Presented as an iPoster at the American Society for Surgery of the Hand Annual Meeting 2018

Efficacy of Automated Patient Reported Outcomes for Hand Surgery

Authors: Orrin Franko, MD

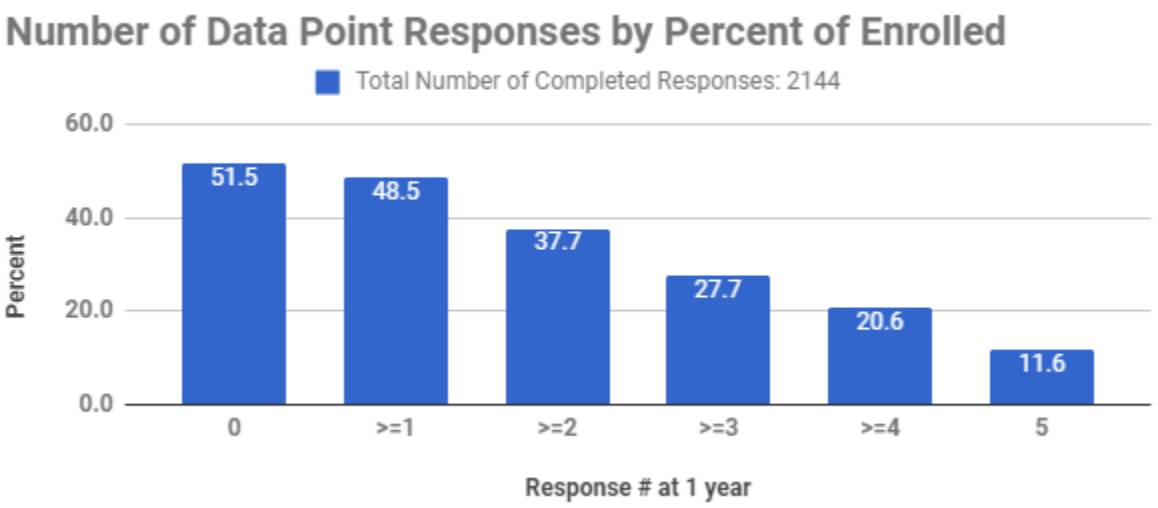
Background: Recent validations studies support the use of outcome measures on home computers, mobile tablet devices, and email. This study expanded upon a prior pilot study validating the use of email-based automated outcome measures. We integrated a cloud-based automated collection system into four hand surgery practices for 52-weeks and hypothesized that clinical integration of this system in different environments would be efficient and cost effective.

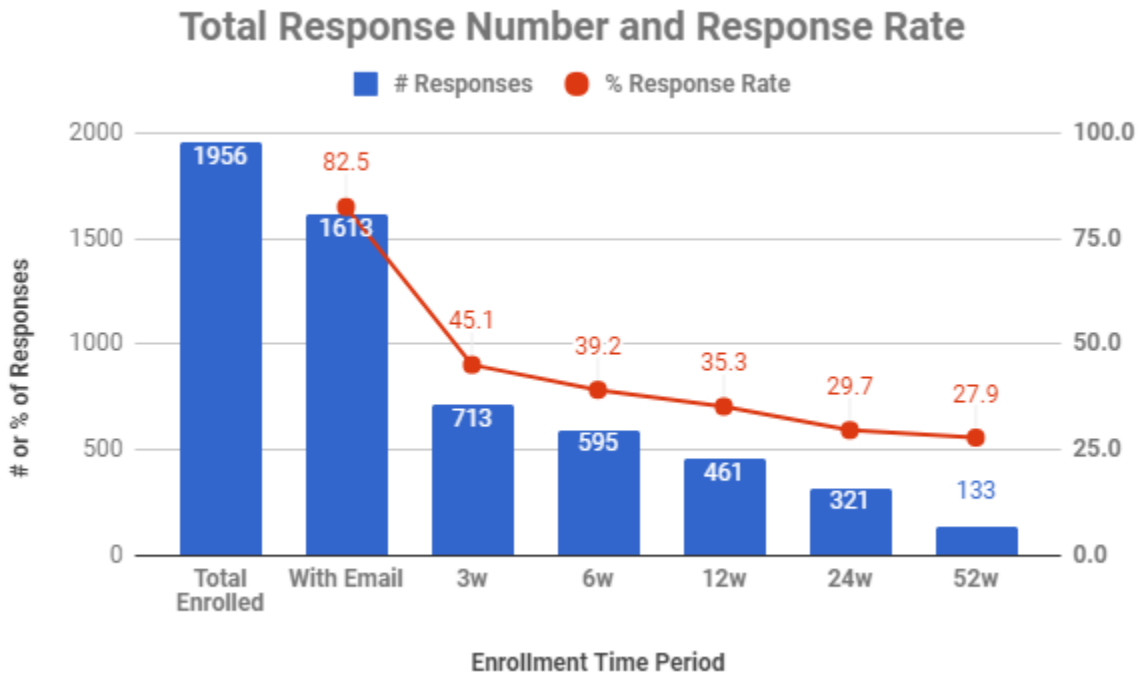
Methodology: This prospective, multi-center study evaluated the efficacy of automated, email-based notifications to complete an online *QuickDASH (QDASH)* questionnaire. Pre-operative patients for eight hand surgeons at four centers participated in the study. All patients completed a *QDASH* questionnaire on a tablet device immediately pre-operatively and, if agreeable to the study, received follow-up email requests at 3-, 6-, 12-, 24-, and 52-weeks post-operatively. Outcomes are reported as descriptive statistics summarizing the efficacy of automated data collection.

Results: A total of 2,046 patients were enrolled in the study and 2,374 *QDASH* scores were recorded during an 18-month enrollment and study period. In total, 56.3% patients with email completed at least one outcome assessment and 14.2% completed all five assessments (Figure 1). The response rates at each time point trended downward, with a rate of 45.3% at 3 weeks, trending down to 28.8% at 52 weeks (Figure 2). All *QDASH* surveys were administered, scored, and analyzed without any human intervention, resulting in an estimated time and cost savings of 340+ medical assistant working hours.

Conclusion: Emailed-based outcome questionnaires are successful and cost effective for collecting post-operative patient reported outcomes. Response rates vary from 28-45% for a given time point and over half of patients respond to at least one survey request.

Research Funded by SurgiSurvey, LLC and East Bay Hand Medical Center, Inc.





Research Funded by SurgiSurvey, LLC and East Bay Hand Medical Center, Inc.