

### Introduction

Engagement is a construct that can inform our understanding of intention, attendance and participation in rehabilitation. A proposed model of therapeutic engagement during cardiac rehabilitation (CR) was introduced by Lequerica and Kortte (2010)<sup>1</sup>, and where the construct of therapeutic engagement is explicitly defined, by identifying a series of sub-models that explain to intention to engage in cardiac rehabilitation (CR), preparation for engagement in CR, initiation of cardiac rehabilitation, and cardiac rehabilitation evaluation and maintenance. This complex model can facilitate our understanding of the variables and processes that play a role in determining participation in, and benefit from, rehabilitation.

### Purpose

The overall aim of this project was to examine the Model of Therapeutic Engagement in Rehabilitation (Lequerica & Kortte, 2010) to advance understanding about patient engagement in outpatient CR programs. The specific objectives of the study were to:

- Explore, measure and validate the components of the Lequerica-Kortte conceptual model of therapeutic engagement in rehabilitation.
- Examine the way in which the components of this conceptual model interact with each other, when empirical data is used to understand patient engagement.
- Use these findings to inform future patient engagement interventions.

### Method

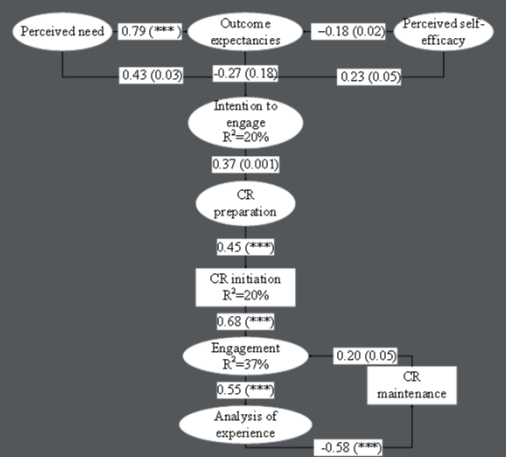
- Participants: 217 patients eligible for outpatient cardiac rehabilitation programs from the Cardiology ward at Gold Coast University Hospital
- Design of this study: a prospective study
- Data collection: paper surveys over three time intervals to cover all stages of the Model of Therapeutic Engagement.
- Statistical method: Structural equation modeling to test the hypotheses proposed
- Nine hypotheses have been tested based on the Model of Therapeutic Engagement in Rehabilitation (significant relationships showed in red).

### Results

Path analysis was carried out by ascertaining the significance of path (p-value).

- For stage 1, results revealed significant relationships between perceived need and patient intention to engage in CR programs ( $\beta = 0.43$ ;  $B = 0.63$ ;  $SE = 0.29$ ;  $p = 0.03$ ), and perceived self-efficacy and patient intention to engage in the CR program ( $\beta = 0.23$ ;  $B = 0.24$ ;  $SE = 0.13$ ;  $p = 0.05$ ).
- For stages 2 and 3, there were significant relationships between:

Intention to engage in the CR program and CR preparation ( $\beta = 0.37$ ;  $B = 0.28$ ;  $SE = 0.09$ ;  $p = 0.001$ ), CR Initiation and Engagement ( $\beta = 0.68$ ;  $B = 0.20$ ;  $SE = 0.03$ ;  $p \leq 0.001$ ); Engagement and Analysis of Experience ( $\beta = 0.381$ ;  $B = 0.38$ ;  $SE = 0.08$ ;  $p \leq 0.001$ ); Analysis of Experience and Maintenance ( $\beta = -0.58$ ;  $B = -0.30$ ;  $SE = 0.05$ ;  $p \leq 0.001$ ); and Maintenance and Engagement ( $\beta = 0.20$ ;  $B = 0.56$ ;  $SE = 0.29$ ;  $p = 0.05$ ).



SEM path analysis with standardized regression coefficients  
Note: \*\*\*  $p \leq 0.001$ . R-squared represented the explained variance of the outputs at each stage of the Model of Therapeutic Engagement.

### Expected Results

The Model of Therapeutic Engagement moves the field toward a more complete understanding of the process of engagement in cardiac rehabilitation programs and contributes knowledge about how to make this process more effective. It is suggested to embed this model into a broader socio-environmental context to have a comprehensive understanding of patient engagement in cardiac rehabilitation programs.

### Literature Cited

- Lequerica, Anthony H, & Kortte, Kathleen. (2010). Therapeutic engagement: a proposed model of engagement in medical rehabilitation. *American journal of physical medicine & rehabilitation*, 89(5), 415-422.
- Tomarken, A. J., & Waller, N. G. (2005). Structural equation modeling: Strengths, limitations, and misconceptions. *Annu. Rev. Clin. Psychol.*, 1, 31-65.

### Disclosure

- Financial support for this study was received from Griffith University.
- Conflict of interest The authors declare no conflict of interest for this study.