

**Title:**

A preliminary consumer health information-seeking (CHI-seeking) behavior model of physicians who treat elderly depressed patients (results from the pilot study of a dissertation proposal)

**Objective:**

Despite useful studies that report the information-seeking behaviors of physicians who use the Internet, or physicians' clinical information-searching skills (such as evidence-based medicine), little literature highlights physicians' consumer health information-seeking behavior. Where does a physician get information to give to the patient or to a caregiver? In a rapidly growing market of consumer health information, what does a physician offer patients today? This poster describes pilot research, methodology and expectations of a study designed to investigate information-seeking behaviors of primary care physicians who treat elderly depressed patients. A main objective is to reveal a correlation between what information is sought versus what is provided to a patient or caregiver. This study identifies a specific population, senior health consumers, and investigates the steps their front-line outpatient caregivers (primary care or family practice physicians) take in order to make sure their patients have the information they need to understand their illnesses and to take part in a shared decision-making process with regard to their treatment. The study attempts to uncover the consumer information-seeking habits of primary care physicians who see large populations of elderly depressed patients. Primary research questions include:

1. How are these physicians searching for consumer health information?
2. How are physicians responding to health information requests from their patients or caregivers?
3. Can a consumer health information-seeking model that is significant for the medical and LIS professions be constructed?

**Setting/subjects:**

Physicians who treat seniors with mood disorders were selected for two reasons. First, senior citizens (those aged 65+) are a major demographic in today's society. Second, access to populations of both primary care physicians and family practice physicians who are affiliated with the world-class center of care for elderly depressed patients and their caregivers is available at the University of Pittsburgh. Three specific procedures, structured interviews, environmental scans, and a self-evaluative confidence scale, will take place with physicians in large ambulatory primary care practices in urban Pittsburgh, Pennsylvania, who take care of large numbers of geriatric patients. In the larger study, twenty-five physicians will be interviewed from Community Medicine, Inc. and Metro Family Practice, two practices associated with the Advanced Center for Intervention and Services Research for Late-Life Mood Disorders (ACISR) at the University of Pittsburgh, as well physicians from the Department of Family Medicine at the University of Pittsburgh School Of Medicine. In the pilot study, three family practice physicians from the Department of Family Medicine at the University of Pittsburgh School of Medicine were interviewed and administered a confidence level survey. The interviewer also performed an environmental scan of the clinical setting according to a predetermined

checklist of items to note during the interview. University of Pittsburgh Institutional Review Board approval was secured prior to the investigation.

### **Methodology:**

Using a grounded theory approach similar to that used in Ellis' information-seeking behavior model research of 1989, 1993 and 1997, [1, 2, 3, 4] data was collected through personal interviews with Pittsburgh-area primary care physicians who see large numbers of elderly patients in their practices, together with environmental scans of their practice spaces and their responses to a standardized questionnaire on their confidence in using consumer health information with their patients. Glaser & Strauss' "constant comparative method" [5] will lead to a generation of theory about the physicians' common information-seeking behaviors from the empirically collected data. Data will be gathered in three phases. (1) Semi-structured interviews, (2) Environmental scans, (3) Self-evaluative confidence scale.

### **Results:**

Use of a naturalistic inquiry method inspired by Ellis [4] will be used to synthesize the use of grounded theory approaches and related methodological issues for the specific purpose of creating a consumer health information-seeking behavior model of primary care physicians who treat elderly patients, and, in turn, will be used to educate clinicians and develop further information-seeking skills of medical students, interns and residents who are training to become better information providers for their patients. Through environmental scans of their offices and interviews with these physicians who are affiliated with the ACISR, outcomes of the pilot include a preliminary model of (1) common behaviors among this relatively homogenous group of physicians, and (2) how these physicians respond to their elderly patients and their caregivers with respect to the provision of consumer health information. The preliminary model indicates three stages of information-seeking. (1) The *pre-patient visit* includes tasks such as listening to or reading current medical news that patients might be hearing, perusing websites that their patients (or their caregivers) may be familiar with, looking for education materials on a case-based nature. (2) Information-seeking activities that occur *during the patient visit* primarily include reaching for the computer in the clinical office with the patient present and searching for a website or searching UpToDate or MDConsult for information to show the patient. Bulleted text and easy to read websites are preferred. During this stage, the physician gives the patient and caregiver website addresses written on a prescription pad to take home for further use. (3) Information-seeking behaviors which occur *following a patient visit* include website follow-up or notes to self in a palm or hand-held device to gather information at a later time or request a search from the library or an administrative assistant. Scans of the physicians' clinical environments revealed electronic equipment such as computers, hand-held devices and electronic resources such as Internet access and use of MDConsult, UpToDate or other specific consumer health resources were of particular interest. More obvious were textbooks, pamphlets, journals and wall hangings which were noted, in detail, in the environmental scan notes. Results of the confidence scale administered to the physicians during the pilot study showed confidence levels that ranged from *very confident need to improve*; to *confident but should improve*; to *not confident but should improve*. The majority of questions resulted

in *confident but should improve*, thus initially indicating that although physicians are confident in providing information to their patients, they still feel that there is more to know about consumer health information.

**Discussion/conclusion:**

*The preliminary model.* The preliminary consumer health information-seeking model of physicians interviewed during the pilot stage of this study begins by dividing the information-seeking into three stages described as a PDA, where the P is for Prior (pre-patient visit, anticipating a need), the D is for During (while patient is in office, direct question and answer session), and the A is for After (look at websites suggested by patients after patient leaves). *Practical uses* for a model of physicians' information-seeking behaviors include awareness and education. Awareness of trends of information habits can lead to awareness of one's own information needs and pursuits. Medical school educators instruct physicians in training, LIS faculty educate graduate library and information science students who, in turn as medical librarians, teach information seeking and retrieval methods to physicians. A synthesized behavior model can enhance this educational process. *Finally*, a specific goal of this particular group of physicians (in Pittsburgh) is that if an understanding of the CHI information-seeking behaviors of this group of physicians is successful, then the ACISR can also create their own consumer health information materials based more precisely on their patients' and caregivers' information needs.

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References

1. Ellis, D., *Modeling the information-seeking patterns of academic researchers: A grounded theory approach*. *Library Quarterly*, 1993. **63**(4): p. 469-486.
2. Ellis, D., *A Behavioral Model for Information Retrieval System Design*. *J Information Science*, 1989. **15**(4/5): p. 237-247.
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4. Ellis, D., *Modeling the information seeking patterns of engineers and research scientists in an industrial environment*. *J Documentation*, 1997. **53**(4): p. 384-403.
5. Glaser, B. and A. Strauss, *The discovery of grounded theory; strategies for qualitative research*. Observations. 1967, Chicago: Aldine Pub. Co. 271p.