# Quality of Life Progression During Dialysis Initi



## Harley Meirovich<sup>1</sup>, Daniel Hercz<sup>2</sup> & Gavril Hercz<sup>1</sup>

<sup>1</sup>Nephrology, Humber River Hospital, Toronto, Canada and <sup>2</sup>Statistics Core, UCLA Department of Medicine, Los Angeles, CA



## Introduction

- Dialysis initiation is associated with emotional distress and poorer quality of life (QOL)
- Reduced internal and external resources may perdict which patients are at a greater risk of QOL decline

## Objectives

- To assess, QOL changes over time, specifically as patients transition from (CKD) after Chronic Kidney Disease pre-dialysis care to dialysis initiation
- To evaluate the possible impact of internal (resilience) and external (emotional support) resources on QOL change during dialysis initiation

## Methods

- QOL assessments repeated in the same cohort of patients: 26.1 weeks prior to and 2.7 weeks, 14.9 weeks after dialysis
- Repeated QOL measurements analyzed using longitudinal mixed effects model, with either resilience or emotional support at enrollment, used as independent predictors, adjusting for temporal and patient level factors
- Assessed resilience and emotional support impact on QOL changes over time, differentiating between High and Low scorers:
- 1) Resilience differentiation cut-off point was 85 (median score) 2) Emotional Support – differentiation cut-off point was 24 (median score of all scores, excluding those scoring maximum of 60)

#### Patients

54 stable patients followed regularly in CKD Clinic

Time Frame: Between Jul 2013 & Apr 2016

**Age**: 65 ±13 (Means ± SD)

**Male: Female** 31:23 Diabetes: 48%

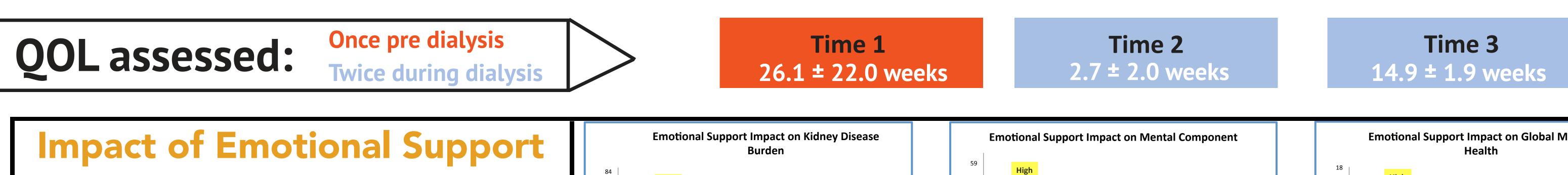
## Quality of Life Assessments

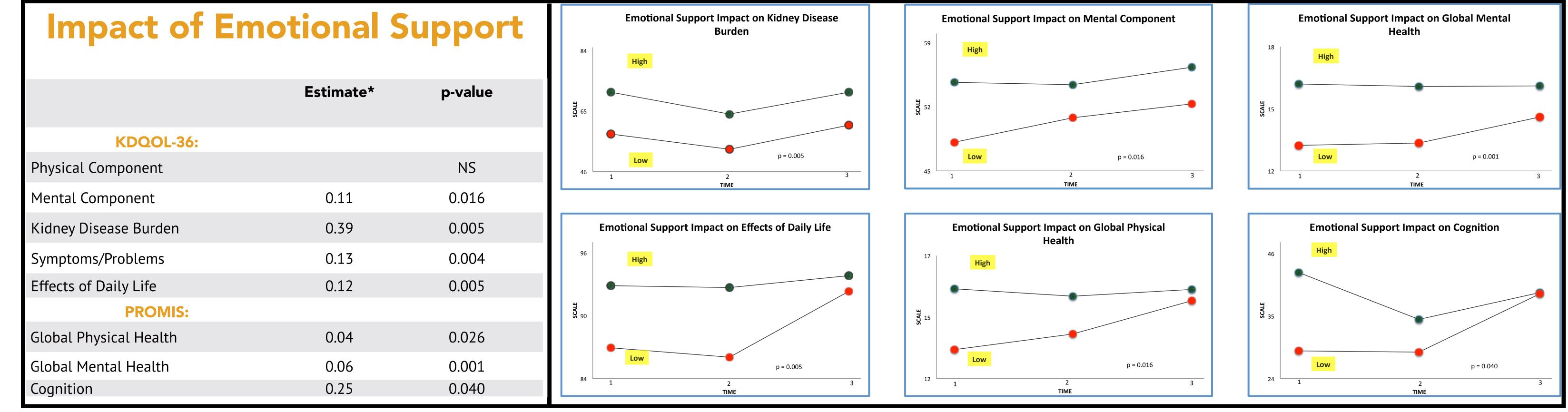
#### **KDQOL-36** Kidney Disease Quality of Life Survey ——¬ Valid, reliable, frequently used measure of QOL Physical Component Summary • Consists of 5 subscales; higher scores indicate better \_\_\_ Mental Component Summary functioning — — Burden of Kidney Disease \_\_\_ Symptoms & Problems

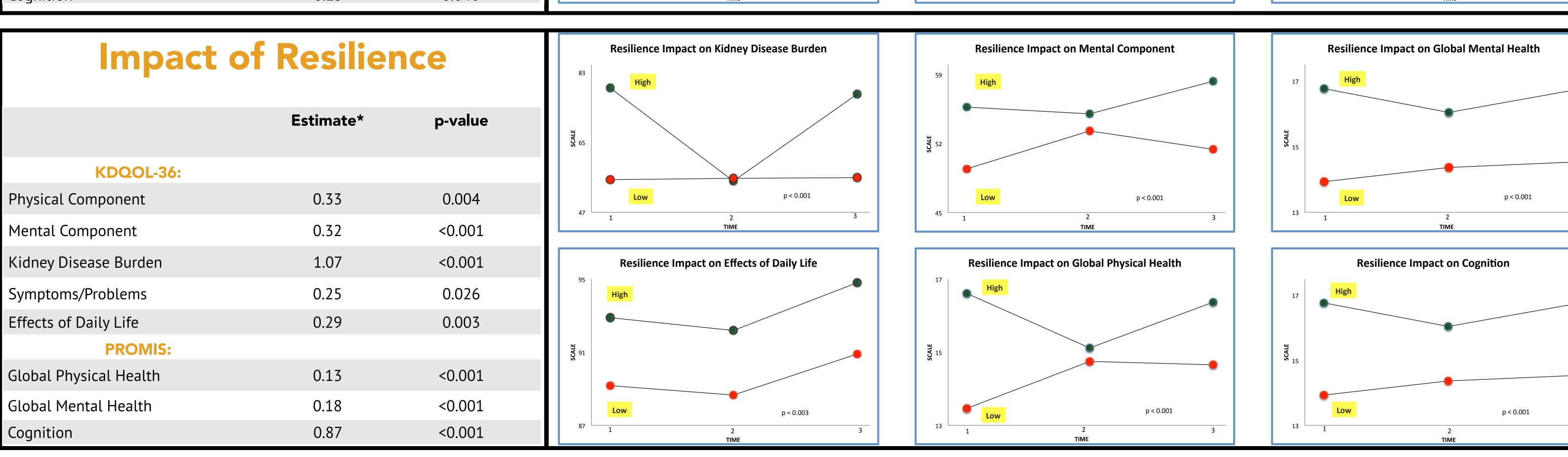
### Connor-Davidson Resilience Scale (CD-RISC)

- Resilience is viewed as a measure of stress coping ability; the ability to "bounce back" • CD-RISC:
- A brief, self-rated measure of resilience with sound psychometric properties - Comprised of 25 items, each rated on a 5-point scale (ranging from 0 to 4), with higher scores reflecting greater resilience
- Increase in CD-RISC score is associated with greater improvement during treatment
- Distinguishes between those with greater and lesser resilience
- Demonstrate that resilience is modifiable and can improve with treatment, with greater improvement corresponding to higher levels of global improvement

## Results







\*Estimated effect of a 1-point change in Resilience/Emotional Support on QOL parameters

 Quality of life measures decline during dialysis initiation and return to baseline in most patients.

Conclusions

 Lower levels of internal (resilience) and external (emotional support) resources are associated with lower QOL scores.

 This suggests a possible modifiable relationship to help patients cope better during this vulnerable period.

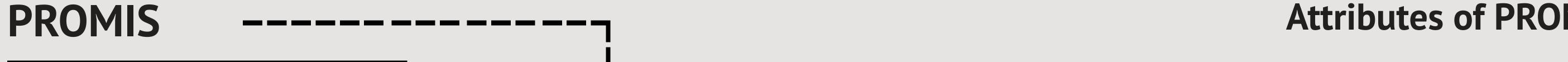


Psychonephrology.com is a community understanding and helping patients & caregivers cope

www.facebook.com/psychonephrology

# with the psychosocial impact of chronic kidney disease.





**Emotional Support** 

PROMIS Instruments Selected

**─ ─ ©** Effects on Daily Life

outcomes from patient's perspective 24 Domains to Choose From: Global Health (Comprised of Global Mental Health and Global Physical Health) **⊢−●** Physical Health | Physical Function | Pain: Intensity; Interference; Behavior; Quality | | Fatique | Sleep: Disturbance; Impairment | Sexual function |

| Gastro-Intential symptoms | Dyspnea **Mental Health** epression | Anxiety | Anger | Cognitive Function | | Alcohol Use: Consequences; Expectancies | Psychosocial Illness Impact | | Self-Efficacy | Smoking

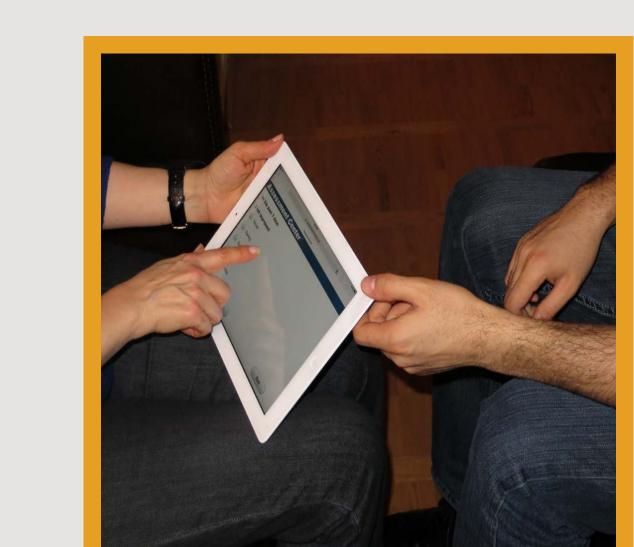
**L\_\_** Social Health

| Ability to participate in Social Roles & Activities | | Satisfaction with Social Roles & Activities | Social Support | | Social Isolation | Companionship

Uses a variety of instruments to measure health

#### **Attributes of PROMIS:**

- Uses Computerized Adaptive Testing (CAT) methodology: - Participants' responses guide the system's choice of subsequent questions - Allows for more precise measurement adapted to each participant
- Excludes uninformative questions to minimize respondent burden
- 4 to 12 items are selected from each instrument's item bank



#### **Benefits of PROMIS:**

 Comparable across many Chronic Conditions Self guided - reflective of patient experience Variety of administrative methods, e.g. iPad

Efficient - Less respondent burden/ burnout