Impact of an Inpatient Palliative Care Consult on Medication Costs
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Background

• The goal of palliative care is to improve the quality of life in patients with serious illness through streamlining treatment and coordinating care between providers.1

• Ideally, palliative care should also reduce costs by limiting or eliminating non-beneficial treatments. 2

• A 2014 literature review of 46 studies that evaluated the cost and cost-effectiveness of palliative care found that most palliative care initiatives reduce overall health care costs. However, none had an endpoint related to changes in the cost of medications. 3

• Duke University Hospital has a palliative care team that performs consults and recommends medication changes based on palliative care goals. Duke University Hospital has multiple palliative care order sets available through the electronic medical record.

• The purpose of this research study is to determine whether medication recommendations made in palliative care consults impact medication costs associated with patient care.

Objectives

• Primary Objective: To compare medication costs 48 hours before medication recommendations made during palliative care consultation and 48 hours after medication changes due to these recommendations in a general medicine inpatient population

• Secondary Objective: To identify the types of medications most commonly used outside of the palliative care order set after a palliative care consult

Methods

• IRB-approved, single-center, retrospective, cohort study

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<th>Inclusion Criteria</th>
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<td>Patients ≥ 18 years of age</td>
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<td>Admitted to a general medicine service at Duke University Hospital between September 1, 2014 and August 31, 2015</td>
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<td>Received a palliative care consultation that included recommendations related to medication management</td>
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<td>Were inpatient for at least 48 hours before the consult (as noted by timestamp on consult note in EHR) and 48 hours after medication changes were made</td>
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<th>Exclusion Criteria</th>
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<td>Received a palliative care consult but none of the recommendations were related to medication management</td>
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• Patient selection and analysis:
  - Database query to obtain list of patients who received a palliative care consult
  - Consult note reviewed to determine if it includes medication management recommendations
  - Two 48 Hour timeframes determined (48 hours before and after consult)
  - Medications administered within the two timeframes determined
  - Cost for medications administered determined
  - Average cost for the before and after periods compared

Endpoints

• Primary Endpoint: Difference in medication costs during each 48 hour timeframe

• Secondary Endpoints: Classes of medications used outside of the palliative care order set

Statistical Analyis

• Given that a $100 decrease in cost would be a significant reduction per the palliative care team, the required sample size to achieve 80% power is estimated to be 155.93. This will be rounded up to a 160 patient sample. Type I error (α) will be set at 0.05.

• The primary outcome will be evaluated with a paired t-test. If the normality assumption is severely violated, the Wilcoxon signed-rank test will be used instead.

• For the secondary outcome, medications outside the palliative care order set used after consultation will be categorized and reported as a proportion of total medications used.

References


Disclosures

The authors of this presentation have no disclosures to provide concerning possible financial or personal relationships with commercial entities that may have direct or indirect interest in the subject matter of this presentation.