Background

- Hospital discharges are important processes that frequently have poor outcomes.
  - One in five discharges is complicated by post-discharge adverse events, which may lead to preventable emergency department visits or hospital readmissions.
  - A staggering 19.6% of hospitalized Medicare recipients nationwide are readmitted within 30-days of discharge.
- Poorly coordinated hospital discharges cause harm:
  - Patients leave the hospital unprepared
  - Adverse events can lead to patient harm and unnecessary utilization of hospital resources
  - Costs of care may increase, with an estimated $17.4 billion dollar cost to Medicare in 2004 for unplanned rehospitalizations.
- Limited health literacy is known to contribute towards poorly coordinated patient discharges.
  - It has been proven as a significant risk factor for 30-day hospital readmission (OR = 1.76).
- Medical students are felt to be in a unique position to combat the negative effects of limited health literacy by delivering additional patient education leading up to and during the discharge process.
  - Students typically care for a smaller panel of patients than the house staff and face less of a documentation burden during the discharge process.
  - By spending additional time educating patients, students may benefit from development of their own patient education and discharge management skills that will be essential in their future careers as clinicians.

Aim

- To have third year medical students at Boston University School of Medicine collectively perform a total of 200 systematic patient discharge education (Medical Student Enhanced Patient Education) sessions with internal medicine patients at Boston Medical Center and other affiliated clinical sites by May 30, 2016.
- To improve patient understanding of health, medications, and follow-up treatment plans in order to combat the negative effects of poor health literacy.
- To examine the effect that Medical Student Enhanced Patient Education sessions may have on the 30-day hospital readmission rate.
- To facilitate student engagement in pre-discharge patient education and follow-up coordination in order to better develop relevant clinical skills.

Methods

- The IHM Model for Improvement has been used as the framework for guiding this effort.
- Population: Adult patients admitted to medicine services and cared for by third-year medicine clerkship students at Boston Medical Center.
- Data Sources: Medical Student Patient Education (MSEPE) checklists completed and submitted by students, inpatient discharge summaries, surveys (distributed electronically).
- Variables of Interest: Number of completed MSEPE sessions per month; student assessment of patient’s understanding of disease, medications, and follow-up plan before and after MSEPE exercise; 30-day hospital readmission rate; time spent by students preparing for and performing MSEPE sessions with patients.

Solutions

The Medical Student Enhanced Patient Education checklist was designed to walk students through the process of providing education to patients as a supplement to current discharge teaching performed by residents, pharmacy, and nursing staff.

- Before and after the MSEPE session, students assess a patient’s understanding of their disease and treatment plan.
  - At the beginning of their clerkship, students are provided with an MSEPE card and a brief (10-15 minute) orientation session for the exercise.
- Students have been asked to complete at least one MSEPE session and card with a patient they care for at Boston Medical Center during their third-year internal medicine clerkship (8 week duration).

Results

- After four months, students have cumulatively provided over 200 hours of pre-discharge education to 39 internal medicine patients at Boston Medical Center.
- Median Student Preparation Time = 28 minutes.
- Median MSEPE Session Time = 20 minutes.

Conclusions

- Based on student assessment, patients exhibit improved understanding of their health, medications, and follow-up treatment plan following participation in the Medical Student Enhanced Patient education exercise.
- MSEPE sessions have been successfully integrated within the third-year internal medicine clerkship; yet additional changes are necessary to promote more frequent completion of these sessions with patients.
- There is a trend suggesting that student assessment of limited patient understanding of their diagnosis and health consequences or medication benefits and side-effects following the MSEPE exercise may serve as a risk indicator for 30-day hospital readmission.

Next Steps

- Expand use of the MSEPE exercise to all sites affiliated with the Boston University Internal Medicine clerkship (has to date only been at Boston Medical Center).
- Encourage completion of more than one MSEPE card per clerkship student by distributing additional cards to students at orientation as well as a PDF file to print more copies if they desire.
- Begin to gather patient perspective impact of MSEPE exercise on their understanding of health, medications, and follow-up plan.
- Pilot the optional student survey directly on MSEPE card to encourage a greater response rate.
- Plan for sustainability beyond this year by reducing number of administrative steps, increasing resident and faculty awareness of exercise, and creating a brief video presentation for efficient and reproducible student orientation.

References


Improving Patient Understanding at Discharge: Medical Student Enhanced Patient Education

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