

Personalized Multimedia for Neurosurgical Inpatient Engagement and Satisfaction

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Introduction

Discharge is a transition of care in which communication is essential. With innovations in multimedia applications clinicians can digitally communicate to their patients through text, pictures and video. A selection of inpatients from the department of neurosurgery received personalized electronic discharge packets. These discharge packets included typical discharge information and also personalized videos made with medication and wound care instructions custom for that patient. Patients received a weblink in their email and were able to play the online video to hear their care team's instructions anywhere, securely on any device, at any time.

Methods

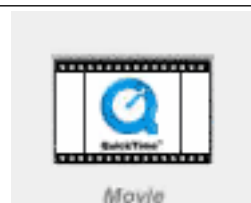
In a retrospective analysis Inpatient HCAHPS survey scores were collected for all 4 neurosurgeons in the practice for dates from 2015-2016. Surveys were matched to patients through billing and hospital medical record numbers. Patients (240) were then grouped by the condition of having received the standard of care (196) or additionally receiving a personalized video (44).



Clinician View of Patient Engagement Software

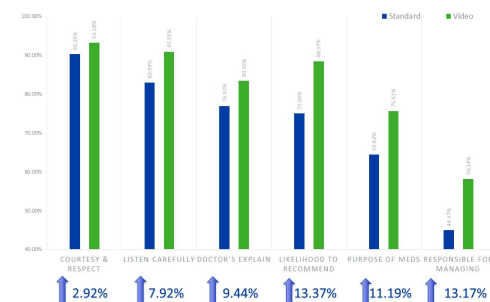
This is the clinician's view of the patient's personalized electronic discharge packet.

Blue icons indicate completed sections which show the clinician's name, title and time that clinician finalized that section. Icons circled in red show the presence of multimedia attachments in a section such as documents, pictures and personalized videos.



HCAHPS Most Positive Answer Frequency Rate

HCAHPS Survey 2015-2016 Most Positive Frequency



Most Positive Answer Frequency for HCAHPS questions in analysis. Frequencies of most positive answer shown for patients who received a personalized video and those who received the standard of care. Questions displayed: During this hospital stay how often did doctors treat you with courtesy and respect? During this hospital stay, how often did doctors listen carefully to you? During this hospital stay how often did doctors explain things in a way you could understand? Would you recommend this hospital to your family and friends? When I left the hospital I had a good understanding of the things I was responsible for in managing my health. When I left the hospital I clearly understood the purpose for taking each of my medications.

Results

Six questions from the HCAHPS were analyzed chosen from the Care for Doctors, Transitions of Care, and Overall Rating sections. For every survey question analyzed the frequency the most positive answer was selected was greater in the video group when compared to the standard group for every single question (range of improvement 2.92%-13.37%). For five out of six questions the least positive answer was never selected by participants in the video group whereas it was selected in the standard group.

Conclusions

There is a pattern of overall increased satisfaction for inpatients who received a personalized multimedia discharge packet when compared to those who received the standard of care.

Digital Medication Review

Medications To Continue	Drug	Number of Pills	Frequency	Ordered By	Physician	Side Effects
Levetiracetam 500 MG Oral Tablet	500mg		Twice a day	Cynthia Lopez Squitieri MD	Headaches, Dizziness, Nausea, Stomach Pain, Fatigue, Blurred Vision	
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Overview of medications to continue post-discharge.