Home Based Primary Care Management of Gastrostomy Tubes

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Background

Over 4.5 million U.S. Veterans are 75 and older, as of 2018; they often have multiple co-morbidities, are more likely to be frail and have difficulty with travel. The VA developed Home Based Primary Care (HBPC) to aid individuals with complex chronic disabling diseases. The program seeks to increase independence of older adults as well as decrease Emergency Department (ED) utilization and hospitalizations. Patients with gastrostomy tubes (GT) are of increased complexity and require regular evaluation and prophylactic exchange. HBPC have added this skillset and we sought to evaluate the effectiveness of regular GT care via HBPC providers in avoiding unnecessary medical resource utilization.

Methods

Retrospective review of patients who had a GT placed and received care at a tertiary VA Medical Center over a 10-year period (1/2010 – 9/2020). Patients were separated into 1) HBPC – PCP visit and PE as well as prophylactic GT exchange every q6 months or; 2) Standard of Care (SOC) – HPBC visit at least every 6 months by PCP without skills in GT management, replacement provided on an as needed basis. Baseline demographics were recorded and the primary outcome of interests was ED utilization for gastrostomy management.

Results

Ninety-four patients underwent GT placement during the study period, 18 (19%) were enrolled in HBPC vs. 76 (81%) SOC. Average age was 63 years and 89 (95%) were male. There was no difference in baseline demographics between the groups. Most common reason for GT was dysphagia at 84 patients (89.3%) .

Gastrotomy tube replacement for HBPC compared to SOC

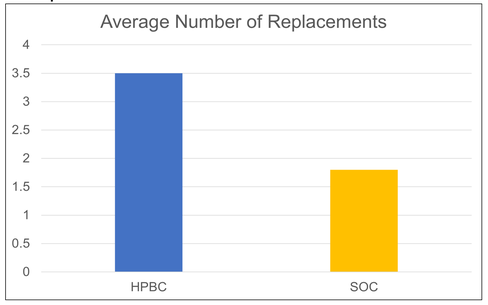


Figure 1. GT replacements (average) for patients in Home Based Primary Care (HBPC) vs Standard of Care (SOC). Average number of replacements, 3.5 vs 1.8, p=0.06.

Gastrostomy tube –related ED visits for HBPC compared to SOC

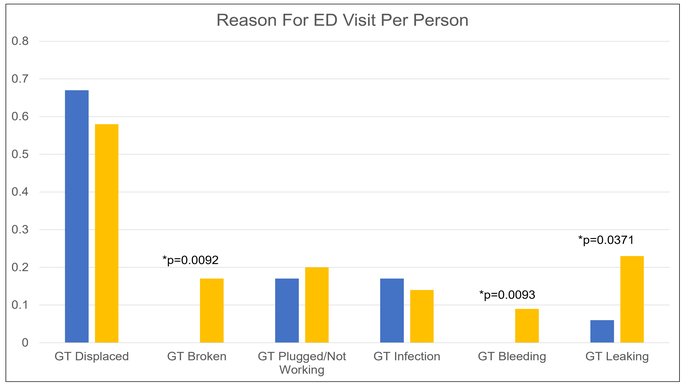


Figure 2. Gastrostomy tube (GT) related reason for Emergency Department (ED) visit per person for Home Based Primary Care (HBPC) vs Standard of Care (SOC)

Need for ED care with 50% (9) requiring ED care vs 55% (42), p = 0.79

1. GT dislodgement in 12 (60%) HBPC patients and 44 (35.2%) in SOC patients
2. HBPC patients had no visits for broken GT vs 10.4% (13) in SOC patients, p=0.0092
3. HBPC patients had no visits for GT bleeding vs 5.6% (7) in SOC patients, p=0.0093
4. HBPC patients reported GT leaking 5.0% (1) vs 8.9% (18) in SOC patients, p=0.0371









Conclusions

Home Based Primary Care (HBPC) patients have GTs exchanged more frequently than SOC patients, 3.5 vs 1.8 average replacements.

HBPC management of GTs reduces number of ED visits related to GT leakage (5.0% vs 8.9%), GT bleeding (0 vs 5.6%) and broken devices (0 vs 10.4%). This reduction in ED visits are likely due to care and monitoring patients receive in HBPC for their GTs.

HBPC is a unique service offered through the VA that has demonstrated excellent care for patients, particularly in the care of complex patients with GTs. Due to being based out of a facility, generally VA hospital, they are limited by geography. Expansion of HBPC is warranted to provide these services for veterans

HBPC HOME BASED PRIMARY CARE
Hands on Care for Our Veterans
Veterans Health Administration

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