## Attachment L-3:

## Descriptions of Outcome Measures for MSD Intervention Study

OI: MS	SD Symptoms (Individual employee level)	
	O Rated by employees impacted by target interventions	
	• Collected at baseline and every 3 months from baseline through con	mpletion
	• Participants will also be asked to report severe episodes of back or	
	within the last 3 months	r
	<ul> <li>O Ordinal data (but often treated as continuous when scores are avera</li> </ul>	ged)
		<i>)</i>
Label	Description	Comments
OIa	NASS Lumbar Spine Outcome Assessment Instrument	Primary outcome
	- 17 items with a 6-point response scale: None of the time (=1) - all the	
	time (=6); not at all bothersome (=1) - extremely bothersome (=6)	Example null hypotheses:
	Notes: Factor analysis (Daltory et al, 1996) has identified two scales:	OIa-1: There will be no
	1) Pain & Disability scale: items on frequency and bothersomeness of	difference between
	back pain, plus nine items on disability because of pain, for a total of 11	mean Pain & Disability scale
	items (questions 1a-b, 5-13). The mean score of this scale will be	score ratios (pre/ post
	calculated. (OIa-1)	intervention scores) when
		groups are compared (focusing
	2) Neurogenic Symptom scale: six items on frequency and	on time period Baseline A to B)
	bothersomeness of leg or foot pain, numbness, and tingling (questions 4a-	
	b, 5a-b, 6a-b). The mean score of this scale will be calculated. (OIa-2)	OIa-2: Duration of intervention
		will not be significantly
	The NASS outcome has been found to have acceptability, high re-test	associated with post mean back
	reliability, internal reliability, and validity for low back pain and	Pain & Disability scale score
	disability (Daltroy et al 1996; Schochat et al 2000; Pose et al 1999;	declines
	Padua et al 2001; Bosković et al 2009; Schneider et al 2007;	
	Schluessmann et al 2009; Sigl et al 2006; Weigl et al 2006;	
	Schaeren et al 2005).	
	See <b>Attachment H-1</b> for a copy of the NASS instrument.	
OIb	Quick DASH Outcome Measure with Work Module Option	Secondary outcome
		Evenue will hypotheses
	DASH stands for "Disabilities of the Arm, Shoulder and Hand." The	Example null hypotheses:
	Quick DASH Outcome Measure is a self-reported questionnaire designed	OIb-1: There will be no
	to measure physical function and symptoms in people with any of several MSD of the upper limb. The Quick DASH Outcome Measure is second in	difference between mean
	MSD of the upper limb. The Quick DASH Outcome Measure is scored in	DASH disability/symptom
	two components: the disability/symptom section (11 items, scored 1-5)	score ratios (pre/ post
	and the optional Work section (4 items, scored 1-5). (Beaton et al 2001)	intervention scores) when
		groups are compared (focusing
	See <b>Attachment H-2</b> for a copy of the Quick DASH instrument.	on time period Baseline A to B)
		OIb-2: Duration of intervention
		will not be significantly
		associated with post mean
		DASH disability/symptom

		score declines
OIc	Borg CR-10 RPE (Ratings of perceived exertion) (Borg, 1982)	Secondary outcome
	Please rate the OVERALL PHYSICAL EFFORT level demanded by your job today. 0 = Nothing at all; 0.5 = Extremely weak (just noticeable); 1 = Very Weak; 2 = Weak (light); 3 = Moderate; 4 ; 5 = Strong; 6; 7 = Very Strong; 8; 9; 10 = Extremely strong (almost max); . = Maximal;	