

Short Communication

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Roadmap to Ordering Imaging for Physical Therapists in the United States: An Evidence-Based Infographic Series

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Abstract

With direct access physical therapists (PTs) are increasingly serving as first-contact providers for neuromusculoskeletal conditions in all 50 states in the U.S. Also, a growing number of U.S. jurisdictions and practice settings now allow physical therapists to refer patients directly for diagnostic imaging. Evidence from direct access and military settings shows that PT-ordered imaging is appropriate and safe. In a 5-year practice analysis published, 91% of PT-ordered studies had met the American College of Radiology Appropriateness Criteria, and no adverse events occurred. In musculoskeletal imaging, PTs follow low back pain (LBP) imaging guidelines more often than primary care providers, and PT-initiated radiograph referrals suggest shorter time to care and therefore lower costs to the healthcare system. Even so, imaging that departs from guidelines remains common and can raise downstream costs and healthcare use without enhancing outcomes. This infographic presents a multi-step roadmap for U.S. PTs. The steps include verifying legal and professional scope of practice; applying clinical reasoning with validated decision rules, such as the Ottawa Ankle and Midfoot Rules; and reviewing red flags of serious pathology. Selecting modality by weighing diagnostic yield and radiation exposure per American College of Radiology (ACR) guidelines. Be able to place an order that clearly conveys the clinical question to the radiologist, communicate the findings to the patient in appropriate language, and coordinate follow-up care. The infographic-based roadmap is intended to provide PTs with a quick guide to support safe, evidence-based, and cost-conscious imaging decisions in physical therapist practice [1-25].

Keywords: Diagnostic imaging; Physical therapists; Direct access; Scope of practice; Imaging

Empowering Physical Therapists (PT's) in Imaging Decisions

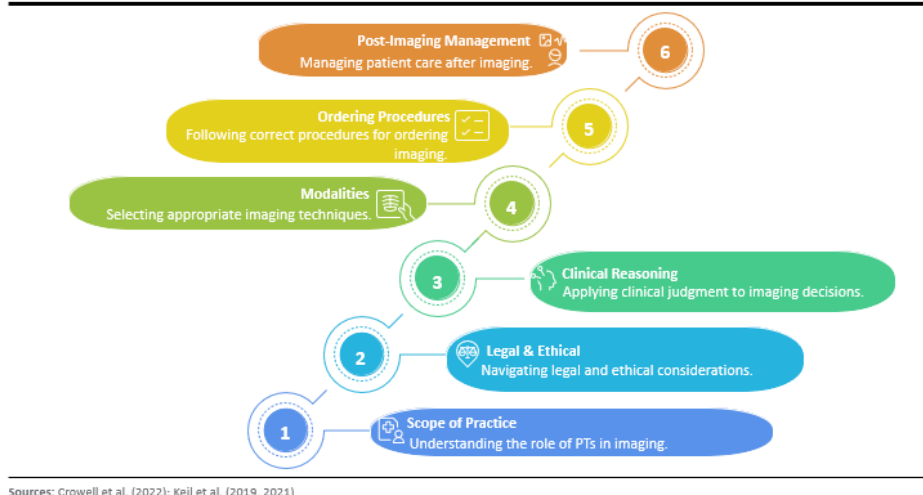


Figure 1:

Considerations for Imaging Ordering by Physical Therapists

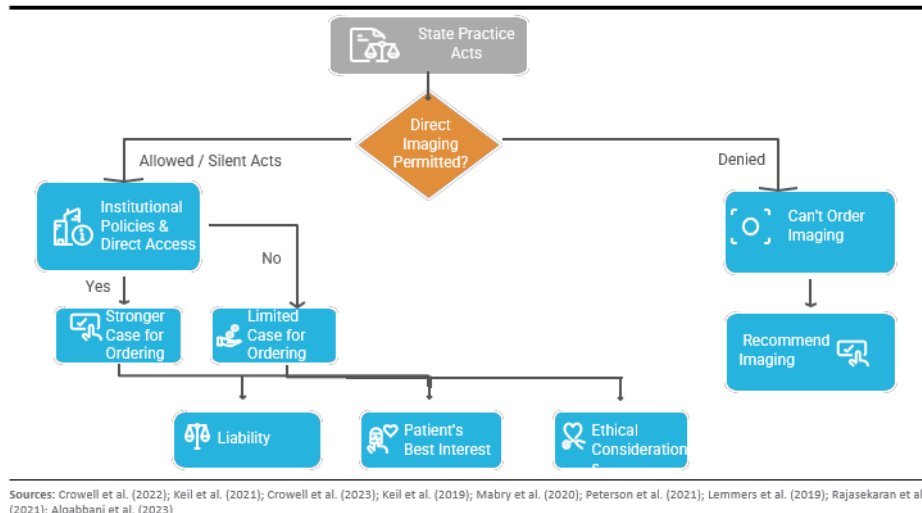
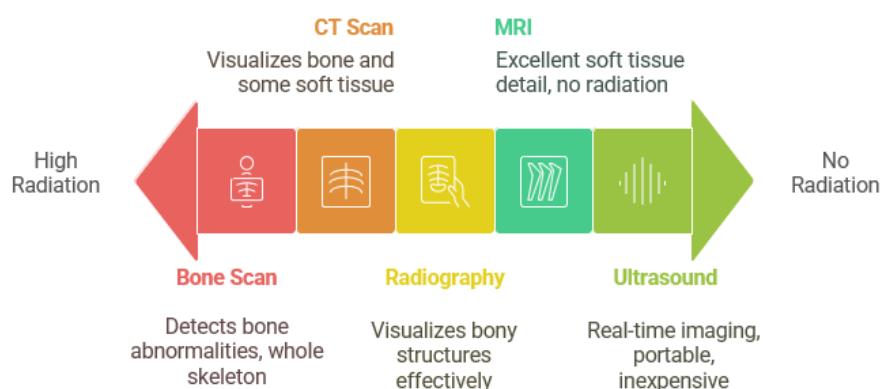


Figure 2:

Imaging techniques ranked by radiation exposure and tissue detail



Note. Effective dose varies by body region; a whole-body bone scan (~4–6 mSv) can exceed the dose of an extremity CT (Mettler et al., 2020).

Sources: Mettler et al. (2020); Smith-Bindman et al. (2019); Sconfienza et al. (2018); Whittaker et al. (2019)

Figure 3:

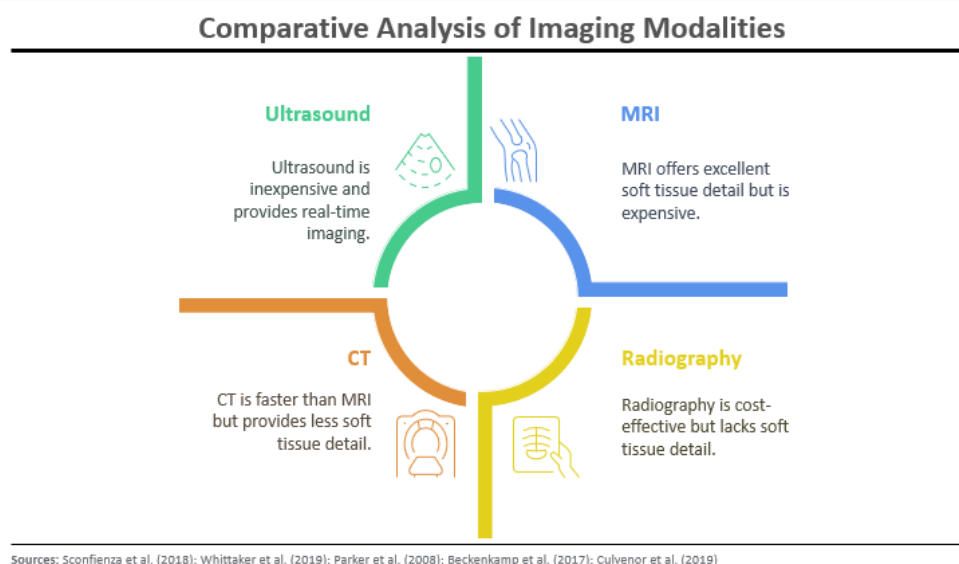


Figure 4:

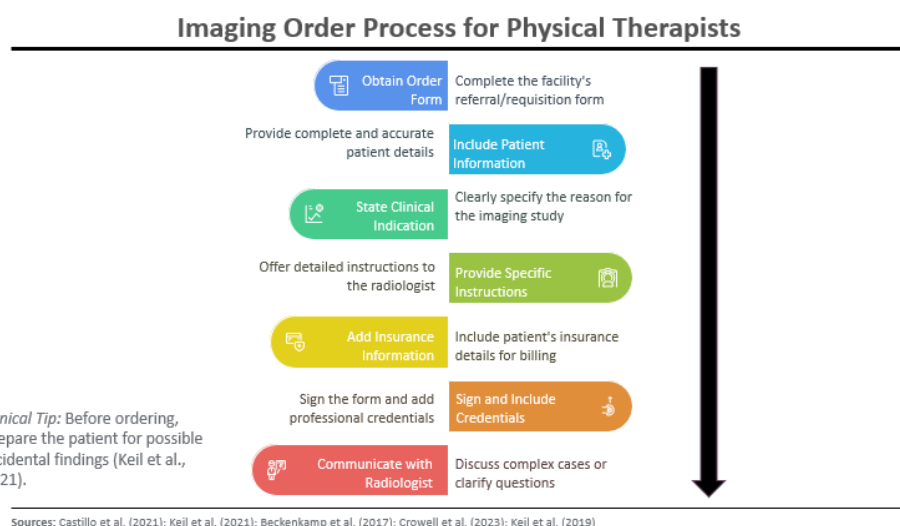


Figure 5:

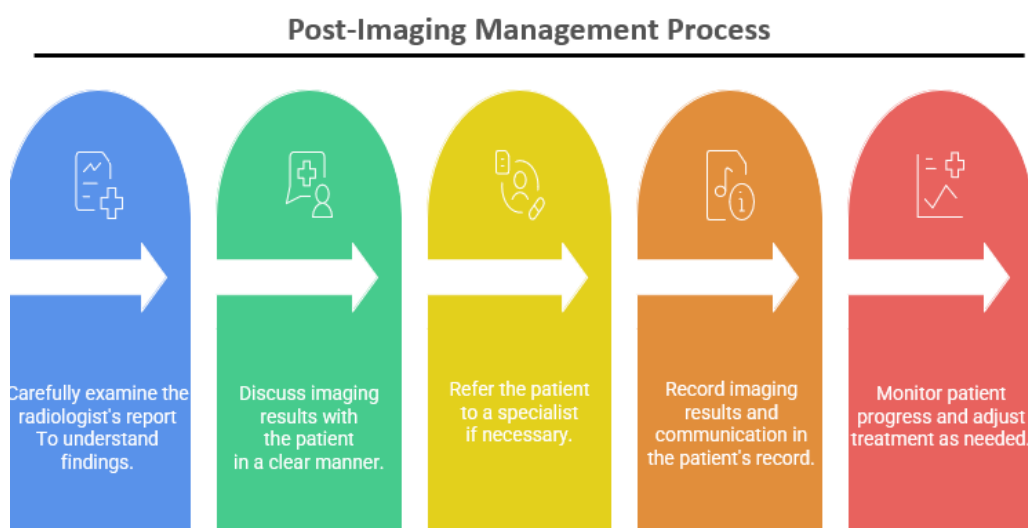


Figure 6:

Enhancing Imaging Expertise



Figure 7:

Sources: Keil et al. (2021); Whittaker et al. (2019); Keil et al. (2019)

Key Support Organizations



Figure 8:

Sources: Fox et al. (2018); Hutchins et al. (2021); Jenkins et al. (2018); Lin et al. (2020); Crowell et al. (2022); Keil et al. (2021)

Achieving Effective Imaging Integration

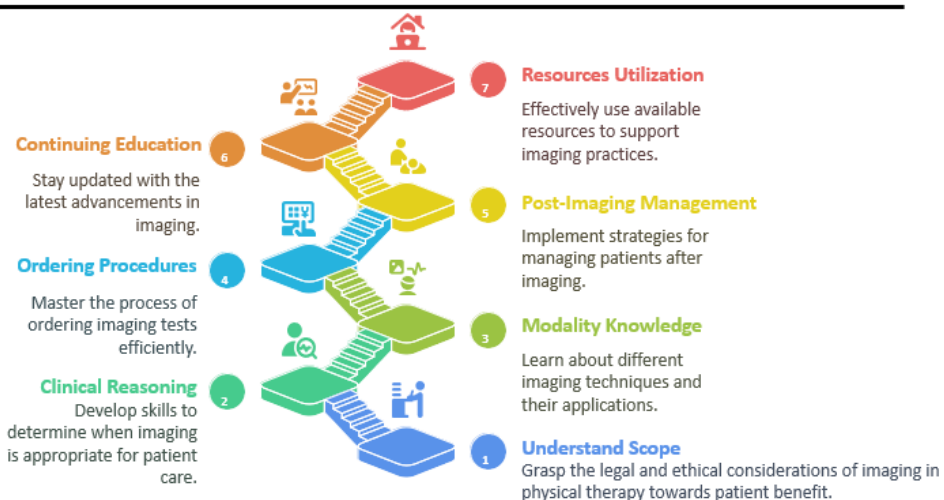


Figure 9:

Sources: Finucane et al. (2020); Keil et al. (2019, 2021); Lin et al. (2020); Whittaker et al. (2019)

Conflict of Interest

The author serves on the Editorial Board of the Global Journal of Orthopedics Research and has no role in the editorial handling or peer review of this manuscript. The author declares no financial conflicts of interest.

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Ethics Statement

Not applicable; this article does not involve human participants or patient data.

Originality

This manuscript is original, has not been published previously, and is not under consideration for publication elsewhere.

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