

Effect of IMPACT Program on Clinical Indicators in Incident Hemodialysis Patients

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INTRODUCTION

Objective: To analyze the clinical outcomes of hemodialysis patients in the IMPACT (Incident Management of Patients, Actions Centered on Treatment) program.

The program, initiated by DaVita in October 2007, aims to reduce mortality among patients during the first 3 months of dialysis – when they are most vulnerable. IMPACT standardizes the onboarding process using 4 tools:

- (1) A structured intake process for new patients
- (2) 90-day patient education program
- (3) 90-day patient management pathway
- (4) Data monitoring reports

METHODOLOGY

In this observational, non-randomized, non-blinded study, IMPACT and non-IMPACT (control) patients at 44 and 58 facilities, respectively, were evaluated for up to 1 year from their first day of DaVita dialysis which was, for the IMPACT patients, 9 months after they completed the IMPACT program.

Cohorts were assessed each quarter for access – arteriovenous fistula (AVF) vs. central venous catheter (CVC) placement.

Outcomes were compared in the same facilities 1 year prior to IMPACT implementation (baseline, n=787) to 1 year after (IMPACT, n=954):

- Albumin \geq 3.5 g/dL
- Anemia: Hgb 10-12 g/dL
- Adequacy; Kt/V \geq 1.2

RESULTS

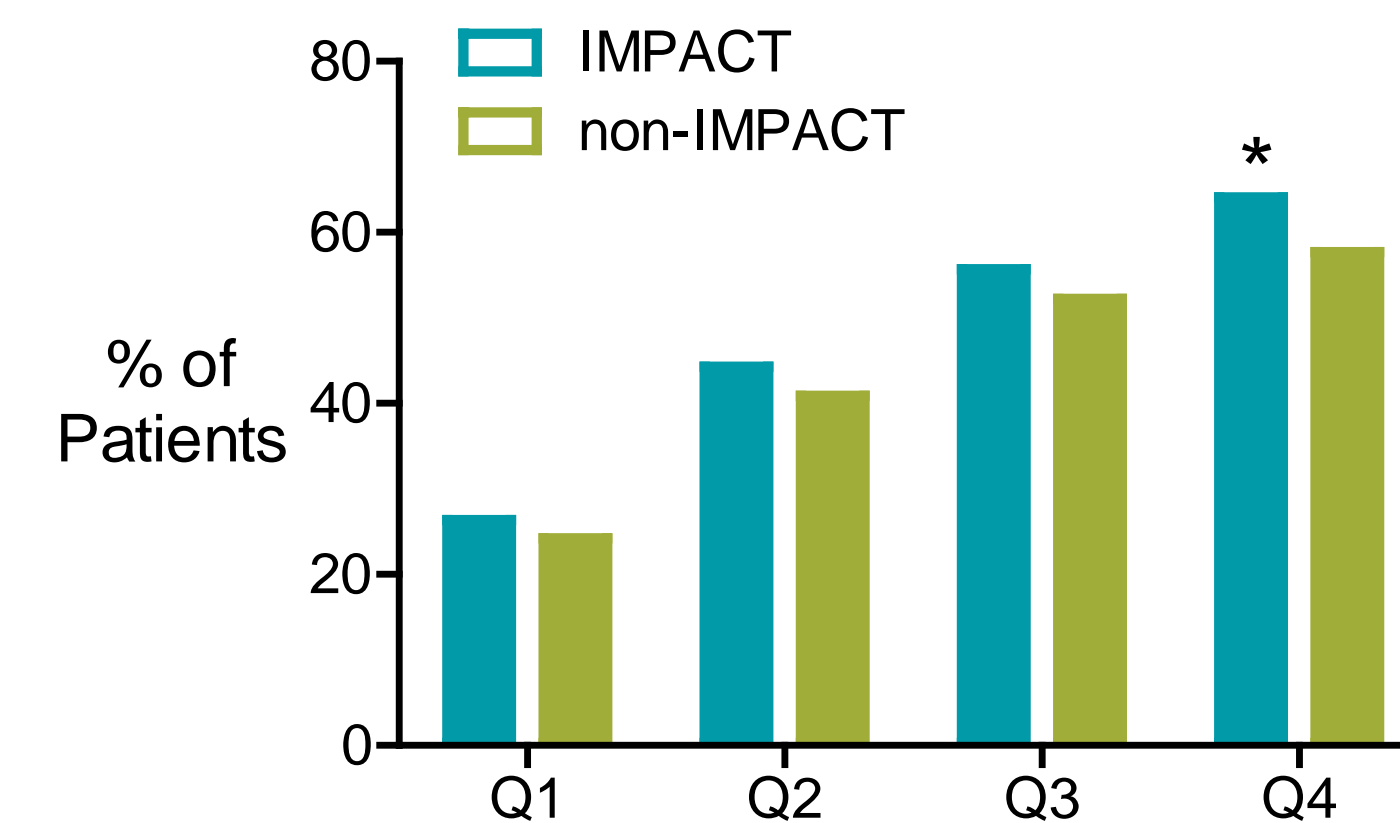


Figure 1. Rates of AVF access between IMPACT and non-IMPACT patients, * $p < 0.05$ for IMPACT (n=331) vs. non-IMPACT (n=9,046).

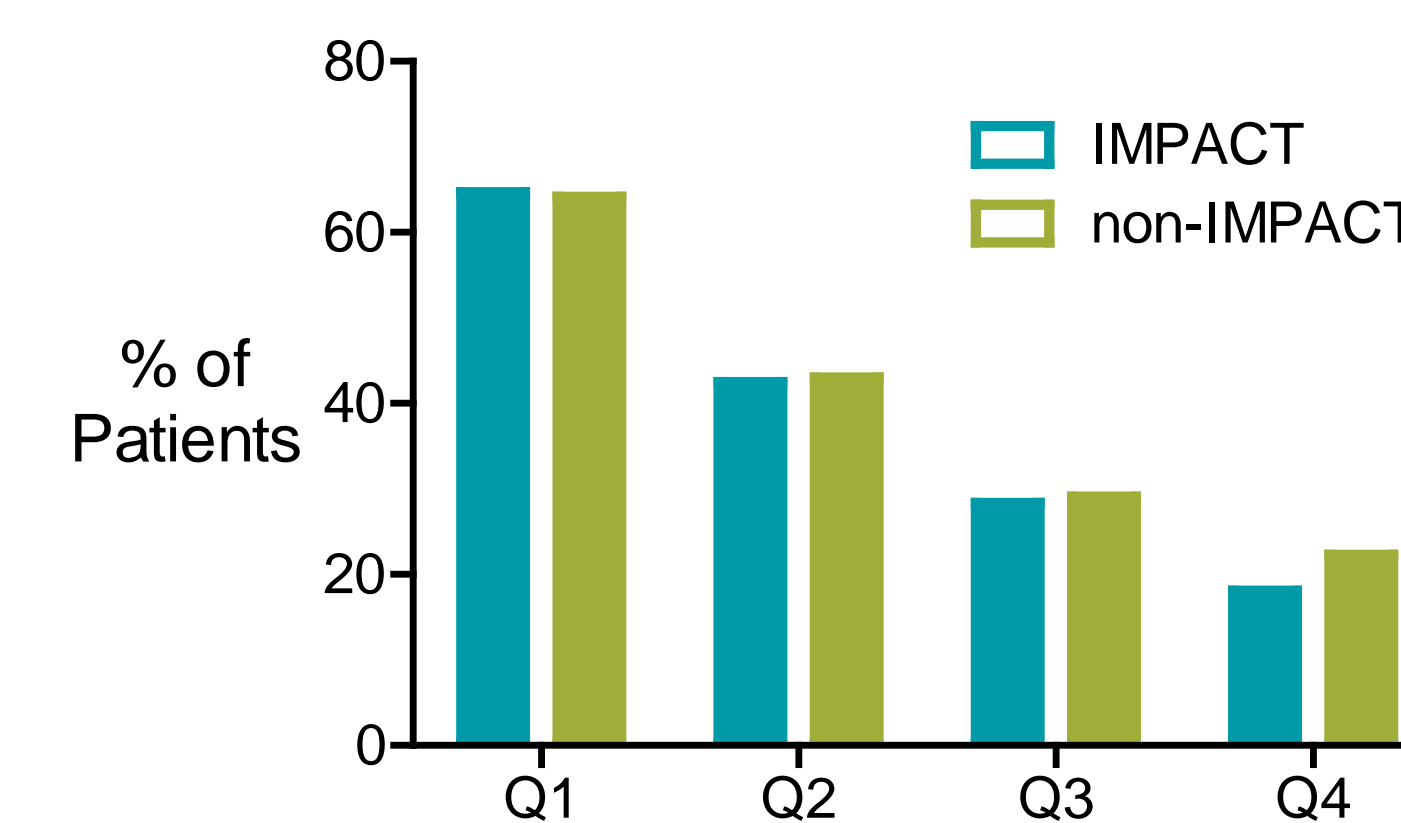


Figure 2. Rates of CVC access between IMPACT and non-IMPACT patients.

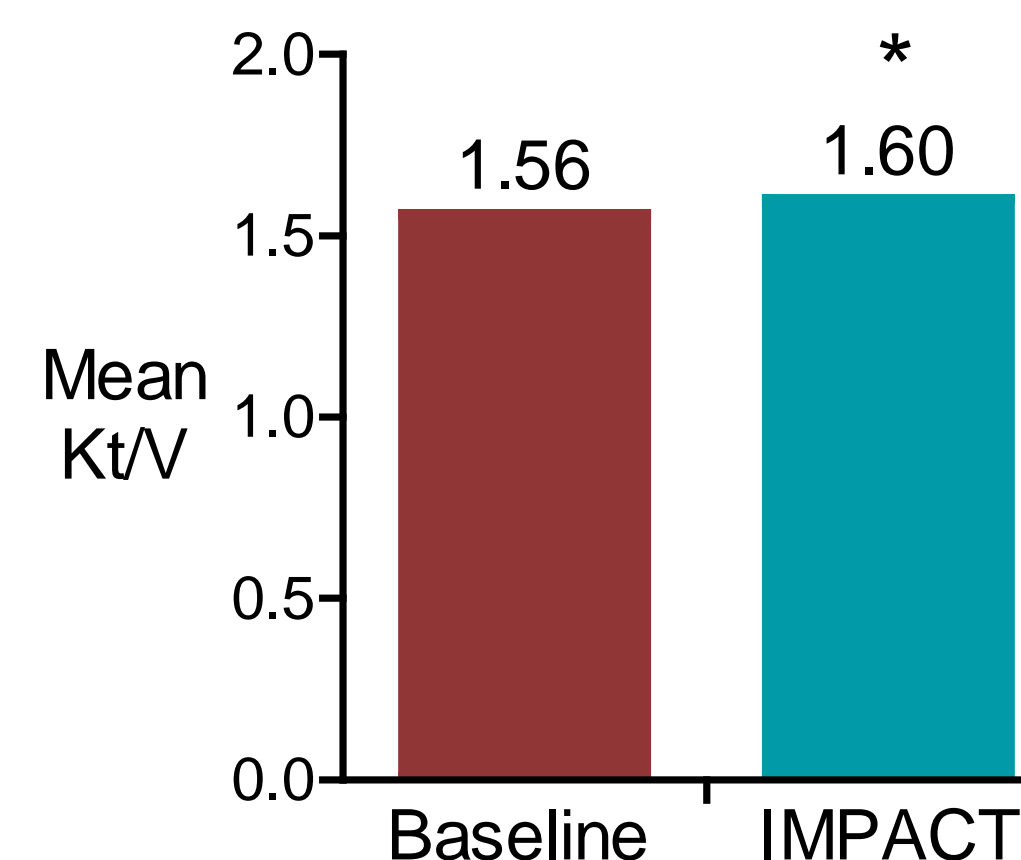


Figure 3. Mean Kt/V, * $p < 0.05$.

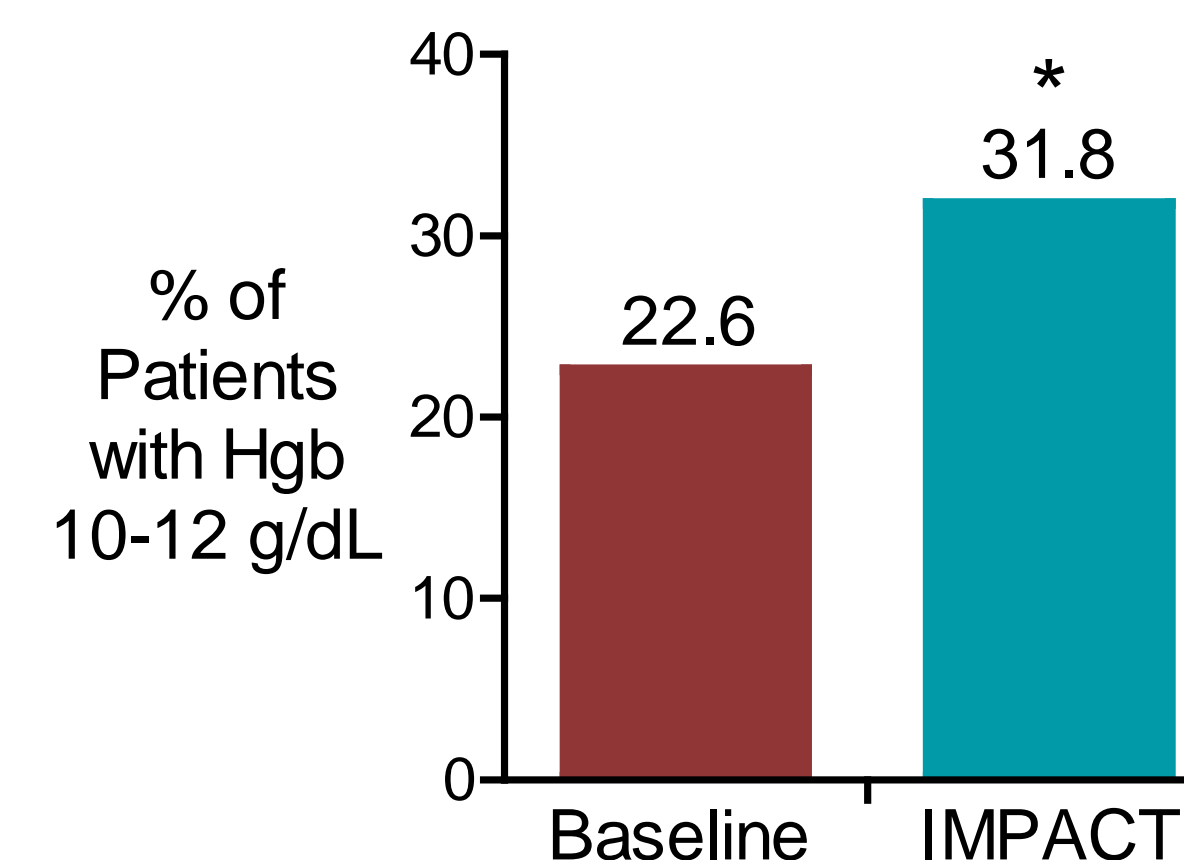


Figure 4. The percent of patients with Hgb 10-12 g/dL, * $p < 0.05$.

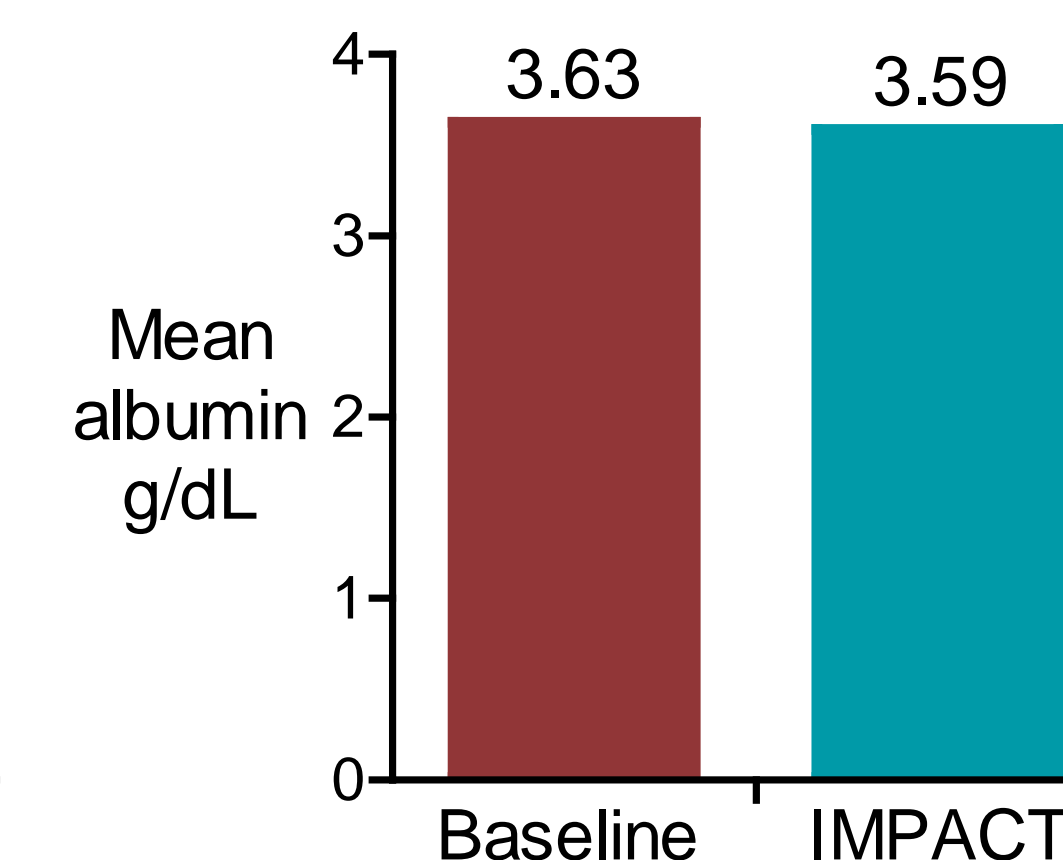


Figure 5. Serum albumin levels.

CONCLUSIONS

- By Q4, placement of AVF access among IMPACT patients (64.1%) was significantly greater than that among non-IMPACT patients (57.7%, $p < 0.05$; Figure 1). As a result, catheter access dropped sharply throughout the year (Figure 2).
- Mean Kt/V and patients within target Hgb increased significantly in the same facilities from baseline to 1 year after IMPACT implementation (Figures 3-4).
- IMPACT did not appear to have a significant effect on serum albumin levels (Figure 5).

KEY LEARNINGS

- ✓ Better management of incident patients through IMPACT is associated with greater placement of AVF access, thus reducing patients' risk of infection and other catheter-related complications.
- ✓ IMPACT is also associated with better adequacy and anemia management in patients new to hemodialysis.

We thank the patients who participated in this study and DaVita Clinical Research® (DCR) for support in preparing the analysis and this poster. DCR is committed to advancing the knowledge and practice of kidney care.



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