

Supplementary Online Content

Goertz CM, Long CR, Vining RD, Pohlman KA, Walter J, Coulter I. Effect of usual medical care plus chiropractic care vs usual medical care alone on pain and disability among US service members with low back pain: a comparative effectiveness clinical trial. *JAMA Netw Open*. 2018;1(1):e180105.
doi:10.1001/jamanetworkopen.2018.0105

eTable 1. Primary and Secondary Outcomes

eTable 2. Additional Therapeutic Procedures Delivered by Doctors of Chiropractic for Participants in the Usual Medical Care With Chiropractic Care Group

eTable 3. Types of Usual Medical Care

eReferences

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Primary and Secondary Outcomes

Outcome Measure	Description	Scaling	Reliability/Validity	MCID
<p>Numerical Rating Scale (NRS)</p> <p>1) Average low back pain (LBP) during the past week (primary outcome)</p> <p>2) Worst low back pain in the past 24 hours</p>	<p>Participants rate using numerical rating scale</p>	<p>0-10, ordinal, 11-box scale (0=no LBP; 10= worst possible LBP).</p>	<p>Von Korff 2000:¹</p> <p>“The validity of NRSs has been well documented. NRSs demonstrate positive and significant correlations with other measures of pain intensity. They have also demonstrated sensitivity to treatments that are expected to affect pain intensity.”</p>	<p>Chou 2007, 2017:^{2,3}</p> <p>Small/Slight: 0.5–1.0 points</p> <p>Moderate: >1–2 points</p> <p>Large/Substantial: >2 points</p> <p>van der Roer 2006:⁴</p> <p>2.5-4.5 for chronic low back pain patients</p> <p>Salaffi 2004:⁵</p> <p>Much better: 2.0</p> <p>Slightly better 1.0</p> <p>Lauridsen 2006:⁶</p> <p>1.4 points</p>
<p>Roland Morris Disability Questionnaire</p>	<p>24-item survey used to assess disability-related changes in patients with low back pain</p>	<p>0-24 (Higher score indicated greater disability)</p>	<p>Stratford 2000:⁷</p> <p>Test/retest Reliability: 0.81</p> <p>Stratford 2000:⁷</p> <p>Validity (correlation with prognostic rating of change): 0.56</p> <p>Riddle 1998:⁸</p> <p>“The area under the Receiver Operating Characteristic curve for the entire Roland Morris Questionnaire scale was 0.68, while the curve areas for smaller Roland Morris Questionnaire intervals varied from 0.80 to 0.97.”</p>	<p>Chou 2007, 2017:^{2,3}</p> <p>Small/Slight: 1–2 points</p> <p>Moderate: >1–2 points</p> <p>Large/Substantial: >2 points</p> <p>Cecchi 2010:⁹</p> <p>2 points between-group</p> <p>Cherkin 2011:¹⁰</p> <p>2.0 between-group on modified RMDQ</p> <p>Patrick 1995:¹¹</p> <p>2-3 points on modified RMDQ</p> <p>Lauridsen 2006:⁶</p> <p>1.7 points</p>

Outcome Measure	Description	Scaling	Reliability/Validity	MCID
Low Back Pain Bothersomeness	Participants rate the bothersomeness of low back pain symptoms in the past week	1 to 5 (1=not at all bothersome and 5=extremely bothersome)	Dunn 2005: ¹² “Defining “bothersome” LBP as a combination of “extremely bothersome” and “very much bothersome” is the most appropriate.vThis definition of bothersomeness gives a sensitivity of 80% (95% confidence interval [CI] 75% to 84%) and specificity of 61% (95% CI 57% to 65%).”	Cherkin 2011: ¹⁰ 1.5 between group on 0-10 scale is considered clinically meaningful
Perceived Global Improvement	Participants are asked to rate their perceived low back pain improvement	0-6 (0=completely gone to 6=much worse)	This measure is often an anchor for other outcomes. Kamper 2009: ¹³ “Researchers have also measured patient ratings of the importance of a certain change concurrently with the magnitude of that change. Reported correlations for these measures are high (r=0.7225 and r=0.9026), and this finding also supports the face validity of a global rating of change indicating that gradation along the scale represents a change that is meaningful to the patient. Fischer and colleagues investigated the related concept of clinical relevance and reported strong correlations with patient satisfaction measures (Spearman correlation coefficients 0.56 to 0.77); these figures being significantly higher than those for serial measures. As far as we are aware, only one study has assessed test-retest reliability. Costa et al. reported high ICC values—0.90 (95% CI 0.84 to 0.93)—indicating good reproducibility in a cohort of subjects with chronic low back pain.”	We were not able to find a MCID reference for this measure.

Outcome Measure	Description	Scaling	Reliability/Validity	MCID
Satisfaction	Participants rate using a numerical rating scale	0-10, ordinal, 11-box scale (0=not at all satisfied; 10=extremely satisfied).	See NRS description above.	We were not able to find a MCID reference for this measure.
Medications	Participants asked how often they took pain relieving medication (both prescription and over-the-counter) during the past week	(0, 1-2, 3-4, 5-6 or 7 days)	N/A	N/A

eTable 2. Additional Therapeutic Procedures Delivered by Doctors of Chiropractic for Participants in the Usual Medical Care With Chiropractic Care Group*

	Walter Reed^a	Pensacola^b	San Diego^c
	(n=120)	(n=118)	(n=112)
Hot or cold packs, n (%)	96 (80.0)	68 (57.6)	0
Mechanical traction, n (%)	47 (39.2)	34 (28.8)	0
Electrical Muscle Stimulation, n (%)	94 (78.3)	71 (60.2)	0
Ultrasound, n (%)	1 (0.8)	27 (22.9)	0
Infrared therapy, n (%)	4 (3.3)	0	0
Laser therapy, n (%)	2 (1.7)	2 (1.7)	1 (0.9)
Therapeutic exercise for strength & flexibility, n (%)	19 (15.8)	48 (40.7)	106 (94.6)
Therapeutic exercise for function, n (%)	12 (10.0)	73 (61.9)	0
Other manual therapy, n (%)	50 (41.7)	1 (0.8)	29 (25.9)
Self-care/home management training	20 (16.7)	0	0

*Includes participants that had at least 1 chiropractic visit

^a Walter Reed National Military Medical Center (Bethesda, Maryland)

^b Naval Hospital Pensacola (Pensacola, Florida)

^c Naval Medical Center San Diego (San Diego, California)

eTable 3. Types of Usual Medical Care *

	Walter Reed ^a		Pensacola ^b		San Diego ^c	
	UMC ^d (n=119)	UMC+ Chiropractic Care (n=114)	UMC (n=123)	UMC+ Chiropractic Care (n=125)	UMC (n=31)	UMC+ Chiropractic Care (n=27)
Physical therapy referral, n (%)	47 (39.5)	34 (29.8)	23 (18.7)	14 (11.2)	15 (48.4)	13 (48.1)
Pain clinic referral, n (%)	6 (5.0)	4 (3.5)	0	2 (1.6)	1 (3.2)	3 (11.1)
Physical therapy and pain management clinic referrals, n (%)	11 (9.2)	14 (12.3)	0	0	1 (3.2)	2 (7.4)
Prescription for spinal pain medications ^e	67 (56.3)	65 (57.0)	112 (91.1)	111 (88.8)	17 (51.5)	11 (40.7)

* Includes participants that had at least 1 UMC visit

^a Walter Reed National Military Medical Center (Bethesda, Maryland)

^b Naval Hospital Pensacola (Pensacola, Florida)

^c Naval Medical Center San Diego (San Diego, California)

^d Usual Medical Care

^e Includes new or changed medications

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