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Standardized Discharge Instructions and their Impact on Post Operative Patient Knowledge

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Introduction

After every surgery, surgeons send their patients home with discharge instructions. The information is intended to educate the patients about their postoperative care and how to safely care for themselves upon returning home. Each surgeon reviews and approves the discharge instructions before they are given to their patients. This information is once again reviewed by the patient's nurse before the patient leaves the hospital.

Within a large hospital, there are often several surgeons within each specialty that perform the same surgeries. The department of Otolaryngology at Thomas Jefferson University Hospital is no exception. Within otolaryngology there are several subspecialties. At Jefferson's University campus hospital, these subspecialties consist of rhinology, otology, head and neck, plastics, and laryngology. Currently there are three rhinologists, two otologists, six head and neck surgeons, three plastic surgeons, and three laryngologists.

Within the department, there has been a movement towards standardizing discharge instructions for every subspecialty. The belief is that if every surgeon that performs the same operation comes to an agreement with postoperative care, there will be less confusion among the nurses and residents who are often the first-line medical staff responsible for answering patient questions. Among the subspecialties within our department and institution, some have already standardized their discharge instructions while some have not.

As residents, we answer home call questions from patients from 5pm to 8am every weekday and at all times over the weekends. It was our goal to determine if patients who received standardized postoperative discharge instructions had less postoperative questions over these time periods than those patients who had not. This would allow us to reflect on our care of patients in the postoperative setting and see if patients were more educated about their care if they received standardized postoperative instructions.

Methods

Home calls are answered by residents from 5pm to 8am every weekday and at all times over the weekends. In a prospective analysis calls from patients that were specifically addressing their postoperative instructions or care were documented. Calls were collected and questions were recorded from October 16th in 2017 through February 15th in 2018. No identifying patient information was gathered or documented. These calls were then grouped into the subspecialty that the patient's surgery was from and subsequently summed to determine the total number of calls per subspecialty. The subspecialties analyzed were rhinology, otology, head and neck, plastics, and laryngology. We then collected the total number of operations that each subspecialty performed over this time period.

The subspecialties and their corresponding home calls were then grouped into subspecialties with standardized or not standardized discharge instructions. Standardized discharge instructions were determined to be discharge instructions in which all surgeons performing the operation agreed upon and used the same discharge instructions. Rhinology, plastics and laryngology were the subspecialties with standardized discharge instructions. Using a Fisher Exact test, we compared the number of patients with calls, versus the number of patients without calls, about their postoperative care between standardized and nonstandardized groups. The Fisher Exact test was also used to make the same comparison between each individual standardized subspecialty versus the total nonstandardized group.

Results

There were a total of 31 home calls from individual patients referencing discharge instructions over the 4 month study period. Of the subspecialties with standardized discharge instructions, there were 16 calls referencing rhinology, 0 calls referencing laryngology and 2 calls referencing plastic operations (Table 1). Of the subspecialties with nonstandardized discharge instructions, there were 2 calls referencing otology and 11 calls referencing head and neck operations (Table 1). During these 4 months, there were a total of 2,034 operations. There were 1,165 cases from the subspecialties with standardized discharge instructions and 869 with nonstandardized. Rhinology had 302 cases, otology had 155, head and neck had 714, laryngology had 501, and plastics had 362 (Table 1).

When comparing standardized and nonstandardized calls versus no calls in regards to discharge instructions, there was no significant difference (p-value = 1). Rhinology had significantly more home calls as compared to all nonstandardized subspecialties (p-value = .0008). Laryngology had significantly less home calls as compared to all nonstandardized subspecialties (p-value = .0031). Plastics had no significant difference in calls as compared to nonstandardized subspecialties (p-value = .2545) (Table 2).

	Rhinology	Otology	Head and Neck	Laryngology	Plastics
# of Home Calls	16	2	11	0	2
# of Cases	302	155	714	501	362

Table 1: Home calls per total number of cases in each subspecialty from October 16th in 2017 through February 15th in 2018.

	Laryngology	Plastics	Rhinology
Difference of Home Calls versus Nonstandardized (p-value)	.0031	.2545	.0008

Table 2: Home calls of standardized subspecialties as compared to all nonstandardized subspecialties.

Discussion

It has been studied that the peri-discharge period is important to prevent adverse events to patients (1). During this time period, patients are given discharge instructions and told what to expect once they leave the hospital and how to best take care of themselves. Poor or confusing communication can lead to poor patient outcomes (2). Studies looking at readmission reasons from the patient's perspective found that patients believe that preventable readmissions are due to a lack of patient preparedness at the time of discharge (3). A further study on this topic by Howard-Anderson et al found that approximately 1 in 3 readmitted patients did not feel ready to leave the hospital at the time of initial discharge. Most commonly, this patient belief was due to feelings of inadequate symptom resolution and poor pain control (4).

Most studies have been centered around a patient discharge from a prolonged hospitalization, most commonly within internal medicine specialties. Upon literature review, there were no identifiable studies that assessed patient understanding of postoperative care instructions. Further, there were no studies identified assessing the impact of surgical discharge instructions and the importance of standardization among surgeons. Our study attempted to answer these questions by assessing if there was any differences between patient understanding (assessed by number of home calls) and having standardized discharge instructions in the postoperative setting.

As our results indicate, we had mixed findings. Of the three subspecialties that had standardized discharge instructions, only one subspecialty, Laryngology, had significantly fewer home calls than the subspecialties with nonstandardized discharge instructions. Surprisingly, rhinology was found to have significantly more home calls as compared to the nonstandardized subspecialties. These results indicate that there may be limited value in standardizing discharge instructions. Patient and surgeon specific instructions may in fact give patients' the best understanding of their postoperative needs.

However, there are several limitations to our study that may have confounded our results. We only accounted for patient calls during non-work hours. We assume that there were many calls made from 8am to 5pm during our study period that we are unable to account for in our data analysis. Further, our study period was merely 4 months and the results over the course of a year may lead to different findings.

Conclusion

In conclusion, we do not advocate against standardizing discharge instructions at this time. Further studies and obtaining patient questions from all times of the day could help us gain a further understanding of the impact, or lack thereof, of standardized discharge instructions. Educating and communicating a consistent postoperative plan with all of the medical staff should lead to better patient education of self care in the postoperative setting.

References

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