

**National Kidney Foundation
2022 Spring Clinical Meetings Abstracts
April 6–10, 2022**

CKD/ESRD—Other

1 **Acuity Score Directed Psychosocial Assessments in Hemodialysis**

Kathleen Belmonte, John Larkin, Felicia Speed, Anna Rutherford, Sheetal Chaudhuri, Joanna Willetts, Jeffrey Hymes, Len Usvyat. Fresenius Medical Care North America, Waltham, MA, United States

4 **Effect of Music Therapy on Dialysis Patients: A Quality Improvement Project**

Janavi Kolpekwar³, Sonali Birewar^{1,2}, Matthew Shanks¹, Shannon Garcia¹, Stephen Weber¹. ¹Fresenius Medical Center, Cedar Park, TX, United States; ²Austin Diagnostic Clinic, Austin, TX, United States; ³Round Rock High School, Round Rock, TX, United States

3 **Factors Associated with Functional Health Limitations in Chronic Kidney Disease**

Veronica Morawek. Catholic University of America, Washington, DC, United States

CKD/ESRD—Prevalence, Progression, and Preparation for Dialysis

2 **Healthcare Providers' Perceptions of Urgent-Start Peritoneal Dialysis: A Qualitative Descriptive Study**

Dawn Burton. Grand Canyon University, Phoenix, AZ, United States

1. ACUITY SCORE DIRECTED PSYCHOSOCIAL ASSESSMENTS IN HEMODIALYSIS:

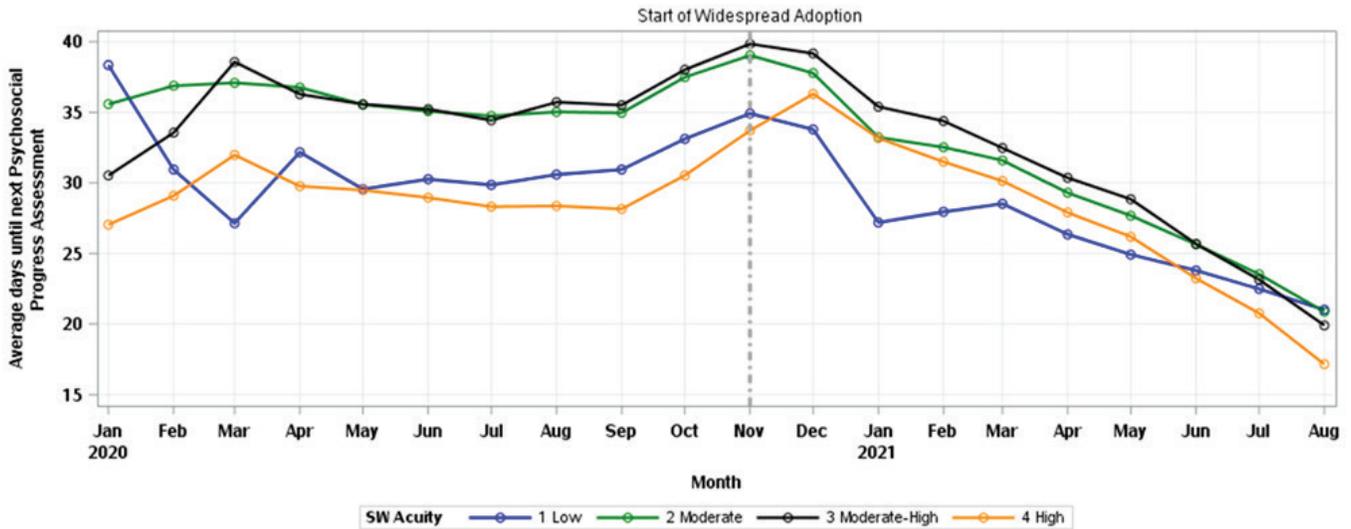
Kathleen Belmonte¹, John Larkin¹, Felicia Speed¹, Anna Rutherford¹, Sheetal Chaudhuri¹, Joanna Willetts¹, Jeffrey Hymes¹, Len Usvyat¹. ¹Fresenius Medical Care North America.

We developed an acuity score to identify hemodialysis patients' level of need for psychosocial support and help social workers' (MSW) optimize visits and deliver personalized care. For preliminary evaluation, we assessed the profiles of MSW psychosocial progress assessments (PPAs) conducted before and after widespread adoption of the acuity score at a national hemodialysis network.

Using patient data from Jan-2020 throughout August-2021, a weekly acuity score was computed using an array of routinely captured variables (n=95) considered critical (i.e., psychosocial, cognitive, clinical, treatment, hospitalization data). Unique variables were assigned points based on a priori assignment, and then totaled and categorized based on population distribution for each week. Acuity was assigned as Low, Moderate, Moderate-High, or High based upon percentile distribution. Average days from the highest weekly acuity score in each month to completion of the next subsequent PPA was computed.

Acuity scores assigned weekly to an average of 214,296 patients/month across 20 months, with 95% having a follow-up assessment. After widespread adoption by MSW, the average days from the highest weekly acuity score in a month until the next PPA decreased steadily with patients in all acuity categories, with marked changes in patients with higher acuity categories (Figure). Patients with high acuity evidenced more frequent MSW interactions than those with lower acuity.

Findings suggest use of acuity score is associated with the occurrence and frequency of subsequent PPAs. It appears the acuity score may have the ability to identify dialysis patients in greater need of psychosocial support and assist social workers with prioritization of care to those with the greatest needs and optimize assessments overall. Future analyses are needed to confirm results.



2. HEALTHCARE PROVIDERS’ PERCEPTIONS OF URGENT-START PERITONEAL DIALYSIS: A QUALITATIVE DESCRIPTIVE STUDY:

Dawn Burton. Grand Canyon University

Despite reports that patient use of urgent-start peritoneal dialysis is safe, viable, effective, and financially sustainable, healthcare providers involved with initiating patients on dialysis in the United States initiate patients lacking kidney failure preparedness on in-center hemodialysis with central venous catheters. It was not known how healthcare providers from North Carolina locations with in-center hemodialysis expertise perceive adopting urgent-start peritoneal dialysis for patients lacking kidney failure preparedness. Using Diffusion of Innovation Theory and Sustainability Leadership Theory as an interpretive lens, the purpose of this qualitative descriptive study was to describe how healthcare providers from North Carolina locations with in-center hemodialysis expertise perceive adopting urgent-start peritoneal dialysis for patients lacking kidney failure preparedness.

By purposive sampling, data from 10 of 14 healthcare provider study participants involved with initiating patients on dialysis recruited from North Carolina locations with in-center hemodialysis expertise were collected for thematic analysis.

Six themes emerged from analysis of data collected from seven individual interview and three group interview participants.

North Carolina healthcare providers are receptive to urgent-start peritoneal dialysis but made suggestions as they expect barriers to adoption in their workplace locations.

Study participants attribute suitability, knowledge deficits, and readiness barriers of the area as factors that slow adoption of peritoneal dialysis for patients lacking kidney failure preparedness.

3. FACTORS ASSOCIATED WITH FUNCTIONAL HEALTH LIMITATIONS IN CHRONIC KIDNEY DISEASE:

Veronica Morawek. Catholic University of America

CKD affects both the physical and emotional health of the adult experiencing it. For many, access to and affordability of appropriate nephrology care may not be available. The burden of care prevents or reduces a person with CKD the ability to develop a purposeful treatment plan to reduce the development of comorbid diseases and manage the progression of his or her CKD. As a result of these challenges, one may experience functional health limitations. Functional health refers to the ability for one to complete a task or activity, either physical or behavioral, in a controlled environment without difficulty (Physical Activity Guidelines Advisory Committee, 2008). The purpose of this study is to explore the factors that are associated with functional health limitations in adults with CKD.

The study used the National Health Interview Survey, 2016 Adult Sample examining only adults who reported having CKD. The study addresses the research question of “What are the factors that predict the presence or absence of functional limitations in chronic kidney disease patients?” The study applied an adapted version of Andersen’s Behavioral Health Model to test the hypothesis that factors influence functional health limitations in adults with CKD. A logistic regression analysis was used to determine the likelihood that predisposing, enabling, personal health practices, and use of health services variables predict the presence or absence of functional health limitations.

The results of the study indicated that adults with CKD were more likely to: be older in age; not working; reduce caloric intake after speaking with a doctor; delay filling prescriptions due to cost; and visit a medical specialist when reporting the presence of functional health limitations.

The study provides support to the social work and nephrology communities as a baseline in developing future studies and programs to address the disparities regarding CKD disease management and functional health limitations.

4. EFFECT OF MUSIC THERAPY ON DIALYSIS PATIENTS: A QUALITY IMPROVEMENT PROJECT:

Janavi Kolpekwar³, Sonali Birewar^{1,2}, Matthew Shanks¹, Shannon Garcia¹, Stephen Weber¹. Fresenius Medical Center¹; Austin Diagnostic Clinic²; Round Rock High School³ Dialysis patients face a multitude of physiological, psychological, and social challenges on a daily basis. Music therapy, along with traditional approaches, have shown positive implications in different clinical setting. The objective of this project was to assess the effects of brief music therapy on depression and anxiety markers with Incenter dialysis patients and also gather qualitative data on the desirability and practicability of music therapy.

Color coated Flash drives (40 minutes each) of six different genres of music being offered at the beginning of treatment after obtaining consents. Pretest and Post-test PHQ-9 depression scale and a GAD-7 anxiety scale results were obtained after 5 weeks.

The results from this small clinic quality project were encouraging not only in the reduction of reported anxiety and depression symptoms. The feedback was overwhelmingly positive as patients reported the soothing and relaxing nature of the music, as well as the pleasant memories it kindled of past experiences and loved ones. The constructive feedback was mostly centered around having a wider and more easily accessible variety of music.

Overwhelmingly the response to this clinic quality project was positive. By offering user friendly music options in the clinic, patients may experience a better quality of life and improvement in anxiety and depression symptoms and increased levels of enjoyment and comfort associated with music therapy. It may have positive effects on other medical and social parameters, including BP and HR, compliance with dialysis treatment, and more involvement in dialysis treatment. Reliable randomized control trial is necessary with a greater number of participants and consideration of confounding variables.

Patient Health Questionnaire (PHQ) Score			Generalized Anxiety Disorder (GAD) Score		
Patient	Before Music	After Music	Patient	Before Music	After Music
1	8	3	1	7	5
2	6	2	2	5	1
3	1	3	3	1	3
4	7	9	4	6	8
5	1	1	5	2	1
6	6	1	6	6	2
Avg PHQ-9	4.8	3.2	Avg GAD	4.5	3.3
P-value (t test)	0.282		P-value (t test)	0.341	
Non-significant decrease, remained in category with minimal depressive symptoms			Non-significant decrease, remained in category with mild to no anxiety		