

Unlocking Rehabilitation Insights: Designing a Data Dashboard for Quantitative Analysis of Rehabilitation Activity Data



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Objectives:

Goal Manager® is a cloud-based platform that streamlines goal setting processes within rehabilitation services. Funding from Innovate UK supported the development of a Data Dashboard within the platform, to allow institutions to conduct quantitative analysis of rehabilitation data with ease, promoting research that improves and standardises knowledge across many disciplines.

Methods:

Eight focus group discussions were held with 13 pre-existing and prospective Goal Manager® users, to establish their current data practices and idiosyncratic reporting needs. Participants were predominantly professionals working in neurorehabilitation, including clinicians, case managers and legal professionals. Discussions were encouraged relating to individual and practice specific interactions with the Dashboard.

Results:

Thematic analysis of meeting transcripts identified six main themes of discussion: 1) the fundamental nature of outcome tracking; 2) standardisation of therapeutic dosage and accountability; 3) data-driven treatment plans; 4) holistic care; 5) idiosyncratic reporting needs and 6) Attitudes towards technology. Participants highlighted the versatile applications of utilising technology to analyse rehabilitation processes, including service-wide monitoring, securing funding support, and addressing legal considerations.

Conclusions:

The ability to input diverse outcome data and track changes was identified as an invaluable tool, making clinician interaction with complex data more accessible. The Dashboard was viewed as an advance to current systems, replacing inefficient paper-based methods or legacy technology, saving time and resources. Focus group outputs directly influenced the design and functionality of the Dashboard, ensuring co-design with service users from the outset. Additionally, this allowed developers to predict and overcome common barriers to adoption.

Biography:

Dr Penny Trayner is a Chartered Paediatric Clinical Neuropsychologist and Clinical Psychologist in the United Kingdom. In 2009, she founded a specialist community-based rehabilitation service for children and young people with acquired brain injury, which serves patients and families across the UK. She has co-authored articles in leading international journals and has been an invited speaker at national and international conferences on a range of topics related to neuropsychology and mental health. Dr Trayner is also the creator of Goal Manager®, an award-winning cloud-based software application designed to facilitate effective goal setting in rehabilitation.