadors for the profession. As such, it is imperative that we leave a good set of tracks to follow. The action points / suggestions to take home from this part of the presentation / paper are:

1. Form an interprofessional rehab focus group or journal club
2. Mentor a student (DVM / PT)
3. Communicate evidence-based medicine to your colleagues
4. Teach but be teachable

Most importantly, we must learn to celebrate our differences and stay committed to and positive about attaining interprofessional collaboration within veterinary medicine.

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