THE SATISFACTION AND RECOVERY INDEX: A NEW TOOL TO MEASURE THE PROCESS AND STATE OF RECOVERY FROM INJURY AND PAIN

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INTRODUCTION / AIM
To present the development and initial psychometric evaluation of a new importance-weighted health-related satisfaction scale, the Satisfaction and Recovery Index (SRI), for use as a condition- and region-agnostic measurement tool to quantify the process and state of recovery from musculoskeletal injury and pain.

METHODS
The tool has been developed over a 6 year period. Item generation was informed by existing and emerging theories of happiness, health and human potential, through results of focus groups and individual interviews, and in concert with experts across fields. Cognitive debriefing and pilot work resulted in a 10-item beta tool that was deployed online and in hard copy across Canada. Participants were drawn from those presenting for rehabilitation following traumatic injuries to the neck, back, upper or lower extremities. The beta SRI was completed along with established tools for measuring region-specific disability (Neck Disability Index, Roland Morris Questionnaire, Upper / Lower Extremity Functional Scales) and generic health status (SF-12). Work status, medication usage, perceived requirement of care and global ratings of change were used as proxy indicators of recovery status at inception. Additional measures were collected at 1 week and 3 months later in a subgroup. Analyses included exploratory factor analysis, internal consistency, concurrent and longitudinal validity and responsiveness to change.

RESULTS
135 subjects completed the tool, and a subgroup of 46 and 29 provided 1 week and 3 month data, respectively. One item was removed due to inadequate measurement properties. The remaining 9 items comprised a single importance-weighted satisfaction factor that explained 71% of scale variance (Cronbach’s alpha = 0.95). A priori hypotheses for cross-sectional associations between SRI and region-specific disability (RSD), SF-12 physical and mental component subscales were supported. When discriminating between improved/not improved participants after 1 week, the SRI performed equally well as the RSDs, and better than the SF-12 subscales. After 3 months a cut score of >80% satisfaction was 77% sensitive and 88% specific for discriminating between recovered and not recovered participants.

DISCUSSION / CONCLUSIONS
Preliminary results suggest that the generic SRI is equally responsive to change as are region-specific disability scales and more so than the generic SF-12 health survey in this sample of people following musculoskeletal injury. The use of importance weighting should facilitate
patient-centered care. Advantages and disadvantages of this approach in comparison to existing functional or “recovery” scales are discussed.

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