

Clinical Outcomes of Patients Completing Early CKD Education

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INTRODUCTION

Objective: To assess the effect of EMPOWER®, DaVita's® structured chronic kidney disease (CKD) education program, on

- patient selection of dialysis modality
- use of arteriovenous fistula (AVF)
- site of dialysis initiation (clinic vs. hospital)
- 90-day mortality rate

EMPOWER, initiated in March 2008 at over 40 locations, is an educational program to help patients with CKD work with their clinical team and make informed decisions about their health and care.

METHODOLOGY

- EMPOWER group included 236 patients who, as of June 2009, completed at least 1 class and started dialysis..
- Control group included 3,361 patients of the same vintage entering the same facilities.
- Modality selection was defined as modality choice at 90 days from first day of dialysis with DaVita (or initial modality, if patient had <90 days of dialysis).
 - Modality classified as conventional, in-center hemodialysis or Home [peritoneal dialysis (PD) or home hemodialysis (HHD)].

EMPOWER: a 3-Step Educational Process

- 1 Patients are referred to the classes by their nephrologist or other physician care partner. We meet with the referring physicians to share our program materials and encourage earlier CKD Stage participation. This helps in **earlier identification and education** of CKD patients.
- 2 Patients and loved ones may attend an EMPOWER program, which is held two times per month at no cost, and receive a **multidisciplinary educational approach**. Includes a nurse, a social worker, a dietitian and patient care technicians as the educators. Educators are facility based and representative of the professionals that care for the dialysis patient
- 3 Ongoing patient and physician partner follow-up to provide **progressive education and continuity of care**.

RESULTS

Table 1. Benefits of the EMPOWER program

	Control n (%)	EMPOWER n (%)	p-value
N	3,361	236	
AVF (in use or in place at baseline)	725 (22.6)	75 (40.3)	<0.0001
Modality selection			
In-Center Hemodialysis	3,132 (93.2)	163 (69.1)	
Home dialysis (PD or HHD)	229 (6.8)	73 (30.9)	<0.0001
Site of dialysis initiation			
Clinic	618 (19.3)	60 (33.2)	
Hospital	2,586 (80.7)	121 (66.8)	<0.0001
Mortality within 90 days (Deaths/100 patient-years)	34.3	15.2	

CONCLUSIONS

Mean age, presence of diabetes, and percentage of African-Americans were similar for each group. A slightly higher percentage of Caucasians were enrolled in the EMPOWER group.

Patients in the EMPOWER group were significantly more likely to:

- Survive the first 90 days
- Choose a home dialysis modality
- Start dialysis in a clinic rather than a hospital (if choosing in-center hemodialysis)
- Initiate hemodialysis with an AVF, or have an AVF placed and maturing upon starting dialysis

KEY LEARNINGS

- ✓ Early structured CKD education significantly improves patient care and quality of life.
- ✓ Future studies are needed to determine whether these benefits extend to all home dialysis modalities, and whether the benefits persist past 90 days.

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