



US DEPARTMENT OF DEFENSE
BLAST INJURY RESEARCH PROGRAM
COORDINATING OFFICE

Pain Management and Rehabilitation after Amputation More than the Final Score: Development, Application, and Future Research of Comprehensive High-level Activity Mobility Predictor

Researchers at the CRSR at USUHS developed the Comprehensive High-Level Activity Mobility Predictor (CHAMP), a performance-based assessment tool for measuring high-level mobility in individuals with lower limb amputation. Based on the existing literature, the most important factors influencing high-level mobility were determined to be balance, postural stability, coordination, power, speed, and agility. The Single Limb Stance, Edgren Side Step Test, T-Test, and Illinois Agility Test, which best capture these factors, were used to form the basis of CHAMP. Inter-rater and test-retest reliability results supported the CHAMP as a stable, repeatable measure of high-level mobility. Additionally, the construct convergent validity of the CHAMP was established using the six-min Walk Test and Amputee Mobility Predictor (AMP). These findings suggest that CHAMP is a stable and repeatable measure of high-level mobility in the clinical setting. Results of this study were published in the *Journal of Rehabilitation, Research, and Development*.