Title: The FORE Model: An Interprofessional Framework for Improving Post-Acute Care Transitions in Patients with Multiple Chronic Conditions.

Fred Frank^a, Jolla de los Santos^a, Jose San Diego^a, Maridor Bocalbos^a, Matthew Shane^a, Sabina del Rosario^a, Stacy Baldwin^{a*}.

^aCharter Healthcare Group in collaboration with UCLA Biostatics United States of America, 9660 Haven Avenue, Suite 203, Rancho Cucamonga, CA 91730.

Corresponding Author:

Stacy Baldwin Fore, DNP, FNP-BC

Address: Charter Healthcare Group, 9660 Haven Avenue, Suite 203, Rancho Cucamonga, CA 91730

Email: stacybaldwin@charterhcg.com

Telephone: (804) 405 – 2635

Fax: (909) 321 – 5670

Abstract

Purpose/Objectives: It is estimated that one in four Americans have been diagnosed with multiple chronic conditions (MCC). MCC often cause functional limitations and include both physical and behavioral health conditions. Ineffective care transition leads to poor patient outcomes, increased utilization of health care services, and increased cost. Significant opportunities exist in improving the management of chronic conditions. The FORE Model is one approach that utilizes a "high touch," interprofessional care team to improve transitions of care for patients with MCC in the post-acute setting. The primary aim of this study is to outline the FORE Model and provide a framework for integrating key elements in the home care setting. Secondary aims include a comprehensive analysis of clinical and quality outcome measures and detailed cost savings analysis.

Primary Practice Setting: The FORE model was developed by a post-acute provider specializing in innovative, interprofessional transitional care management. The clinic is located in Southern California, that was initiated to improve transitions of care for patients across any continuum of care. The interprofessional care team consists of a Physicians, Certified Family Nurse Practitioners, Registered Nurses, Licensed Vocational Nurses, Nurse Case Managers, and Social Workers.

Findings/Conclusions: Data was collected on a total of 3,551 patients who were enrolled in during the study period. A paired T-test was conducted comparing utilization of services 30 and 90 days pre/post study enrollment. A patients' participation in the FORE model was associated with a significant reduction in number of emergency room visits and hospitalizations (95% confidence interval, P < 0.05). 90 days after enrollment, emergency room utilization decreased 34.19%, number of hospital admissions decreased 62.58%, and hospital bed days decreased 62.87%. A cost analysis was performed utilizing AHRQ's *Readmission Reduction Impact and Financial Analysis Tool*. The *Healthcare Cost and Utilization* (HCUP) database was utilized to determine estimated cost per readmission. The estimated cost savings attributed to the FORE model was \$44,708,312. Estimated operating cost of the FORE model was \$19,331,564 which gave a total estimated net savings of \$25,376,748; return on investment (ROI) 2.31. The cost savings analysis and ROI demonstrated a significantly cost effective model of care.

Implications for Practice: The current healthcare landscape is comprised of an aging population, rising in complexity. Effective transitional care management models are essential in improving patient outcomes across the care continuum. The outcomes of this study support the review of literature findings that in-home, interprofessional care may play a significant role in improving outcomes for patients with MCC.

Keywords: post-acute, transitions of care, readmissions, hospital, utilization.