Continuity of Care Counts: Improved Patient Satisfaction in Advanced Practice Clinician Fracture Clinics

Emi Schwab¹, Sarukkalige Shanika A De Silva¹, Kristin S Livingston ¹Orthopaedic Surgery INTRODUCTION:

In 2001, the National Academy of Medicine called for an increase in the prioritization of patient-centered healthcare in the U.S, as satisfied patients have improved clinical outcomes. Since that time, patient satisfaction instruments, such as Press Ganey (PG) Performance SolutionsSM, have been developed to analyze the patient experience. In larger pediatric orthopedic practices with busy trauma centers, hospitals may utilize fracture clinics primarily staffed by advanced practice clinicians (APC) as opposed to physicians, as APC schedules may be more flexible to accommodate trauma patients and the large majority of pediatric injuries are non-operative. Basic fractures are often short-term problems, likely requiring only 2-3 clinic visits; however, it is unclear if provider continuity is important in these brief health-care encounters. The purpose of this study was to determine the associated between continuity of care, defined as being seen by the same provider in two successive clinic visits, and patient satisfaction scores in primarily APC-run urgent/fracture clinics.

METHODS: This study was IRB approved at a single pediatric tertiary-care Level 1 trauma hospital from 2021-2023. We conducted a retrospective review of prospectively collected Press Ganey data (filled out by parent/guardian) for acute injury/fracture patients seen in a pediatric orthopaedic fracture clinic, which is APC-staffed and physician supervised. Patient demographics and injury characteristics were collected. The results of four Press Ganey patient satisfaction survey items (recommend provider, staff teamwork, recommend practice, overall rating of care), scored on a scale from 1-5, with 5 being the highest, were analyzed. Top-box scoring was employed to analyze the data. For each of the four primary outcomes, the maximum score (5) was compared against all other possible scores (1-4). Demographic, geographic, and clinical factors were then compared across the top-box rating groups for each outcome. Wilcoxon ranksum tests were used to compare continuous variables, while Fisher's exact tests were used for categorical variables. Generalized estimating equations (GEE) models were used to assess the associations between continuity of care and odds of top-box scoring of the four Press Ganey satisfaction scores. Univariate and multivariable GEE models were conducted to determine independent predictors of patient satisfaction.

RESULTS: 230 follow up patient encounters with associated satisfaction scores were reviewed. Patients had an average age of 11 (r, 0-17). The majority of patients were male (59%), White (75%), with a very high child opportunity index (72%). There was a significant difference in the proportion of top-box ratings for *recommend provider* by gender, with 86% of males providing the highest rating, in comparison to 76% of females (p=0.04). There were no significant differences observed in the proportion of top-box ratings for *staff teamwork*, *recommend practice*, *and overall rating of care* across any demographic or clinical characteristics (p>0.05). Patients who saw the same provider at follow up had a higher proportion of top-box ratings compared to those who saw a different provider for three of four outcomes: 88% vs. 76% for *staff teamwork* (p=0.04), 94% vs. 78% for *recommend practice* (p=0.003), and 93% vs. 76% for *overall rating of care* (p=0.003). Likelihood to *recommend provider* had a similar trend but was not significantly different (88% vs 79%, p=0.11). There were no statistically significant differences in the proportions of top-box ratings across consistency of clinic location (p>0.05). Visits including only the APC were more highly scored than visits that also included the physician for *staff teamwork* and *overall rating of care* (p=0.01 and 0.007, respectively). After adjusting for consistency of care, location, age, sex, child opportunity index, injury region, and geographical distance from clinic, the odds of receiving a top-box rating for *recommend practice* were 4.7 times higher (p=0.004) and 3.8 times higher for *overall rating* (p=0.002) for patients with continuity of care-provider.

DISCUSSION AND CONCLUSION: Continuity of APC care-provider has a positive impact on patient satisfaction in a pediatric fracture clinic, as patients who saw the same provider in successive follow-up visits yielded a higher proportion of top-box ratings across all four Press Ganey survey items. Demographic, geographic and clinical factors had comparatively little effect on patient satisfaction. The provider remains a fundamental factor in patient experience.