Optimizing PROM Response Rates: The Role of Survey Prompt Design

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INTRODUCTION: Patient-reported outcome measures (PROMs) are increasingly used to assess clinical effectiveness after total joint arthroplasty (TJA). Low response rates, particularly with digital delivery, can limit their utility and generalizability. With recent mandates from the Centers for Medicare and Medicaid Services (CMS) tying PROM reporting to hospital reimbursement, understanding how to optimize PROM response rates is critical. This study evaluates whether prompt length and the inclusion of an estimated time commitment affect response rates among patients unfamiliar with digital PROM collection.

METHODS: A total of 2,966 TKA and THA patients who were at least 1-year out from surgery, all naïve to digital PROM collection, were propensity-score matched by age, sex, and time since surgery. Patients were randomized into four survey prompt cohorts: (1) short message, (2) short message with time estimate, (3) long message, and (4) long message with time estimate. Each patient received a single survey invitation via text and email. Responders first completed a brief survey on the perceived burden of PROMs, followed by PROMIS-10 (data not shown).

RESULTS: Of 2,966 patients, 1,179 (39.8%) responded. Response rates for the short message vs. short message with time estimate were 38.4% and 42.7%, respectively (P = .08). For the long message vs. long message with time estimate, response rates were 35.8% and 42.2%, respectively (P = .02). Patients with a time estimate, regardless of message length, responded more frequently than those without a time estimate (42.5% vs. 37.2%; P = .003).

DISCUSSION AND CONCLUSION: Including an estimated time commitment in PROM invitations improves response rates, particularly for longer messages. These findings support the use of time estimates into digital PROM prompts to improve response rates and the quality of patient-reported data in clinical practice.