Comparing the Value of High-touch vs Low-touch In-home Palliative Care Models

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Introduction

Most research demonstrating the value of palliative care has been performed in the inpatient and hospice settings. Fewer studies have investigated the quality and cost savings associated with upstream palliative care, which targets patients who are not yet at the end-of-life, but can still significantly benefit from symptom management and psychosocial support. Upstream palliative care can be delivered as in-home palliative care (IHPC), and is often administered to patients through a high-touch or low-touch model. There is currently no research in the relevant literature comparing the efficacy of these two approaches. The two models of IHPC in this study, operated by St. Peter’s Health Partners (SPHP) in Albany, NY, are described below:

High-Touch Model → 271 ESAS surveys administered across 79 patients

- Certified Home Health Agency (CHHA)
- High-touch IHPC patients exhibited significant declines in both ER visits and IP admissions after enrollment.

- Low-Touch IHPC patients did not exhibit any significant changes in re-admissions after enrollment.

Methods

Cost and Quality Component

Cost Component

- Obtained lists of patients from both Edgy VNA and AIM who were admitted and discharged between 4/1/16 and 6/30/16 with their demographic.

- Each patient’s Length of Stay was used to define a threshold for downstream costs and post-discharge for collection of metrics.

- Obtained results of the similar ESAS from 4/1/16 to 6/30/16.

Quality Component

- Using the Health Linkages of New York (HLN), a Regional Health Information Organization (RHIO), we obtained patient data for inpatient admissions and emergency visits for hospital encounters collected through the Health Linkages of New York (HLN), a Regional Health Information Organization (RHIO).

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- Symptom Scores were averaged, and compared between the two programs to compare symptom management for each patient on each metric.

- The proportion of patients with a low readmission rate means hospitalization was successfully prevented.

Cost: Hospital Utilization

High-Touch IHPC

- 971 Hospital Encounters across 165 patients
- Average LOS on program = 56 days

- Reasons for Discharge: Hospice (39%), Home Discharge (25%), Expired (21%)

Low-Touch IHPC

- 571 Hospital Encounters across 165 patients
- Average LOS on program = 56 days

- Reasons for Discharge: Hospice (39%), Home Discharge (25%), Expired (21%)

Results

Inpatient Readmission

High-Touch IHPC

- 271 ESAS surveys administered across 79 patients

- High-touch IHPC patients exhibited significant declines in both ER visits and IP admissions after enrollment.

- Low-Touch IHPC patients did not exhibit any significant changes in re-admissions after enrollment.

Quality: Symptom Management

High-Touch Model

- 49 ESAS surveys administered across 30 patients

The High Touch and Low Touch models had similar scores for all symptoms, although the High-touch program was slightly better at managing patients’ lack of appetite and well-being. All scores had generally low averages, but patients on both programs reported higher levels of tiredness and drowsiness.

The High Touch and Low Touch models had more goal-concordant scores for dyspnea.

Discussion

- Results of the high-touch model (Edgy VNA) suggest cost savings for the patient, hospital, and third-party governmental payers.

- Patients → Fewer expensive ER and inpatient services. Hospital encounters are also not pleasant experiences for patients, and are associated with higher levels of iatrogenic illnesses.

- Hospitals → Reduction in CMS HRRP penalties as a result of fewer 30-day readmissions. Shared Savings ACOs such as St. Peter’s Health Partners also share in the CMS’ savings when patients go to the hospital less frequently.

- Third-party payers/governmental agencies (eg. CMS) → Federal and private Managed Care Organizations stand to financially benefit the most from limiting patient use of expensive ER and inpatient services.

- The low touch model (AIM) did not demonstrate these same cost savings. Possible explanations include:

  1. These patients have lower acuity, and therefore go to the hospital less often in the first place.

  2. Limited sample size of 30 patients

- The low-touch model’s narrow spectrum of services truly does not provide significant cost-savings.

  - Patient-perceived symptom severity was generally low for both IHPC models. The goal-concordance of scores for pain, dyspnea, and anxiety also appear to be similar between the two programs.

Conclusions & Future Directions

- A high-touch model of IHPC offers substantial overall value by providing significant cost savings to various healthcare stakeholders and offering high-quality patient-centered care.

- Although a low-touch model of IHPC offers similar levels of quality, the overall value of a low-touch model is limited given that no significant cost savings are observed.

- Future research can considerably build on these results by:

  1. Improving the sample size of patients on the low-touch model to achieve greater statistical power.

  2. Probing hospital costs directly rather than using hospital utilization and readmissions as a proxy for costs.

  3. Establishing benchmarks for symptom goal-concordance in order to provide a context for the quality of care offered by palliative care programs.

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