



Research Briefing

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Physician-Patient Communication in the Hospital

Objectives

To determine the relationship between physicians' communication behavior and patients' overall satisfaction with hospital care, paying special attention to potential confounding variables not addressed in previous hospital-based studies.

Background

In contrast to the outpatient setting, little research has been done on physician-patient communication for inpatient care. This study supplemented regularly collected hospital patient satisfaction survey data with additional survey data designed to measure patient-reported physician communication behavior.

The four elements of effective communication were drawn from the American Board of Internal Medicine Patient Satisfaction Questionnaire:

1. treating you like you are on the same level; never talking down to you or treating you like a child
2. letting you tell your story; listening carefully; asking thoughtful questions; not

interrupting while you are talking

3. discussing options with you; asking your opinion; offering choices and letting you help decide what to do; asking what you think before telling you what to do

4. encouraging you to ask questions; answering them clearly; never avoiding questions or lecturing you

Patient surveys were administered at discharge and one month after discharge. Complete data was available for 3,123 patients from 1997 to 2000, and researchers controlled for the potential bias individual patient outcomes may have on perceived physician communication behaviors.

Findings

There was a significant positive relationship between ratings of physician communication behaviors and overall satisfaction. For every one point increase in patient ratings of each of the four communication behaviors, there was a 0.62 average increase in satisfaction ratings ($p < .001$). Adjusting for confidence in nurses, pain experienced, comorbidities, and demographic data had a minor impact; the average increase was still 0.58 ($p < .001$).

The final analysis, which incorporated the instrumental variable in a two stage least squares regression found an average increase of 0.40 (p=.046), which is slightly less than what was found in the previous analysis, but still remained statistically significant. In other words, controlling for patient-level factors resulted in a weakened, but statistically significant finding.

Ix Implications

Preliminary research suggests that physician-patient communication is similarly important in hospitals as it is in ambulatory care settings. Further research in hospital settings should attempt to confirm what is known about physician-patient communication in ambulatory settings: information sharing, a lack of physician dominance, encouraging patients to ask questions, and discussing options with the patient are associated with increased patient satisfaction.

Hospital discharge summaries should incorporate components of the After-Visit Summary (AVS) to use as a communication

tool and to document important health information and guide discussion at discharge. Patient preference for AVS content includes the following:

- what is the problem or diagnosis
- why it is important
- what the patient can do about it
- where the patient can go for help
- where the patient can go with questions

Grounding improved communication strategies in Ix principles will facilitate patient participation in their own care and disease management.

Citation

Clever, Sarah L, et al. 2008. Does Doctor-Patient Communication Affect Patient Satisfaction with Hospital Care? Results of an Analysis with a Novel Instrumental Variable. *Health Services Research*, 43(5), 1505-19.

Educating Consumers on Medication Best Buys

Objectives

To estimate the maximum savings of a national educational program focusing on prescription drugs in order to understand the potential impact of such a program if it, or a similar educational intervention, were fully implemented.

Background

The Consumer Reports Best Buy Drugs (CRBBD) program, launched by Consumer Reports in 2004, is designed to reduce consumers' out-of-pocket expenses and improve medication access by making information available about the price and effectiveness of prescription drugs. The CRBBD program identifies drugs that are at least as effective as their competitors, yet have retail prices equal to or less than those of similar drugs.

This study focused on four drug classes widely used to treat cardiovascular conditions, taking into account cost savings associated with both generic and therapeutic substitution. While some research has been done on the economic impact of generic substitution, data on the impact of therapeutic substitution is lacking.

Aggregated data on pharmaceutical sales were obtained for 12 months from January through December 2006 for every prescription drug in the four therapeutic categories. In order to facilitate comparison, defined daily doses (DDDs) were calculated for each drug independent of price and formulation.

Cost savings were calculated based on four assumptions about switching behavior. The four assumptions were:

- 1) consumers would switch from brand name to generic equivalents (generic substitution)
- 2) individuals taking a combination would not switch (these drugs were excluded from analysis)
- 3) all individuals taking non-best buy or other drugs would switch to one of the best buy drugs within the same class (therapeutic substitution)
- 4) in classes with multiple best buy drugs, consumers would switch to these drugs in proportion to the existing market shares for the best buy drugs

Findings

An estimated \$2.76 billion could be saved annually if the recommended drugs were used. The drugs recommended by CRBBD were 15 to 65 percent less expensive per DDD than their therapeutic alternatives. Therapeutic, as opposed to generic substitutions accounted for 57.4 percent of potential savings.

Ix Implications

While prescribing practices are difficult to change, physicians are responsive to patient requests for medications. Providing best-buy drug information directly to consumers may be more cost-effective and efficient than targeting physicians. Providing targeted drug information to consumers will enhance their ability to make informed economic decisions regarding treatment options and alternatives. Cost savings would likely lead to increased adherence among consumers dealing with cost-related barriers to medication adherence.

While the CRBBD information is available on the web, Ix best practices suggest making the information available in multiple formats based on the preferences of specific populations. For example, special print and cell-phone based educational outreach efforts would likely be more effective than web-based for low-income populations who are more likely to confront cost issues and also more likely to have difficulty accessing this information via the internet. In addition, targeting delivery of this information to moments in care when consumers are preparing to fill or refill prescriptions could dramatically improve cost-effective decision making.

Citation

Donohue, Julie M. et al. 2008. Potential Savings from an Evidence-Based Consumer-Oriented Public Education Campaign on Prescription Drugs. Health Services Research, 43(5), 1557-75.

What Happens When Patients Control Their Personal Health Data?

Objectives

Although a growing body of research demonstrates the positive impact of personal health records (PHRs) on the physician-patient relationship, the utility of patient health information specifically for patients is not well documented or understood. The purpose of this project was to investigate the ways in which patients share, interpret, and

react to private information (their personal health data) on PatientsLikeMe.com.

Background

PatientsLikeMe is an online community designed to support information exchange among patients. Patients post data relevant to their diagnosis: current treatments, symptoms, and outcomes. Visually

represented patient-level health data are displayed within each patient's profile and are available to other community members. One example, the summary diagram, is shown below. The stars indicate the level of participation on the site, the color codes indicate affected areas of the body, and the icons represent equipment the patient currently uses. Also included in the diagram is the number of years that have passed since the diagnosis.



Analysis focused on patient-to-patient communication exchanges that referenced individual-level personal health data among patients living with amyotrophic lateral sclerosis (ALS). Qualitative analysis focused on questions, comments, and discussions among patients that directly referenced shared personal health information. A total of 123 postings by 95 different patients meeting the criteria were analyzed.

Findings

The availability of comments for analysis, by definition, illustrates that patients have examined and interpreted other patients' posted medical information. All 124 postings made explicit references to another patient's health information.

Three major themes emerged from the analysis of patient-to-patient questions, comments, and responses: targeted questions to others with a relevant experience, advice and recommendations, and forming and solidifying relationships based on similarity.

Patients utilized and referenced various combinations of available data on patient symptoms, treatments, and outcomes. Patients identified others with relevant experience to ask them questions related to that experience. For example, patients

considering a specific treatment contacted other patients already using that treatment to ask them about their perception of the treatment's effectiveness. Conversely, patients identified others with similar symptoms to share their experience with a successful treatment for that particular symptom.

In addition to referencing specific symptoms and treatment, patients referenced the amount of time symptoms were experienced and treatments used. Patients also used available profile information to identify other patients in non-medical ways like shared interests, employment history, or geographic proximity.

Ix Implications

Based on the ways in which patients use their personal health information in a patient-centered web environment, patients value the ability to identify other patients with similar issues and experience. Patients are willing to share their personal health information; the benefits of sharing this information outweigh the risks for those who participate in this type of electronic community.

Patients often are willing and able to play an active role in locating the right information at the right time. Visual displays help patients identify relevant "sources" of information (other patients). Self-care and self-management are especially relevant for patients dealing with chronic illnesses like those on PatientsLikeMe, and this is consistent with how they use this system. While patients are undoubtedly interested in scientifically proven treatment options, they are also interested in talking with other patients who have already tried the treatment.

Citation

Frost, Jeana H. and Massagli, Michael P. 2008. Social Uses of Personal Health Information Within PatientsLikeMe, an Online Patient Community: What Can Happen When Patients Have Access to One Another's Data. *Journal of Medical Internet Research*, 10(3):e15.