

## **High-Quality Internet Information May Improve Patients' Satisfaction With Their Doctors**

### **Objective:**

To examine how the doctor-patient relationship predicts service use within an Interactive Cancer Communication System (ICCS) for underserved women with breast cancer, and how, in turn, this service utilization affects the doctor-patient relationship.

### **Background:**

The National Cancer Institute's (NCI's) Health Information National Trends Survey found that over 56% of breast cancer patients who have been online have visited a Web site with the specific purpose of learning about cancer. It is not clear how such Internet use might affect doctor-patient relationships, and little research has been done on this issue. This study included 231 recently diagnosed lower income breast cancer patients in a 4-month intervention. Participants received a free computer, Internet access, and training in the use of an ICCS called the Comprehensive Health Enhancement Support System (CHESS) "Living with Breast Cancer" program. The authors collected pretest and posttest survey data, as well as data on how women used the four distinct components of CHESS: Information services, Discussion Group, Ask an Expert service, and Interactive services. Doctor-patient relationship from the patient's perspective was the key variable of interest.

### **Findings:**

- ? The authors found a statistically significant negative relationship between pretest level of women's perception of their relationship with their doctors and use of Ask an Expert services. They found a similar relationship (although not statistically significant) for use of Information and Interactive services.
- ? Women who reported a more positive pretest relationship with their doctors were more likely (although not statistically significantly) to participate in the CHESS Discussion Group.
- ? Regardless of whether pretest appraisal of doctor-patient relationship was high or low, the posttest appraisal of the relationship improved as women used the CHESS Information services more. This improvement, which was statistically significant, was more marked for women with a lower pretest appraisal of doctor-patient relationship.

### **Ix Implications:**

- ? Cancer information on the Internet, if trustworthy and of high quality, has the potential to improve the doctor-patient relationship, perhaps by validating the information offered by providers and increasing patients' confidence in their doctors.
- ? The correlational analysis in this study is only suggestive. A current NCI-funded clinical trial at the University of Wisconsin will use an experimental design to examine the differential impact of adding tools to CHESS to facilitate communication between doctors and patients. Researchers hypothesize that CHESS with these tools will have a more positive impact on the doctor-patient relationship than CHESS without them.

### **Citation:**

Shaw, B. R., et al. (2007). Doctor-patient relationship as motivation and outcome: Examining uses of an Interactive Cancer Communication System. *International Journal of Medical Informatics*, 76, 274-282.

**Tailoring Interventions to a Woman's Mammography Stage of Change  
Can Make Them More Efficient and Effective**

**Objective:**

To identify predictors of change in mammography behavior stage (precontemplation, contemplation, and action, as described in the Transtheoretical Model [TTM]) for nonadherent women so that appropriate stage-based interventions can be developed.

**Background:**

The TTM can be used to conceptualize mammography behavior as a series of stages:

- ? Precontemplation: Never had mammogram; not planning on having one in next 6 months.
- ? Contemplation: Never had mammogram; planning on having one in next 6 months.
- ? Action: Had mammogram within last 12 months.
- ? Relapse precontemplation: Prior mammogram but not currently adherent and not planning on having one in next 6 months.
- ? Relapse contemplation: Prior mammogram but not currently adherent and planning on having one in next 6 months.
- ? Maintenance: Adherent with mammogram for the past 2 years.

Studies consistently have suggested that stage-matched interventions may be more effective than standard education in increasing mammography rates. Previous reports have shown differences in *perceived* risks, benefits, and barriers by stage of mammography, but the current study is the first to assess whether *change in beliefs* predicts change in stage.

Data were collected from 1,245 women, none of whom had had a mammogram in the preceding 15 months, at baseline and 2 months postintervention. Instruments measured: perceived susceptibility, benefits, and barriers; self-efficacy; fear; fatalism; and knowledge.

**Findings:**

- ? At baseline, there was a highly significant difference between precontemplators and contemplators on all belief scores.
- ? Postintervention, there were highly significant changes among stages of adherence. However, the only significant difference between contemplators and those in action was higher perceived barriers among contemplators.
- ? Change in perceived barriers and benefits and change in self-efficacy all significantly predicted forward stage movement.

**Ix Implications:**

- ? Tailoring Ix to behavior stage increases mammography rates. Women in precontemplation need counseling about the risks and benefits of mammography, while those in contemplation benefit from counseling to help them eliminate real or perceived barriers to getting a mammogram.



- ? The association between changes in perceived benefits, barriers, and self-efficacy and forward change in mammography stage suggests that interventions could be tailored to focus more intensively on these beliefs. Streamlining interventions in this way may reduce costs and participant burden and increase effectiveness.

**Citation:**

Menon, U., et al. (2007). Health belief model variables as predictors of progression in stage of mammography adoption. *American Journal of Health Promotion*, 21(4), 255-261.

**Note:**

The results of the tailored interventions cited in the current study are discussed in:

Champion, V. L., et al. (2002). Comparison of tailored mammography interventions at two months post-intervention. *Annals of Behavioral Medicine*, 24, 211-218.

**Patient Engagement with Discharge Summaries Can Improve Communication  
Problems Between Hospital-Based and Primary Care Physicians**

**Objectives:**

To assess the prevalence and type of communication problems between hospitalists and primary care physicians (PCPs) at patient discharge, and to identify interventions to improve this communication.

**Background:**

The advent of hospitalists has heightened the need for timely, accurate communication between hospital-based physicians and PCPs. The authors reviewed 55 observational studies investigating communication and information transfer at hospital discharge to assess deficits, and 18 controlled studies to evaluate the efficacy of interventions to improve communication.

**Findings:**

- ? Direct communication between hospitalists and PCPs regarding patient discharge occurred infrequently (3% -20%). Following discharge, patients often contacted or visited their PCPs before the PCPs had received a discharge letter (16% -53%) or a detailed discharge summary (66%-88%). Approximately 11% of discharge letters and 25% of discharge summaries never reached PCPs. PCPs estimated that poor communication and information transfer adversely affected care in about 24% of cases.
- ? Discharge summaries often lacked information on diagnostic test results, treatment during hospitalization, discharge medications, tests results pending at discharge, patient or family counseling, and follow-up plans.
- ? Hospitals' generating computerized discharge summaries and giving patients copies of discharge information to deliver to their PCPs improved the timeliness of communication to PCPs. PCPs reported that use of standardized discharge summary formats that highlighted the most important information improved the quality of the documents.

**Ix Implications:**

- ? Ix has direct benefits for clinicians as well as consumers. Hospitals' giving patients copies of the most pertinent information upon their discharge involves patients more directly in their care and increases the probability that the PCP will have this information at the first postdischarge visit.
- ? Health information technology (HIT), including electronic medical records, can substantially improve the timeliness (and possibly the quality) of discharge summaries. Hospitals can use HIT to extract relevant information and place it into a structured discharge document, which can then be reviewed for accuracy by the hospitalist and augmented with additional information and instructions. The hospital can deliver the discharge summary to the PCP by fax or e-mail, or can allow the PCP to access the information directly.

**Citation:**

Kripalani, S., et al. (2007). Deficits in communication and information transfer between hospital-based and primary care physicians: Implications for Patient Safety and Continuity of Care. *JAMA*, 297(8), 831-841.