The McKenzie Method continues to be one of the most researched conservative approaches to musculoskeletal problems. It has been examined in depth in relation to its utility in the spine, and the research is accumulating in the extremities. The following is a selection of some of the most relevant and supportive studies on the approach to date. However, studies on MDT are not universally supportive, to get a comprehensive sense of the literature exploring MDT and for the most up-to-date McKenzie references, please visit: www.mckenzieinstitute.org

Classification Reliability

The following two systematic reviews summarise reliability for MDT. When applied by Credentialled or Diplomaed clinicians, MDT has acceptable reliability for the lumbar spine and conflicting levels for the neck. For the extremities there is strong evidence for acceptable reliability with some study designs, using experienced clinicians:


Treatment Efficacy

The following RCTs endorse the treatment value of MDT, showing efficacy in the spine and in the extremities.


This high-quality RCT endorsed the value of classifying patients using directional preference (DP) and matching exercises. Pain, function, and medication use were significantly superior in the DP group with matching exercises.


With a one-year follow-up, this study compared two alternative interventions. MDT was found to be more effective than manipulation, and the study gives support to the Method's classification-based approach.


The patients in this study had symptoms that would normally qualify them for surgery. Those given DP exercises improved significantly for global improvement, sick leave, vocational status, root compression signs, and satisfaction.


Patients who were given exercises based on an MDT assessment had superior outcomes compared to those of wait-list controls for both pain and function. 40% of the knees examined were classified as having a DP; they demonstrated large effect sizes at two weeks for all primary outcomes and up to large effect sizes at three months.


This RCT with 220 patients, used an exercise-based approach utilising MDT principles, including force progressions, vs ‘usual care’. At 1 year, the MDT group showed greater improvements with function, pain and self-reported success.

Association with Psychosocial Factors

Numerous studies and one systematic have explored the association between MDT and psychosocial outcomes. There is a positive association to fear avoidance beliefs, somatisation, depressive symptoms and pain self-efficacy.


This study followed 705 patients who completed functional scores and the STarT Back Questionnaire at baseline and received MDT care. Over 90% classified at a high-risk level decreased to either low (67%) or medium risk (25%) by discharge indicating that MDT care may reduce some of the STarT physical and psychosocial impairments.


This cohort study took 138 patients with LBP and high STarT risk. Those with a DP and given matched intervention showed significant and clinically important differences in function compared to those with no DP.


This systematic review found there was an association between MDT and improvement in fear-avoidance, pain self-efficacy, depression, and psychological distress.

Predicting Outcomes

MDT also has a proven ability to predict patient outcome. With Centralisation / DP the prognosis for a rapid and lasting improvement is very good.
Assisting in Spinal / Extremity Differentiation

MDT is used as a means for clinicians to differentiate whether extremity symptoms are from a spinal or extremity source. One cohort study details this MDT process, and a secondary analysis examines the indicators.


Using an MDT based ‘baseline-test-retest baseline’ process, clinicians determined which of the 369 patients with extremity pain had symptoms that were of ‘spinal source’ and which had ‘extremity source’ symptoms. Overall, 43.5% of the patients were designated as having a ‘spinal source’ and were treated with solely spinal intervention.


This analysis provides clinicians with indicators that predict the source of symptoms for isolated extremity pain and assist with differentiation clinical decision making. Five indicators were identified, with two being the optimal number.

Avoiding potential Surgery and Cost-Saving Implications

Several studies demonstrate the potential of MDT for pre-surgical screening and intervention to reduce surgery rates and decrease costs for low back pain. In the Rasmussen study, 4 years after implementation of MDT-based spine clinics, lumbar disc surgery rates were reduced by 50%. In the van Helvoort study, transforaminal epidural injections followed by MDT demonstrated the potential to be an effective strategy in preventing surgical interventions. In the Donelson study the utilisation of MRIs, injections and surgery was substantially lower for those receiving MDT care.


Systematic Reviews and Guidelines featuring MDT

MDT and the phenomenon of Centralisation and DP have been the subject of, or included in, many systematic reviews and guidelines. Here are a few examples.


It was recommended that clinicians should use specific repeated movements to promote centralisation in patients with acute, subacute, or chronic LBP, with the recommendation based on Grade A, ‘strong evidence’.

- **Silvennoinen K, Konstantinou K, Dunn K. Classification of patients with LB-related leg pain: a systematic review. BMC MSK Disorders 2016;17:226-245.**

This review evaluated 22 systems that classify populations with low back-related leg pain. MDT scored the highest of any system, with criteria based upon purpose, validity, feasibility, reliability and generalisability.


This clinical practice guideline developed by a panel of international experts made recommendations on the management of knee OA in regard to exercise. MDT was ‘strongly recommended’ as an intervention.


This review concluded that there was moderate to high quality evidence that MDT is superior to other rehabilitation interventions for pain and disability in patients with chronic LBP.


This review grouped MDT RCTs into those that followed the core principles of MDT and those that did not and compared treatment effect sizes. Those adherent studies showed significantly greater reduction in pain and disability, demonstrating that when the approach used is consistent with the core MDT principles, better outcomes are achieved.


This guideline designated a ‘can use’ for the McKenzie Method as a classification system for acute LBP, and a ‘may use’ for chronic LBP.