



By Andrew M Lum, MD  
Mark D Zuiderveen

*Clinician-Patient Communication:*

## The Electronic Medical Record—Barrier or Bridge to Effective Clinician-Patient Communication?

**We know that communication behaviors in the examination room affect health outcomes and patient satisfaction.**

### Common Questions

The Kaiser Permanente Computerized Information System, KP CIS, is coming to an examination room near you. Will it help or harm your patient relationships? We'd like to share some of the learnings from the KP Colorado Region.

In 1997, when CIS was being launched, a few questions were posed by clinicians in the Colorado Region:

- "What do patients think of having a computer in the exam room?"
- "Doesn't the computer distract you from taking care of the patient?"
- "What if it goes down?"<sup>a</sup>

### Desired Outcomes at KP Colorado

Many "hoped for" outcomes associated with use of an electronic medical record effort are compatible with the goals of superb clinician-patient communication. These outcomes include excellent quality of care, improved patient outcomes, enhanced careers, patient satisfaction, and increased rates of patient/member retention.

### Communication in the Examination Room

As a result of work spearheaded in our organization by Drs Terry Stein<sup>1</sup> and Jill Steinbruegge (personal e-mail communication, May 2000),<sup>b</sup> we know that communication behaviors in the examination room affect health outcomes and patient satisfaction. Communication that is dissatisfying to members can lead to complaints, legal claims, and disenrollment, all of which are costly financially and costly for clinician careers. A superb electronic medical record supports communication and outcomes with patients and has an important impact in all these arenas.

Our experience at KP Colorado showed that KP has the responsibility to take the lead in creating excellence in "exam room communication" as supported by an electronic medical record. The path to achieving KP CIS proficiency can be rocky—personally as well as organizationally—and requires substantial sponsorship and an array of resources. In Colorado, when we started using KP CIS, 40% of our workforce had no previous computer experience.<sup>c</sup> (One novice placed the computer mouse on the floor like a footpedal; another held it up at the screen like a remote control device.)

### The Crucial Role of Clinician-Patient Communication in KP's Future: Summary

Evidence from our own research and from the medical literature shows that the quality of communication between clinician and patient matters a great deal. Outcomes such as adherence to treatment, resolution of symptoms, and functional status of patients are directly attributable to elements within the medical interview. Patients' assessments of quality and the appeal of membership in KP depend highly on patients' views of their interactions with clinicians. Communication mishaps are extremely costly to the organization.

Although KP consists of dedicated, competent, motivated health professionals, many of our clinicians simply did not receive training in communication skills as part of their formal education. During the past decade, nearly all of our medical groups have initiated programs in communication skills to address this lack. The challenge now is to strengthen and broaden that effort by supporting training in communication, by linking training with performance feedback and incentives, and by recruiting clinicians who have strong interpersonal skills.

We have an opportunity to distinguish ourselves in the marketplace. Our members deserve to be listened to, heard, cared about, and involved in decisions about their own health care—not only to have satisfying care experiences but also to achieve optimum health. This goal is crucial to the success of KP. The time is right for Kaiser Permanente as a national organization to make a strong commitment to strive for excellence in clinician-patient communication.

### Table 1. Kaiser Permanente Colorado Clinical Information System (CIS) Implementation Support Team

**Contact person:** Andrew M (Andy) Lum, MD

**Team:** Michael D Chase, MD; Marianne P Gapinski, PhD; Noni Wiencrot, MD; Cheryl Rogers, RN; Alice Alexander, MPA; Dee Lawer, RN



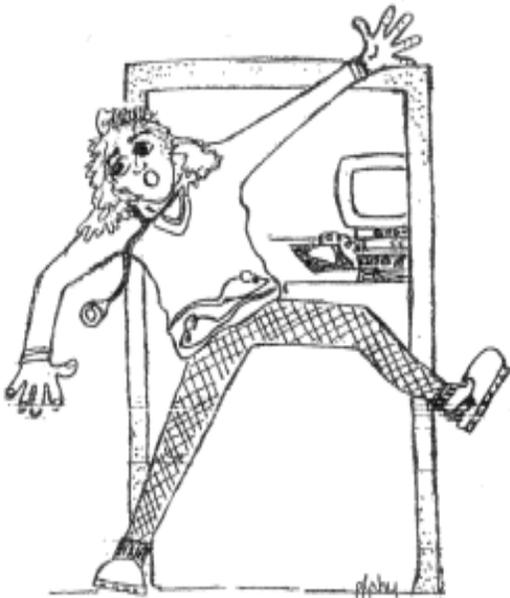
**ANDREW M LUM, MD**, (left), an Internist, was a partner physician with SCPMG and served as the PIC of the Santa Clarita Medical Offices until 1994. In 1994, Andy moved his beautiful wife and four children to Colorado. He currently serves as the Assistant Medical Director of Service Quality and Informatics and is on the Board of Directors for CPMG.

**MARK D ZUIDERVEEN** (right), has been with Kaiser Permanente for 18 years; he serves as Senior Director for Service Quality in the Colorado region.

## Five Steps to Adopting the Electronic Medical Record

In reviewing the KP Colorado implementation, Dr Steinbruegge (personal e-mail communication, May 2000)<sup>b</sup> and others have identified five steps required to support adoption of an electronic medical record (see sidebar “The Five Steps”). Clinician Patient Communication is addressed in the fourth step. Several efforts were specifically addressed at facilitating this skill at the time of implementation:<sup>d</sup>

1. one-on-one tutorials,
2. early-morning departmental practice sessions,
3. written tip sheets and newsletters with anecdotal stories, and
4. sessions using a humorous but instructional video, “CIS: Improving the Art of Medicine.”<sup>2</sup>



*“Don't take my computer away!”*

Reproduced by permission of the artist, Patricia K Fahy, MD.

## The Five Steps to Successful CIS

Five steps to be successful using CIS as outlined by Dr Jill Steinbruegge, MD (personal e-mail communication, May 2000)<sup>b</sup>:

- 1. Basic PC skills.** Ensuring that all users have acquired basic PC skills is important because all other CIS-related learning is slowed if these skills are not in place. At KP Colorado, approximately 40 percent of the workforce had no computer experience before implementation of CIS.
- 2. CIS functions and features.** Users must learn to navigate the screen and to perform all the functions relevant to their role. The training document outlines many options for this.
- 3. How to integrate CIS into personal workflow.** Physicians must learn how to integrate the CIS tool into the way they do their work—the way they gather and record information, the steps they take in performing a task, and the order of these steps—so that they may return to their baseline efficiency level. Workflow efficiency before implementation of KP CIS predicted efficiency after implementation of KP CIS as well as the rate at which baseline efficiency was achieved. Stated differently, the efficient physicians were efficient when using either paper or KP CIS, and they learned to become efficient more rapidly than colleagues who were not efficient before KP CIS and who slowly returned to their relatively inefficient baseline efficiency levels.
- 4. How to integrate CIS into the clinician-patient interaction.** How to have CIS enhance (and not interfere with) the clinician's interaction with the patient is a fourth area of learning necessary for using the KP CIS effectively. Without additional training, physicians ended where they started: physicians with strong interpersonal skills engaged their patients during the learning process (“bear with me while I do this on the computer”), whereas physicians with poorer interpersonal skills were unable to mitigate interference of the KP CIS in patient interactions. As did physicians' efficiency with patients, the “Art of Medicine” scores of physicians with poorer interpersonal skills returned to pre-CIS baseline levels.
- 5. How to integrate CIS into work unit (team) workflow.** The final aspect of learning to use the KP CIS effectively is learning how to integrate CIS into the workflow of the work unit or team. How do individuals in the work unit change their workflow and work processes after they have implemented a CIS? In what order are steps taken? How does communication occur (eg, without a paper chart, how to know when a patient has checked in)? These are areas that affect the ability of the work unit to process patients efficiently.



### Ongoing Efforts

Ongoing efforts include:

1. Clinician Patient Communication skills teaching sessions (see sidebar),
2. Informatics teaching sessions for team members, and
3. Disseminating information (tip sheets and voicemail) to highlight ways in which quality of outcomes can be enhanced.

### Summary

KP CIS can be a bridge to excellent clinician-patient communication and can be a real opportunity for our organization to distinguish itself on this front. We must build on the learnings from each KP Region to help other Regions navigate the steps of implementation. In addition, to fully exploit KP CIS as a tool, we must continue to focus on our core product: interaction between clinician and patient in the examination room. The extent to which KP CIS can support and enhance quality of health care, patients' confidence in clinicians, clinicians' confidence in themselves, level of patient service, treatment outcomes, and member retention is the extent to which we have appropriately exploited this exciting new tool. ❖

*Acknowledgments: Patrica K Faby, MD, reviewed and edited the manuscript. Many thanks to Terry Stein, MD; Bob Tull, PhD; and the Bayer Institute for Health Care Communications, Inc (Fred Platt, MD), who helped us design our Clinician Patient Communication courses. The Medical Editing Department, Kaiser Foundation Research Institute, provided editorial assistance.*

<sup>a</sup> Regarding chart availability. Using a paper-based system, we received, on average, 60 percent of our charts (including urgent care); with CIS, our charts are available in read-only mode more than 98 percent of the time and are available in read-write mode more than 95 percent of the time.

<sup>b</sup> Associate Executive Director, Physician Development, The Permanente Federation, Oakland, CA.

<sup>c</sup> An extensive survey of Colorado CIS users was conducted in August 1999 (approximately one year after implementation). The unpublished survey included chart audits, an anonymous written survey, and onsite observation of approximately 40 percent of staff and physicians. The unpublished survey results indicated that users are very concerned about the presence of a computer detracting from their interactions with patients. From the survey, more than 60% of the respondents said the presence of the computer detracted from interaction with patients in exam rooms. The two most commonly identified factors were clinicians' lack of confidence in their typing skills with patients present and the physical placement of the CIS computers in the exam rooms diminishing clinicians' ability to maintain sufficient eye contact with patients. However, more than 99 percent of users were observed to have good to excellent skills integrating the use of the computer into their patient visits. In addition, more than 98 percent of users were observed to have good to excellent typing skills sufficient to not impede their ability to document in CIS. The survey was conducted by our CIS Onsite Support Team (Table 1).

<sup>d</sup> "Art of Medicine" patient satisfaction scores (Al Mehl, MD, personal communication) tended to drop a few points for individual physicians during the first two months of CIS usage for our physicians. Scores then came back to their previous level or slightly higher. Regional mean Art of Medicine scores for the year 2000 are now statistically significantly higher than 1998 and 1999. The increase for 2000 reverses a five-year decline in overall mean Art of Medicine scores.

#### References

1. Stein TS, Nagy VT, Jacobs L. Caring for patients one conversation at a time. *Permanente J* 1998;2(4):62-8.
2. Lum AM. CIS: improving the Art of Medicine [videocassette]. [Oakland, CA]: Kaiser Foundation Health Plan, Inc; 1998.
3. LaFleur P, Starret M, Kelly G, Luebke A. Communication skills for the clinician. Facilitator's guide [videocassette]. [Oakland, CA]: Kaiser Foundation Health Plan, Inc; 1999.

### Clinician Patient Communication Skills for the Clinician<sup>3</sup>

"Communication Skills for Clinicians,"<sup>3</sup> designed by Peter LaFleur, MD, is an interactive tool suitable for 90-minute facilitated sessions within clinical departments. Optimal group size for these sessions is 5 to 15 people. Sessions are designed to stimulate discussions about communicating with patients who are considered challenging. Each of six video vignettes presents a patient with a common but fairly problematic, challenging communication issue (eg, angry patient). The doctors demonstrate some desirable communication skills and omit others. The focus is on communication—not on clinical diagnosis.

We conducted approximately 30 classes with half of our 16 medical offices. Sessions have been very popular. Our Executive Medical Director (Jack Cochran, MD) is one of our stars in the video series!