



The Value of Communication, Education, and Self-Management in Providing Guideline-Based Care: Lessons Learned from Musculoskeletal Telerehabilitation During the COVID-19 Crisis

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Introduction

The onset of the COVID-19 pandemic generated an unprecedented shift in the delivery of musculoskeletal care. Restricted access to in-person services and concerns about exposure to SARS-CoV-2, the virus that causes COVID-19, contributed to the rapid acceptance of telerehabilitation. This change resulted in distinct challenges for both the patient and the therapist. Homes and apartments were repurposed into examination rooms and therapy gyms. Physical examination and intervention options were limited as hands-on techniques could not be implemented. The constraints of telerehabilitation pushed practitioners to reevaluate their practice patterns and reallocate their time, resources, and focus. Prior to the pandemic, the implementation of telerehabilitation was shown to result in clinically meaningful improvements in pain, disability, and quality of life across a variety of conditions [2, 3]. This transition fostered a new appreciation for the value of three important aspects of guideline-based care: interpersonal communication, education, and self-management. This commentary highlights our experiences and lessons learned in each of these areas while providing guideline-based telerehabilitation.

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Guideline-Based Care

Clinical guidelines for musculoskeletal rehabilitation are based upon best current evidence and aim to inform clinical decision-making, improve patient outcomes, and reduce healthcare expenses. Despite clear benefits of guideline-based care, only 54% of physical therapists provide care that aligns with recommendations [25]. This suggests that treatment choices are frequently not evidence based and that unwarranted practice variation is prevalent in the profession. Barriers encountered during telerehabilitation have restricted evaluation and treatment possibilities and pushed clinicians outside of their comfort zone. Therapists have had to examine their practice patterns and clinical decisions to adapt to the changing landscape [1]. The result of this process may be a shift in practice and the provision of care that better reflects evidence supported by clinical practice guidelines.

Musculoskeletal physical therapy guidelines on the delivery of patient-centered care incorporate effective communication, education, and self-management. Patient-centered care is both respectful and responsive to the preferences of each patient and considers their needs and values during clinical decisions [24]. The patient is an active participant in the visit and is encouraged to share their thoughts and beliefs. Telerehabilitation promotes care that is centered around the patient and places emphasis on communication, education, and self-management. The patient and provider form a partnership where shared decision-making is used to address the individual aspects of a musculoskeletal condition.

Telecommunication

Telerehabilitation provides an environment where the therapist can listen and the patient can be heard. First, the physical examination is often truncated allowing for additional time for discussion. Second, interacting over a screen requires direct

focus from both the patient and therapist and limits distraction that is common in a busy therapy clinic. Without the overlap of patients with competing needs, the clinician is free to focus entirely on the treatment and care of their patient in front of them. Additionally, the comfort and familiarity of the home may help temper patient anxiety and create a more casual and genuine interaction. This is critical as communication and interpersonal skills are key factors that influence the interaction between the patient and therapist in musculoskeletal settings [18]. By asking, listening, and reflecting, the clinician may gain a deeper understanding of the fears, concerns, and pertinent psychosocial factors of each individual.

Effective verbal and non-verbal communication are essential factors to forge a therapeutic alliance of understanding and trust. Successful communication can influence patient understanding, adherence, and satisfaction [11]. When productive communication is coupled with a realistic assessment of patient knowledge and a trusting relationship, patient adherence is enhanced [15]. Furthermore, communication styles that display sympathy, empathetic listening, and communicative discussion and include patient input have been associated with greater patient satisfaction and improved treatment outcomes [22]. What we say as therapists and how we say it matters. Words that convey harm and instill fear may contribute to negative beliefs, unnecessary compensations, and avoidant behavior. Diagnostic terms such as “degenerative disc disease” or “bone on bone” can be reconceptualized as a normal part of the aging process [21]. An investment in communication is one that pays dividends for both the patient and therapist and may result in care that is more effective and patient centered.

Without the use of hands-on examination techniques, physical therapists must rely on conversation and observation to gain insight into patient symptoms. A productive discussion sets the stage for a physical examination that is organized and focused on specific patient concerns. During the examination, dialogue must be coupled with appropriate camera angle to establish a diagnosis. Observation of specific movements, postures, and positions in the home can provide the therapist with a clearer picture of real-world functional limitations. Instead of artificially constructing the environment and tasks to simulate the home environment, the therapy takes place in real time, allowing the patient to demonstrate limitations and challenges in their natural environment.

Good communication in a telerehabilitation evaluation elicits valuable information and enables accurate diagnosis [19]. The combination of effective communication and a comprehensive clinical examination is therapeutic for the patient as they can produce short-term effects on pain, catastrophizing, and functional mobility [14]. Additionally, discourse between the patient and therapist on the nature of pain may reduce symptoms and alleviate disability [13]. By promoting interaction, discussion, and observation, telerehabilitation may lead to a better appreciation of the patient condition and result in care that is specific to the needs of each individual.

Tele-education

Education in rehabilitation is designed to increase understanding and develop confidence for home management. It is built upon effective communication and includes a thorough explanation of the condition, symptoms, mechanism, and management plan and involves teaching and counseling to modify behavior [8]. Proper education is a first-line treatment as it empowers the patient with knowledge, reduces fear, and provides reassurance that movement is safe and recovery is possible [23]. The telehealth model is well designed for the effective delivery of education as it places emphasis on the interaction between therapist and patient.

The remote session provides a focused treatment environment without outside distraction and fosters communication and education between patient and provider. An increased ability to focus on education can lead to greater comfort with the clinician and treatment plan and reassure the patient, which has been associated with higher satisfaction, symptom improvement, and reduced healthcare use [20]. Knowledge empowers patients, maximizes comprehension and compliance, and helps to shift the locus of control. This is significant as internal beliefs regarding health control are associated with improved outcomes in subjects with musculoskeletal pain [26].

Therapists should provide information clearly, succinctly, and according to the patient’s preferred learning style and avoid information overload. Recall and retention can be diminished in clinical settings because of patient discomfort with a new environment, anxiety or fear, or pain [5, 8, 16, 23]. The telerehabilitation model limits these factors with a focus on therapist coaching and improved retention of messaging [18]. Clear verbal, written, and physical instruction during telerehabilitation can illustrate anatomy and physiology, surgical procedure, and exercise positions. Examples, metaphors, and analogies are encouraged and can be helpful in explaining challenging topics to patients [18]. Written material should have a clear font and avoid technical jargon, graphics, and clutter. Effective techniques include repetition, spacing of new information over multiple sessions, and limiting the quantity of material to important points. The goal of educational materials is to impart knowledge, bolster confidence, and improve self-management.

Self-Management

Telerehabilitation shifts the locus of control from the therapist to the patient. Factors that encourage self-management include a treatment framework that is patient driven, the provision of tools for self-management, and the home environment acting as the therapy setting. Each of these mechanisms contributes to a greater sense of active responsibility and provides the patient with the ability to complete tasks and reach individual goals. Providing self-management advice can increase self-efficacy, improve coping strategies, and instill the belief that an individual can exert control over their symptoms [4]. Pain-related self-efficacy and locus of control are critical factors as they have been shown to predict outcomes in subjects with

musculoskeletal conditions [10]. Patients with chronic conditions must understand that a short-term solution is unlikely and that a long-term self-management strategy is a more sustainable approach. The therapist should address beliefs that may hinder recovery and provide the patient with the skills to lead active lifestyle and successfully manage their musculoskeletal condition. When patient beliefs and expectations are reframed, the value of an active approach is recognized and appreciated.

Instead of relying on physical interaction, telerehabilitation promotes an active management approach involving the use of patient education, exercise, functional activity training, and behavioral and lifestyle changes. This method shifts the control of the treatment to the patient, making them accountable as their own “therapist,” with the clinician acting as coach and consultant. By following a treatment plan of self-monitoring and self-management, the patient is an active participant in the recovery process and develops greater control in managing their condition. Self-managing and self-monitoring have been shown to improve patient confidence, self-efficacy, self-regulation, and adherence in a range of clinical populations [6, 7, 12, 17].

To design an effective self-management plan, the clinician and therapist must define appropriate goals and understand roadblocks that the patient will likely encounter [9]. Shared decision-making and guided problem-solving may help a patient make long-term behavioral change [4]. Guided experiments can help the patient identify the most effective strategies to avoid symptom exacerbation [9]. The plan may involve gradual exposure to movements, positions, and activities that were once difficult to achieve. Patients may be taught to perform self-mobilization techniques and active exercise sequences to help manage symptoms. Strategies should be simple, as adherence is necessary for effective self-management. Reassessment of symptoms during a telerehabilitation encounter provides the patient with evidence and reinforcement that a self-management approach is effective.

In conclusion, the sudden transition in the delivery of musculoskeletal care offered a means for healthcare providers to examine current practice patterns and embrace areas for growth. Telerehabilitation can enhance communication, education, and self-management; improve patients’ outcomes and therapists’ adherence to musculoskeletal guidelines; and ultimately strengthen the patient-therapist alliance, improve patients’ perceptions of care interactions, and enhance their satisfaction [18]. Future study addressing the influence of these variables on clinical outcomes will help identify the populations and conditions that may benefit most from telerehabilitation.

Compliance with Ethical Standards

Conflict of Interest: Matthew Pugliese MS, PT, DPT, OCS, FAAOMPT, and Aviva Wolff EdD, OT, CHT, declare that they have no conflicts of interest.

Human/Animal Rights: N/A

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Required Author Forms Disclosure forms provided by the authors are available with the online version of this article.

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