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## Innovative KP Research in Clinician-Patient Communication: Deepening our Understanding of the Clinician-Patient Relationship

What happens inside the examination room after the door shuts is less a mystery than it used to be. Educational programs in clinician-patient communication now bring people together to discuss strategies for brief medical visits and to practice skills for handling a difficult interaction. Patient survey results inform individual clinicians on how their patients perceive them. In some regions, specially trained communication coaches are available to observe their colleagues and to provide feedback on their interaction with patients.

But do these educational programs and services work? How can we deepen our understanding of the complex relationship between clinician and patient? What contribution can Kaiser Permanente (KP) make to the growing but still limited evidence base for the interpersonal aspects of health care delivery?

To address these and other questions, the Garfield Memorial Fund launched, in July 2000, the Clinician-Patient Communication Research Initiative (CPCRI). The CPCRI team (see sidebar) began its work by in-

terviewing 40 clinicians, educators, leaders, and administrators across KP to determine priority research topics. On the basis of the results of the interviews, the subsequent Request for Applications was sent out in June 2001 across the organization, soliciting proposals on clinician-patient communication in five key areas: technology, end-of-life care, physician satisfaction, best practices, and patient safety.

Through comprehensive review of the 39 preliminary proposals received, the CPCRI team, in collaboration with the Garfield Memorial Fund Board, selected four innovative research studies for funding (Table 1). These studies explore interventions in technology, physician education in end-of-life communication, and best practices in clinician-patient communication. Each study incorporates the Four Habits Model, a communication framework developed by Dr Terry Stein and Dr Richard Frankel.<sup>1</sup> Led by a team of investigators from various KP entities (TPMG, SCPMG, KPHI, KPNW, CMI, KP Online, Permanente Federation), the projects include the KP regions of Northern California, Southern California, Northwest, and Hawaii. Results of these projects will be available mid to late 2003.

### Clinician-Patient Communication Research Initiative Team

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### Summary of Projects

#### Communication at the End of Life: Using the Four Habits Model to Engage Patients and Family in a Collaborative Relationship

*Investigators: Cecilia Runkle, PhD (TPMG), Elizabeth Wu (SCPMG), Edward C Wang, MD (SCPMG)*

Many clinicians receive little or no training in medical school on end-of-life conversations. Research within KP and in other settings has demonstrated important problems in the interpersonal care of terminally ill patients. To address this area, we designed an educational program that focuses on communication skills in discussing advanced care planning, shifting focus to palliative care, handling clinician grief, managing anger in family members, and understanding the role that culture plays in communication.

From January through December 2002, 200 oncologists, internal medicine physicians, hospital medicine specialists, and other clinicians who work with patients who have chronic diseases will attend this program in a series of three classes or a one-day intensive format. Study

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participants will be surveyed at the conclusion of the workshop and three months after about the effect of the course on their knowledge and attitudes. In addition, selected family members of patients who have died and had received care from the study participants will be asked to participate in a qualitative interview about their experience with the clinician during and after the death of their loved one. The results of this

study will be used to understand how training experiences can affect precursors to clinician behavior change.

**Best Practices in MD-Patient Communication: Identification of Behaviors Associated with Patient and Physician Satisfaction**

*Investigators: Tom Janisse, MD (KPNW), Karen Tallman, PhD (Permanente Federation), John Hsu,*

**Table 1. Garfield Memorial Fund—Clinician-Patient Communication Research Initiative (CPCRI) funded proposals**

Project title	Region	Kaiser Permanente investigators	Description	Methods	Measurable outcomes	Project dates
Communication at the End of Life: Using the Four Habits Model to Engage Patients and Family in a Collaborative Relationship	KPNC KPSC	<ul style="list-style-type: none"> <li>Cecilia Runkle, PhD (TPMG)</li> <li>Elizabeth Wu, (SCPMG)</li> <li>Edward Wang, MD (SCPMG)</li> </ul>	This study will evaluate a 6- to 8-hour skill-based workshop for clinicians to determine if it can change the knowledge and attitudes of clinicians in having end-of-life conversations with patients and family members.	<p><b>Sample Size:</b> 200 study participants</p> <p><b>Evaluation Techniques:</b></p> <ul style="list-style-type: none"> <li>Pre-post surveys</li> <li>Qualitative interviews with family members</li> </ul>	<ul style="list-style-type: none"> <li>Knowledge and attitude of clinicians with regard to end-of-life discussions</li> <li>Number of completed advance directives</li> </ul>	January 2002–October 2003
Best Practices in MD-Patient Communication: Identification of Behaviors Associated with Patient and Physician Satisfaction	KPSC KPHI	<ul style="list-style-type: none"> <li>Tom Janisse, MD (KPNW)</li> <li>Karen Tallman, PhD (Permanente Federation)</li> <li>John Hsu, MD (TPMG)</li> <li>Geoff Galbraith, MD (KPHI)</li> <li>Tom Godfrey, MD (SCPMG)</li> <li>Tom Vogt, MD, PhD (KPHI)</li> </ul>	This study will identify communication practices of physicians who are at three discrete levels of patient satisfaction (high, medium, and low) by videotaping and analyzing clinic visits. Videotapes will be reviewed with each patient after their visit and the patient's comments recorded. Physician review of videotapes will also be recorded.	<p><b>Sample Size:</b></p> <ul style="list-style-type: none"> <li>50-60 physicians</li> <li>3-4 videotaped patient visits per physician</li> </ul> <p><b>Evaluation Techniques:</b></p> <ul style="list-style-type: none"> <li>Analysis of videotaped visits based on Four Habits Model Checklist</li> <li>Patient postvisit interviews</li> <li>Physician focus groups</li> <li>Pre-post surveys with physicians</li> </ul>	<ul style="list-style-type: none"> <li>Correlation between physician's patient satisfaction classification and physician demeanor in the videotaped visits</li> <li>Duration and quality of communication in visits</li> <li>Correlation between patient perception and physician perception of visit</li> </ul>	March 2002–March 2003
The INTERACTION Study: Information Technology Ramifications for Communication	KPNW	<ul style="list-style-type: none"> <li>John Hsu, MD (TPMG)</li> <li>Holly Jimison, PhD (KPNW)</li> <li>Nan Robertson, RPh (KPNW)</li> <li>Robert Tull, PhD (TPMG)</li> </ul>	This study will analyze the effect of computers in the medical examination room on topics, duration, and quality of communication between patients and their primary care clinicians at the KP Rockwood Medical Office.	<p><b>Sample Size:</b></p> <ul style="list-style-type: none"> <li>13 physicians</li> <li>400 patient visits</li> </ul> <p><b>Evaluation Techniques:</b></p> <ul style="list-style-type: none"> <li>Analysis of videotaped visits and exam room computer screens</li> <li>Physician pre-post surveys</li> <li>Patient pre-post surveys</li> </ul>	Quality, type and duration of communication between patients and primary care clinicians before, just after, and six months after installing exam room computers	May 2001–May 2002
Patients and Clinicians Online: KP Online/Care Management Institute Joint Study	KPNC KPNW KPSC	<ul style="list-style-type: none"> <li>June Forkner-Dunn, RN, PhD (KP Online)</li> <li>Jim Bellows, PhD Candidate (Care Management Institute)</li> <li>Kate Christensen, MD (KP Online)</li> </ul>	This study will explore whether online discussion groups for diabetic patients, using the Four Habits Model, improve participants' perception of clinician-patient communication, promote positive change in health-condition-specific behaviors, and increase member and clinician satisfaction.	<p><b>Sample Size:</b> 200 participants in intervention group and 200 participants in control group at four pilot sites</p> <p><b>Evaluation Techniques:</b></p> <ul style="list-style-type: none"> <li>Participant focus groups</li> <li>Pre-post survey</li> </ul>	<ul style="list-style-type: none"> <li>Patient perception of clinician-patient communication</li> <li>Health behavior changes</li> <li>Self-rated general health status of patients</li> <li>Pre-post HbA<sub>1c</sub>, LDL levels</li> </ul>	January 2002–June 2003

MD (TPMG), Geoff Galbraith, MD (KPHI), Tom Godfrey, MD (SCPMG), Tom Vogt, MD, PhD (KPHI)

The critical role of physician-patient interaction in determining patient satisfaction is a consistent finding in KP and in health care generally. Patient perceptions of quality tend to focus on interpersonal aspects of care.<sup>2</sup> The top correlates of patient satisfaction, in both patient satisfaction studies and Consumer Assessment of Health Plan Survey (CAHPS) results,<sup>3</sup> are the provider's interest and attention, shared decision-making, listening, and ability to explain.

Yet we have little information as to how highly rated physicians within KP demonstrate these skills during an actual visit. This observational study will record and analyze the communication practices of physicians stratified by three patient satisfaction levels—low, medium, and high.

From March 2002 to March 2003, 50 to 60 Southern California Permanente Medical Group (SCPMG) and Kaiser Permanente of Hawaii (KPHI) physicians will each have three to four patient visits videotaped. The videotapes will be analyzed according to the Four Habits Model coding scheme. Videotapes will also be reviewed with each patient after the visit, and the patient's comments will be recorded. Separately, the physicians will review the tapes with a communication specialist and comment on the visit. The communication specialist will provide to the physician constructive feedback about the visit.

Other evaluation methods include correlating patient and physician perceptions of the visits, analyzing the duration and quality of the communication in the visits, and conducting physician focus groups to discuss communication practices. The information collected will inform future clinician educational programs on communication skills.

### **The INTERACTION Study: Information Technology Ramifications for Communication**

*Investigators: John Hsu, MD (TPMG), Holly Jimison, PhD (KPNW), Nan Robertson, RPh (KPNW), Robert Tull, PhD (TPMG)*

Introduction of computers into the outpatient setting has the potential to influence the interaction between patients and clinicians and to lead to improvement in quality, productivity, and satisfaction. To measure these benefits (and potential threats), the first step is to develop an understanding of the impact of the computer on the content of clinician-patient communication during an office visit.

The goal of this proposal is to determine the effect

of computers in the medical examination room on the topics, duration, and quality of communication between patients and their primary care clinicians at the KP Rockwood Medical Office in Portland, OR. This longitudinal, qualitative study employs a quasi-experimental pre-post design that uses a combination of videotaping and surveys at three points in time: preimplementation, early postimplementation, and late postimplementation.

From May 2001 through May 2002, this study will videotape and evaluate 400 patient visits with 13 recruited physicians coded according to the Four Habits coding scheme. Other evaluation methods include physician and patient pre-post surveys. This study evaluates change in clinician-patient examination room communication during introduction of a clinical information system, informs ongoing efforts to improve clinician communication and patient satisfaction, and serves as the basis for proposed future externally funded studies.

### **Patients and Clinicians Online: KP Online/Care Management Institute Joint Study**

*Investigators: June Forkner-Dunn, RN, PhD (KP Online), Jim Bellows, PhD Candidate (Care Management Institute), Kate Christensen, MD (KP Online)*

Increased use of the Internet has added a new dimension to the clinician-patient relationship by giving patients and their clinicians the opportunity to improve patients' participation in managing their care and thereby possibly improving health outcomes. Increased Internet use also offers to patients the unique opportunity of regularly accessing online support and information from others experiencing the same condition.

This study will explore whether online discussion groups for diabetic patients, using the Four Habits Model,<sup>1</sup> improve participants' perception of clinician-patient communication, promote positive change in health-condition-specific behaviors, and increase member and clinician satisfaction. Specifically, this study will compare potential behavior change of participants with that of nonparticipants, identify factors associated with successful online groups, and determine whether participants find private online discussions of value in a managed care setting.

The study will be conducted from January 2002 through June 2003 at four sites (Oakland, Fontana, Riverside, and Northwest). Four hundred members with diabetes will be randomized into intervention groups and control groups that will have access only



**Most important, these research studies promote KP's commitment to delivering health care with a personal touch.**

to the public KP Online Web site. Each intervention group will participate in a private discussion group moderated by two local clinicians and will have access to other resources in addition to those available on the public KP Online Web site. Evaluation techniques include Web site usage review and content analysis, participant focus groups, pre-post surveys, and HbA<sub>1c</sub> and LDL level determination before and after. Evaluation measures include patient perception of clinician-patient communication, health and behavior changes, and self-rated general health status of patients.

### Summary

The Garfield Memorial Fund's Clinician-Patient Communication Research Initiative has launched four innovative studies. Each of these multiregional projects will contribute toward our own evidence base about communication skills in clinical care. This first phase of the CPCRI also expands the KP community of researchers in clinician-patient communication, setting the stage for partnerships with other health care organizations, academic institutions, and foundations with similar interests. Most important,

these research studies promote KP's commitment to delivering health care with a personal touch.

For more information about the studies or the CPCRI, please contact Sue Hee Sung at 510-891-3807 or Dr Terry Stein at 510-625-3019. ❖

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*The study descriptions were adapted from proposals written by the Principal Investigators.*

### References

1. Frankel RM, Stein T. Getting the most out of the clinical encounter: the four habits model. *J Med Pract Manage* 2001 Jan-Feb;16(4):184-91.
2. Attree M. Patients' and relatives' experiences and perspectives of 'Good' and 'Not so Good' quality care. *J Adv Nurs* 2001 Feb;33(4):456-66.
3. Golden A, Carlton D. Heart of the visit measures: primary care delivery models work group update [presentation]. Care Experience Council, November 9, 2000, Oakland, CA.

## Our Highest Accomplishments

Transport of the mails, transport of the human voice,  
transport of flickering pictures—in this century, as in others,  
our highest accomplishments still have the single aim of bringing men together.

*Wind, Sand, and Stars, Antoine de Saint-Exupéry, 1900-1944, pioneer aviator, poet and novelist*