

## Evaluating Centralised Outcome Measurement Tracking in Rehabilitation Through an MSK Intervention Study Investigating Movement Enhancement

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**Background** This study assessed the feasibility of improving movement using the FLX musculoskeletal application within a brain injury population, a population with high prevalence of MSK disorders. This study provided a use case for the Goal Manager® Outcome Measures Wizard (OMW), in tracking various metrics generated due to the complexity of co-morbid MSK and brain injury conditions.

**Methods** A 6-to-12-week trial of the application was conducted, followed by quantitative analysis of collected outcome measures and qualitative analysis of participant experience. Participants were recruited via social media and personal correspondence, with confirmation of final numbers at project completion. Data collected included mood measures (GAD7, PHQ9), a customised International Classification of Functioning Disability and Health (ICF) Assessment with relevant musculoskeletal codes, and a pre- and post-trial questionnaire assessing technology confidence. EuroQol 5 Dimension Scale (EQ5D) measures were recorded weekly during the trial and tracked using the OMW.

**Results** Quantitative score comparisons evaluated the effect of FLX musculoskeletal interventions in a brain injury population. Study feedback underscored the need for targeted developments to better serve a brain injury population. Full results will be presented following project completion.

**Conclusions** This study demonstrates the benefit of improving movement through targeted MSK interventions and underscores the necessity for centralised quantitative outcome tracking in rehabilitation. The OMW facilitates this, as the diverse metrics investigated within this study demonstrate the practicality and efficiency of a unified platform in clinical research practice. The study also demonstrated the utility of the FLX app in improving musculoskeletal function within this population.

### Biography:

Dr Penny Trayner BSc (Hons), PGDip, DClinPsy, CPsychol, AFBPsS

Founder, CEO, Clinical Director, Clinical Neuropsychologist, Clinical Safety Officer

Dr Trayner has 15 years of clinical experience within neurorehabilitation, holding the UK's highest and gold-standard qualification in paediatric clinical neuropsychology. She specialises in community-based work, predominantly for children and adolescents who have experienced catastrophic brain injuries. Dr Trayner's passion for enhancing rehabilitative care, and recognition of a lack of infrastructure to set and manage rehabilitation goals, led to the development of Kompass. Under her leadership, Kompass has introduced innovative health tech solutions, including a quantitative data dashboard and a patient portal, to improve patient outcomes and streamline the rehabilitation process.