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Research Briefing

Informing Patients of Test Results

Objective
To determine the frequency of errors in reporting test results to patients and assess whether the reporting problem is driven by the quality of existing medical care processes.

Background
The process involved a retrospective medical record review with 5434 primary care patients aged 50 to 69. The review was used to identify cases where patients had not been informed of test results. The primary care physicians corresponding with all patients, regardless of whether they had been informed, were surveyed about their existing processes for managing test results.

Based on a review of the literature, good processes for managing test results included the following, including routing results through the physician and notifying patients of all results, whether normal or abnormal.
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Findings
Of the 23 primary practices involved, failure to inform patients of abnormal test results was common. The failure rate per primary care practice ranged from 0% to 26.2%, with a mean of 7.1%. The mean process score was 3.8, with practices varying from 0.9 to 5 out of 5.

Offices with better process scores were associated with proper delivery of test results to patients. When comparing "full EMR" to "partial EMR" settings, those fully using EMRs were associated more strongly with proper delivery of test results to patients. Partial EMR settings used various combinations of EMR technology and written documentation.

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Process scores were significantly associated with failure to inform rates ($p<001$). In other words, use of simple processes for managing test results is associated with better test result communication rates.

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IxImplications
Other research suggests that when patients receive information directly, they are more likely to respond than if the information only goes directly to the doctor. It is likely, as was found with this study, that the information does not always reach the patient. Work flows should incorporate patient-directed reminders in addition to provider-directed reminders.

EMR technology, where available, can be utilized to automate test result delivery and reminders for necessary follow up to both the physician and the patient. Whether a practice uses EMR or is paper-based, simple processes should be used to ensure patients receive test results.

	Simple Process Steps for Managing Patient Test Results
1.	all results are routed to the responsible physician
2.	the physician signs off on all results
3.	the practice informs the patient of all results, both normal and abnormal
4.	the practice documents that the patient has been informed
5.	patients are told to call after a certain amount of time if they have not received their test results

Citation
Casalino, Lawrence P. et al. 2009. Frequency of Failure to Inform Patients of Clinically Significant Outpatient Test Results. Archives of Internal Medicine, 169 (12), 1123-9.

Surgery Discharge Instructions

Objective
To examine the differences in mean patient satisfaction scores before and after the implementation of diagnosis-specific discharge instructions in three ambulatory surgery units.

Background
Patient satisfaction scores are an important index of quality improvement initiatives. Currently, patient satisfaction scores are the most widely available information available to serve as a proxy, or rough indicator, of the quality of patient care, patient safety, and patient loyalty. Written discharge instructions provide an opportunity to supplement verbal instructions for post-operative home care. The purpose of discharge communications is to provide effective strategies for patients is to ensure their safety and ability to meet standard post-operative care expectations at home.

Patients often go home without a concrete understanding of how to best care for themselves. Outpatient surgery nurses routinely received questions like the following:

- I had a tonsillectomy yesterday. Can I eat regular food today?
- Why can't I take out my nasal packaging?
- I'm supposed to use a sitz bath. What is that?

This evaluative study compared the differences in mean satisfaction scores before and after implementing the diagnosis-specific discharge instructions.

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	Ambulatory Surgery Unit (n=602)			Endoscopy Unit (n=84)			Main Surgery Unit (n=485)		
	Pre	Post	Change	Pre	Post	Change	Pre	Post	Change
discharge instructions	3.5	3.6	+0.2	3.5	3.8	+0.3	3.5	3.6	+0.1
discharge procedure	3.5	3.6	+0.1	3.5	3.6	+0.1	3.5	3.5	0
staff communication	3.6	3.7	+0.1	3.6	3.7	+0.1	3.5	3.7	+0.2
concern shown by nursing staff	3.4	3.6	+0.2	3.6	3.7	+0.1	3.6	3.6	0
helpful and courteous staff	3.6	3.7	+0.1	3.6	3.8	+0.2	3.6	3.7	+0.1
family kept informed	3.5	3.6	0	3.5	3.6	+0.1	3.5	3.6	+0.1
concern and problem resolved	3.4	3.5	+0.3	3.4	3.7	+0.3	3.4	3.5	+0.1
overall nursing care	3.6	3.7	+0.1	3.6	3.8	+0.2	3.6	3.7	+0.1
overall satisfaction	3.6	3.7	+0.1	3.6	3.7	+0.1	3.7	3.7	0

Findings

Results of this study indicate that diagnosis-specific discharge instructions may have positive effects on patient satisfaction scores. Specifically, there is some evidence supporting increased satisfaction with discharge instructions and patient perception of concerns and problems being resolved.

The use of diagnosis-specific discharge instructions may also influence patient satisfaction with staff communication, satisfaction with overall nursing care, and perception of concern shown by nursing staff.

IxImplications

The outpatient ambulatory care setting provides a great opportunity for providing discharge instructions that have been designed for each specific procedure performed. Krames On-Demand (KOD) electronic diagnosis-specific discharge instruction sheets, used in this particular study, provide patients with explanations and instructions for home care and follow up.

Although further study is needed, customized surgery discharge instructions, as opposed to general discharge instructions, potentially improve patient ability to care for themselves and understand and remember under what circumstances they need follow-up care.

Citation

Lo, Shuilain et al. 2009. The Impact of Diagnosis-Specific Discharge Instructions on Patient Satisfaction. Journal of PeriAnesthesia Nursing, 24(3), 156-62.

Patient Education and Pain Management

Objective
To measure the impact of patient-based educational initiatives on cancer pain management, including patient knowledge, attitudes, and experience of pain.

Background
The study was a systematic review and meta-analysis of controlled clinical trials selected from 6 databases through November 2007. The main outcome measures were effects on knowledge and attitudes toward cancer pain, analgesia, and pain intensity. Secondary measures involved the relationship between education and patient outcomes.

Findings
Patient-based interventions for cancer pain improve knowledge and attitudes to pain and analgesia and reduce pain intensity through knowledge and attitude of analgesia, but did not translate into reduced interference from pain in daily activities. Of the nine studies reviewed, 5 showed no statistically significant effect and 4 showed positive effects of education-based intervention. Benefits were found from both single and multiple exposure studies. In nearly all studies, patients were given written (and sometimes audio-visual) information to take away.

The meta-analysis demonstrated a modest but clear benefit of patient education efforts, but was unable to determine optimum timing, exposure, and duration. Experience of pain intensity may be impacted by factors other than actual medication use, such as patient experience of control and anxiety.

IxImplications
Patient education plays a role in patient experience with pain beyond the extent to which pain is managed with increased medication adherence. Patients with cancer pain should routinely receive education to improve their knowledge of pain management and analgesia. Information prescriptions, via patient education, should supplement standard medical care and pain management.

Citation
Bennett, Michael I. et al. 2009. How effective are patient-based educational interventions in the management of cancer pain? Systematic review and meta-analysis. Pain, 143, 192-9.