Effect of IMPACT Program on Clinical Indicators of Incident Hemodialysis Patients

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Introduction: IMPACT (Incident Management of Patients, Actions Centered on Treatment) is a program started in October, 2007 to reduce mortality in new patients during the first 3 months of dialysis, when they are most vulnerable. IMPACT standardizes the on-boarding process (including intake, education, management, and monitoring) of incident patients during their 0- to 90-day period. We analyzed clinical outcomes of hemodialysis patients in the IMPACT program.

Methods: This observational, nonrandomized, unblinded study compared IMPACT and non-IMPACT patients evaluated up to their 365-day time point. Cohorts were assessed for vascular access used, (% of patients with AV fistula versus CVC), mean serum albumin levels, and mean facility quality score assessed by a facility-level performance measure (developed to promote continuous quality improvement) per quarter (90 days of treatment) from October 2007 to December 2008.

Results: AV fistula access among IMPACT patients exceeded that for non-IMPACT patients starting in Q2. 64% of IMPACT patients (N=331, Q4) had fistula access compared to 58% of non-IMPACT (N=9,045, Q4) by the end of Year 1 (P ≤ 0.05). By Q3 of the program, facilities that implemented the IMPACT program (N=300 in Q3 and 100 in Q4) had significantly higher facility quality score than did non-IMPACT facilities (N=9,419 in Q3 and 4,069 in Q4; P ≤ 0.05). There were no significant differences between cohorts in mean serum albumin levels.

Conclusions: Better management of incident patients through the IMPACT program was associated with more having AV fistula vascular access thus reducing the patients’ risk of infection and other catheter-related hospitalizations. IMPACT had a positive effect on the facility based score. Having a higher score has been reported to decrease mortality and hospitalizations. The score is used not only by administrators to evaluate and compare facility performance, but also by clinicians to assess and address patient outcomes in an effort to improve associated mortality risk and outcomes.

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