destination surgery: creation of a virtual care hotel program for outpatient surgery within urology at mayo clinic in arizona

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INTRODUCTION

The Mayo Clinic in Arizona campus has been historically an early pioneer in outpatient surgery with a record-high of 86% of all urologic procedures completed as outpatient in 2020. However, in early transitions to outpatient surgical volume dating back to 2018, institutions and clinical teams frequently see increased outpatient in a bed (OPIB) cases, summarized as outpatient surgery patients that remain overnight or for an extended period occupying an inpatient care bed, as they are oftentimes in place for social reasons (i.e., caregivers), convenience, or for outpatient treatment needs (i.e., infusion, etc.). The Department of Urology was identified as one of the largest contributors of OPIB cases, dating back to 2000, due to the innovation to drive more procedures outpatient.

OBJECTIVE

The Department of Urology sought to decrease the volume of OPIB surgical cases, meanwhile reducing surgical readmissions and maintaining excellent patient care and safety for urologic patients. Primary metrics of success monitored for any intervention implemented would include percentage of OPIB cases to total cases, total number of 30-day post-operative readmissions, and patient satisfaction.

IMPROVE

Beginning February 2022, surgeons identified patients eligible for the virtual Care Hotel at the time of case-booking and they were confirmed for a one-night stay following surgery with a caregiver, usually a family member or friend. Patients and caregiver were connected remotely to registered nurse (RN) staff in a centralized call center via a video-capable tablet and phone for clinical questions and monitoring. These were typically patients that would have otherwise incurred an OPIB hospital stay. Patients were educated that they were not staying in licensed clinical space, so no hands-on care was available.

COMPARISON FOR THE IMPROVEMENT MEASURE

Total volume of 274 unique patients stayed in the Care Hotel from February 7, 2022 – December 31, 2022

Case breakdown: 140 HoLEP, 88 RARP, 9 transurethral resection of the prostate (TURP), and 34 other urologic cases type

83 out-of-state patients (30%) vs. 191 in-state patients (70%); of all in-state patients, 77 unique patients (40%) were from outside of Phoenix metro

78 additional Care Hotel patient stays planned with 54 patients admitted via OPIB and 24 patients electing to go home instead, 1 readmission for shortness of breath and chest pain and 2 ER visits for bladder spasm without readmission (i.e., patient returned to Care Hotel)

Total volume of urologic surgery cases increased 25% from 2021 to 2022, yet total OPIB cases declined 1% for the same period.

This decline in OPIB cases was most evident in HoLEP procedures, which increased by 78% from 2021 to 2022, yet OPIB cases declined by 11%. This has returned 274 bed-days back to the hospital

Results showed a decline in total OPIB cases in the department from 9.9% of all urologic surgery patients having an OPIB stay in 2020 to 5.3% in 2022.

COMPARISON FOR THE BALANCING MEASURE

Urology 30-day readmission, as measured through American College of Surgeons’ National Surgical Quality Improvement Program (NSQIP) improved from needs improvement to meets expectation between January 2022 and December 2022.

Patient satisfaction was positively impacted, as evidenced by an average score of 4.84 out of 5 (positive) on all questions asked of patients in the patient experience survey that was extended upon discharge from Care Hotel. A total of 234 patients have completed the surveys across 274 unique outpatient stays for the same period.

CONCLUSION

The Care Hotel model for post-operative outpatient surgical patients and their families has demonstrated great success in reducing outpatient in a bed within the Department of Urology, without negatively impacting 30-day readmission rates, meanwhile improving patient satisfaction and comfort. This model of care delivery is highly translatable across other surgical departments, including those without physical space for a Care Hotel, as patients can utilize the telehealth platform in other locations (i.e., home, rental, hotel, etc.).