



## Effective Exercise Instruction

Excerpt from Central Valley Physical Therapy PIER Document

**PROBLEM:** Effective Exercise Instruction

**INTERVENTION:** Physical Therapist-Modeled Therapeutic Exercise  
Physical Therapist-Instructed Therapeutic Exercise  
Manual Physical Therapy / Therapeutic Exercise

**EVIDENCE:** Oxford Evidence Grade = A, B (Level of evidence = 1a, 1b, & 2b studies)

A combination of manual physical therapy and physical therapist instructed therapeutic exercise has been repeatedly shown to be more effective than a variety of other commonly used interventions for reducing pain and disability associated with musculoskeletal conditions, including osteoarthritis (knee and hip),<sup>11</sup> acute and chronic LBP,<sup>12, 13</sup> mechanical neck pain,<sup>14</sup> and shoulder impingement.<sup>5, 15</sup>

Exercise Modeling is important and most effective when demonstrated by a professional at periodic moments during the skill acquisition process.<sup>6</sup>

Quality Performance is dependent upon the physical therapists instructions, as demonstrated in several randomized controlled trials,<sup>1, 9, 10</sup> and there is a strong association between exercise performance and pain reduction.<sup>9, 10</sup>

The beneficial effects of manual therapy and exercise continue to be observed up to one year later.<sup>14, 16, 17</sup>

### **REFER:**

Any patient for whom exercise is deemed an important part of their treatment program to maximize pain relief and improve function. Physical therapy exercise instruction and modeling is especially important for patients in whom long-term compliance is necessary to minimize disability associated with more chronic musculoskeletal disorders such as osteoarthritis, low back pain, and neck pain.

\*References noted can be found on the original PIER document.