INTRODUCTION
Patient outcomes studies in upper limb prosthetics are traditionally limited as there is a paucity of functional status measures available for this population (Wright, 2006). As technology develops in the field of upper limb prosthetics the options available to prosthetists and end-users are constantly evolving, and the need to study the outcomes for these individuals is imperative. It is important to ensure these technological advancements are translated into improved outcomes and functional benefit to the upper limb client.

The Patient Care Pathway is an online tool designed to collect information before and after a patient is fitted with a prosthesis. This tool is being used internationally in clinics fitting i-limb ultra prosthetic hands and i-limb digits partial hand prostheses. This tool not only collects validated outcome measures of the Disabilities of the Arm, Shoulder and Hand (DASH) and Trinity Amputation and Prosthesis Experience Scales (TAPES) but also documents a client-centered approach to the prosthetic rehabilitation experience and achievement of personal and functional goals.

METHOD
Subjects: 5 male patients; aged between 25 and 41; all fitted with i-limb digits partial hand prostheses during a one week expedited fitting process. All had right hand involvement of 2-4 digits.
Apparatus: Patient Care Pathway, incorporating DASH pre and post and TAPES post-fitting Procedures: During the pre-prosthetic evaluation, patients were asked to complete a Pre-Fitting Assessment. Each subject received between 18 and 25 hours of occupational therapy prosthetic training. After delivery, a Post-Fitting Assessment was completed, incorporating both DASH and TAPES. Data Analysis: DASH and TAPES data compared to determine change as a result of prosthetic intervention.

RESULTS
Minimum clinically important difference scores for the DASH have been defined between 3.9 and 15 (Beaton, 2001). Of the 5 subjects, the average improvement in the DASH score was 18.3, with 3 of the 5 showing changes well beyond the minimum.

TAPES satisfaction with prosthesis scores can range between 8 and 34 with higher scores indicating greater satisfaction. In this study, scores ranged from 25-33.

DISCUSSION
Davidson (2004) noted higher DASH scores among those with partial hand amputations than those with even major unilateral limb loss/deficiency as well as higher scores for those being compensated for their injury. These preliminary study results are consistent with these findings. A comparison of change based on number of digits involved would be beneficial.

CONCLUSION
The preliminary study results of the first 5 subjects described show support for improved function with multi-articulating partial hand prostheses. Additional research is needed and underway.

CLINICAL APPLICATIONS
By collecting outcomes data the benefits of advances in technology can be further supported and help to define those that would most benefit from these devices.

REFERENCES