These are exciting times for practitioners who manage musculoskeletal conditions. There are increasingly clear and sophisticated management approaches and a burgeoning evidence base, concurrent with a high demand from an aging and variably active population. Tendinopathy, a common and troublesome condition, has significant consequences for both the athletic population and, more importantly, those who exercise for health or engage in physical activity as part of their occupation. That we are now able to perform high-quality evidence syntheses based on robust primary evidence for a wide range of conditions and therapeutic approaches is a credit to the pioneers who have driven the evidence explosion, and an inspiration for those striving to emulate and build on their achievements. Some of the people in each of those categories have contributed directly or indirectly to this special issue on tendinopathy, from which strong messages have emerged. So, how do we take that evidence and apply it in the clinical setting to individual patients? How do we adjust our decision-making schema in response to the presented information and challenges?

With unprecedented access to published material allied to the analytical skills required to decipher research reports, alongside established structures, such as formal education and in-practice teaching as well as engagement with social media platforms, there has never been such a wealth of information to guide us. Almost too much at times, so that discerning a clear signal from the background noise has become a skill in itself. Clinical guidelines offer a possible mechanism to assist clinicians in navigating this wealth of information. Clinical guidelines could be defined as statements designed to guide decisions regarding diagnosis and management of people with specific diseases and conditions. These are usually based on evidence of efficacy and cost-effectiveness, but also include elements of consensus.

To be useful, such guidelines must synthesize the evidence and provide high-level clinical guidance that is flexible and facilitates clinical reasoning, rather than being prescriptive. On the local operational level, far more complex pathways may be required to explain the detail of who does what and when, how resources follow the patient journey, how clinical governance will be ensured, and what materials are required to guide patients, primary care practitioners, therapists, and specialists in the management of the various stages in which a patient may present (FIGURE).

The FIGURE shows an apparently complex operational care pathway, designed to illustrate potential relationships between a range of services and professionals who may become involved in providing care for someone with tendinopathy. This is based on the typical UK National Health Service model, which is designed to minimize costs and maximize care delivery in primary or intermediate care settings. A “back of the envelope” estimation of the number of patients presenting and resolving at each stage, from self-management through surgical options, is presented to the left of the
pathway, which will vary according to affected tendon and acts as a useful audit and commissioning tool. Referral pathways will vary in different health care systems, but ideally there will be a concentration of resources available at first contact, perhaps delivered in a “one-stop shop” model of care. Relevant skill sets and freedom to act of the first-contact practitioner bring care closer to the patient and reduce pathway complexity, but questions remain as to whether outcomes are improved or costs reduced when the whole pathway is considered.

Pathways are operational structures with which to implement clinical practice guidelines. It is reasonable to be a little nervous about guidelines being overly prescriptive, therefore limiting flexible clinical reasoning in the application of the tools we have at our disposal. The imperative must reside in guidelines being subordinate to sound clinical reasoning skills. This would circumvent any attempt to argue that there may be medicolegal consequences for not following guidelines. So the key is that guidelines need to be seen as a decision-making aid rather than a recipe. A clear theme that emerges from this collection of articles on specific tendinopathies is of evidence- and expertise-informed nuances and subtleties being useful to guide selection of stage- and person-specific treatment.

Factors relevant when accessing, adapting, and applying guidelines to the real patient include those gleaned from attentive and careful listening to, and analyzing of, the history a patient shares. Mapping those factors to pathophysiological knowledge and likely treatment responses thus enables robust clinical decisions that utilize guidelines in an individualized way. Comorbidities, the milestones in symptom development, responses to previous interventions, patient beliefs, psychosocial and cultural factors, likely tissue demands, and so on may radically influence key decisions (TABLE). It is the lens of insightful clinical reasoning that focuses guidelines most effectively on the individual patient and ensures that the clinician can justify practice in response to any challenge.

One of the challenges to the clinician in interpreting the evidence about tendinopathy management is the increasingly ubiquitous application of the word tendinopathy itself. Labeling numerous conditions in a variety of anatomical sites, with many possible stages of presentation and a plethora of possible diagnoses and approaches, means that we have to be very careful to differentiate and individually determine interventions. The pathophysiology and presentation of subacromial impingement with scapular dyskinesis in an elderly person with multiple comorbidities are quite different from those of patellar tendinopathy in a young athlete, in terms of movement patterns, load demands, psychosocial elements, and tissue pathology. These are just a few of the reasons for individualizing treatment selection.

Further, we may be able to access “tickets to treatment” specific to site, pathology, and stage of presentation that enable us to apply judicious and progressive loading—the central treatment of choice for most tendinopathies. Adjunctive treatments, such as shockwave therapy and injection therapy, may have a specific role at specific stages. There is now arguably as strong an evidence base for shockwave therapy as for loading in lower-limb tendinopathies and plantar fasciopathy (research question, anyone?). The role of injection therapy and surgery is still unclear, with authoritative systematic reviews contrasting their widespread, continued application.1 While results of any intervention may be slow and incomplete in pragmatic real-world situations, there is definitely room for innovation, with guidelines and pathways that reflect an interdisciplinary team working to optimize outcomes.

Good-quality guidelines that are based on robust evidence and are widely accessible make what is covertly known...
by some explicit and clear to all. Such resources offer a touchstone to guide practitioners’ determination of learning requirements, educators’ design of curricula to adequately prepare expert practitioners, and researchers’ definition of questions that require particular attention. How are they future proofed, and is amendment fast enough? One can envisage that resources utilizing high-quality information technology to alter dynamically in response to evidence development and patient experience may not be unachievable, and even become the highest form of evidence available, at the fingertips of the treating clinician whenever required.5

And what if the evidence is not sufficient to guide treatment for every patient? How do we capture the art of physical therapy, the clinician’s experience, the nuances that negotiate common hurdles, the words that communicate key concepts? Will an evidence hierarchy that values systematic reviews based solely on clinical trials capture this art? I would argue no—but that innovative solutions can do so. For example, blending systematic review with the experience of proven experts is one possible solution that would enable level 1 evidence to be interpreted and complemented by thematically synthesized expert opinion—a powerful bridge between studies of large samples and the individual patient.5

Guidelines that are informed by mixed methods will be all the stronger and more relevant than those drawing on limited sources. Welcome to an impressive body of work on a hot topic, delivered by thought leaders, innovators, and clinical academics with real insight and proven experience that contains aspects of all the factors described above. The information in this special issue of JOSPT moves us forward and will help form the basis of local pathways and international guidelines. Your challenge is to translate the knowledge here and blend it with existing decision-making paradigms to optimize outcomes. No small order, but a worthy task, and one for which we are ever better prepared due to the kind of work contained in this special issue on tendinopathy. Enjoy the read.  

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REFERENCES


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