Low Back Pain: The Facts

- Annually, low back pain accounts for approximately 40% of all lost workdays and has been estimated to cost $49 billion within the industrial sector.¹
- Attempts to identify effective interventions for patients with low back pain (LBP) have been largely unsuccessful.²³ One explanation offered for the lack of evidence is the inability to define subgroups of patients most likely to respond to a particular intervention.⁴

Low Back Pain: The Evidence

- Flynn et al. validated a clinical prediction rule that identifies a subgroup of patients with nonspecific low back who are likely to respond to spinal manipulation.⁵
- The predictor variables, based on the history and physical examination, were identified as follows:
  1. Pain of less than 16 days duration
  2. No symptoms distal to the knee
  3. One or both hips with internal rotation < 35°
  4. One or more hypomobile lumbar segments
  5. FABQ*-work subscale score of < 19
- The presence of four of five variables in the prediction rule increases the likelihood of success with manipulation from 45% to 95%.
- According to a study by Childs et al.⁶, patients who were “positive on the rule” (met 4 or 5 of 5 predictor variables) and did not receive spinal manipulation were 8 times more likely to experience a worsening in disability as compared to those that did.

*Fear-Avoidance Belief Questionnaire: measure of how beliefs of fear and avoidance are contributing to function.
Mythbusters

Myth: Research has shown that spinal manipulation is no more effective than any other intervention for the treatment of low back pain.⁷

Fact: Indeed, studies that have treated low back pain as a homogenous group have shown that spinal manipulation is superior to sham treatment but not superior to other conventional treatments.⁷ However, studies consisting of low back pain patients that are stratified according to a clinical prediction rule⁸ have shown superior results with spinal manipulation. This subgroup of patients that possess 4 of 5 characteristics (pain less than 16 days, no symptoms below the knee, hip internal rotation > 35°, one or more hypomobile lumbar segments, and FABQ-work score < 19) improve their post-test probability of success with spinal manipulation from 45% to 95%. Further, studies that have compared manipulation alone and exercise alone to a group that incorporated both interventions showed that those who received the combination of the two achieved superior results.⁹

Myth: Only chiropractors are allowed to perform spinal manipulation.

Fact: According to the Illinois State Physical Therapy Practice Act physical therapists are permitted to perform grade V mobilizations, otherwise known as manipulation. Some physical therapists have received extensive post-graduate education in the proficiency of performing spinal manipulation.

References