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Culturally Competent Care
Pocket Card Enclosed
**Mission:** The Permanente Journal is written and published by the clinicians of the Permanente Medical Groups and KFHP to promote the delivery of superior health care through the principles and benefits of Permanente Medicine.

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71 Standards for Computerized Clinical Data: Current Efforts and Future Promise. Jonathan Y Lukoff, MD; Robert H Dolin, MD

Computerized clinical data and electronic health records are things of the present. This article explains some of the most important medical informatics terms and concepts in the context of clinical practice.
A Voice of Permanente

In August of 1997, The Permanente Journal published its first issue. With this August 2002 issue we celebrate our fifth anniversary! In the beginning, the physicians, clinicians, and staff of the Editorial Team, Advisory Board, and Review Board all aspired to become “A Voice of Permanente.” From the Permanente Medical Groups across the country, individual physician voices spoke into my first editorial: “Permanente is a group with tremendous resourcefulness, creativity, and care-full-ness in meeting the challenges ahead, but we need to share amongst ourselves much more effectively and efficiently.” “This journal can showcase our best work and practices, strengthen the connection among groups, and influence the direction and nature of change in the practice and business of health care.” “I want to make a real contribution.” “Kaiser Permanente has an obligation to promote research into clinical practices, set the standards, and communicate through an organ such as the journal.” In the 20 issues of The Permanente Journal published, we have heard from over a thousand of our organization’s authors, researchers, poets, and painters. I believe we have become “A Voice of Permanente.”

How do the voices of The Permanente Journal contribute to the future of health care? The National Academy of Sciences Institute of Medicine published its second report in March 2001, Crossing the Quality Chasm: A New Health System for the 21st Century. This report focused on the broader variations and deficiencies in medical practice today. Their recommendations included: multidisciplinary, team-based patient care; an infrastructure of information technology; a focus on a limited number of common, chronic conditions; and evidence-based care processes supported by automated clinical information and decision support systems. The Permanente Medical Groups have those components in place now. The Permanente Journal, as a direct expression of that medical care in an integrated service delivery model, represents a unique niche in American medical journals. We select journal articles to disseminate new advances and contributions to clinical medicine and to elucidate the processes that embed those contributions into medical practice and the health care delivery system.

I would like to thank everyone who has had even the smallest part to play in The Permanente Journal living for five years. It took the vision and will of the Regional Medical Directors and our Executive Publisher, Jay Crosson, MD, to approve and fund the journal, the expertise of the Editorial Team to create the journal, and the authors and artists to give it substance and value. Ultimately, our greatest appreciation is for our readers, who transfer knowledge into practice to enhance the health and well-being of both our members seeking care and the people of our organization delivering that care.

For the future, I can think of no more fitting way to close than I did in the first issue: “Members of the Advisory Board, Review Board, and Editorial Team have a responsibility to carry forward the energy, enthusiasm, commitment, dedication, long-standing effort and work, aspirations, and dreams of all physicians, clinicians, and Health Plan experts so invested in Kaiser Permanente.”

Reference:
In celebration and recognition of our fifth anniversary, we present 20 journal covers from the past five years, all but two (the breast cancer stamp, Summer 1998, and the Voehs award, Summer 1999) were created by Kaiser Permanente clinicians. To encourage professional-personal balance we have a strong commitment to publishing the creative/artistic work of Permanente physicians and clinicians; these covers represent some of the best work being created by your peers.
On congratulations to all the talented people who edit, publish, and support The Permanente Journal. It was an honor to write a commentary for the premiere issue of the Journal back in 1997, and I am twice as pleased to share a few comments for this, your fifth anniversary issue. What an important milestone!

I am a strong supporter of The Permanente Journal, and allow me to tell you why. First, there are numerous physicians in the Permanente Medical Groups across the country who tell me that they are enriched by the articles found within its pages. The Journal has covered important issues such as Patient Safety, Quality, New Technology, Service, Research, Women’s Health, Doctor-Patient Encounters, and more, with finesse. And, of course, the Journal publishes our physicians’ important research studies and medical achievements so learnings can be shared across the Program.

Second, I believe we need to build more of a Permanente culture throughout all of our Medical Groups because at the end of the day, we are, at least philosophically, one Permanente Medical Group. The Permanente Journal helps us create and foster that culture. Back in 1997, I stated “the Journal will aim to bring our thoughts, practices, and accomplishments under one roof for everyone’s view. As a result, these new ideas can spread across our Permanente Medical Groups to bring better health to our members.” I am pleased to say today that I believe this publication is doing just that.

Third, the Journal provides a platform for physicians to express themselves artistically, whether it be through writing, poetry, photography, or illustration. I’ve been impressed by the artistic talent of so many of our colleagues.

There are some critics of this publication. It’s true — The Permanente Journal does cost money to produce, but I think it is a fine, worthwhile endeavor. And I’ve seen improvement in its content over the years. We all know that it is not the New England Journal of Medicine, nor is it intended to be. I think that The Permanente Journal is ultimately about caring deeply for our Program and for our physicians. The focus of this issue, physician worklife, demonstrates that caring.

I congratulate Tom Janisse, MD, the editor-in-chief, the editorial board, and the production staff on its fifth anniversary and wish The Permanente Journal continued success for many years to come.

A Worthy Program

It has always been our opinion that a medical care program worthy of perpetuation, in addition to being economically sound, must provide teaching, training, and research, all so necessary for the maintenance of high quality care.

— Sidney Garfield, MD, Second Annual Report of the Permanente Foundation, January 1945
An Interview with Dr David Lawrence

Editors: First of all, Dr Lawrence, you must be having mixed emotions as the time for stepping down gets closer. Could you tell our readers how you are feeling right now?

Dr Lawrence: Well, I think that anybody who makes this kind of decision, to end his career with Kaiser Permanente, is going to have mixed emotions. I am extraordinarily excited about exploring the next phase of my life, but it is very poignant to be leaving. We have fought many battles, and much has happened over the years that has been exciting. However, I will miss many, many friends and colleagues; they will be difficult to leave. I have spent a long time with the organization, so it is bittersweet. It's happening, and I'm having a lot of mixed emotions, but I have no regrets about leaving at this time.

Editors: Looking back at the many events and accomplishments during your tenure as CEO, is there any one accomplishment that gave you an especially high level of pride in the organization?

Dr Lawrence: Not just one, there are many. I guess one of the things that I have been very excited about has been the embracing of the Care Management Institute by the organization, and particularly by the physicians. I have always believed that our greatest asset is our intellectual capital, the knowledge we have accumulated. Various people have gotten together, sifted through the evidence, and come to conclusions about the best way to take care of patients. That gives me enormous pride because it is sort of a fundamental promise of an organization like ours, and it is wonderful to see it actually happen through the work of the Institute. I actually take more pride in this accomplishment and others such as the labor management partnership and the successful way in which we make decisions together, than I do about accolades that come to the organization from the outside. It is more about what I see on the inside than what people tell us from the outside.

Editors: Could you tell us what you believe is the state of the partnership between Kaiser Foundation Health Plan and the Permanente Medical Groups?

Dr Lawrence: I actually think it is a much healthier partnership than it was ten years ago. Otherwise, I would say I have failed. What has been extremely difficult, in my mind, has been the partnership at the national level. I would say that ten years ago we didn't have a partnership, and today we do. I think it is much healthier because the tensions and the issues now have a place to be resolved, and they are on the table much more than they used to be. I see that issues are being dealt with objectively, with good data and analysis and with good conversation, rather than being turned into political issues at the first sign of conflict. It has not been an easy road. I think that it is a real testimony to the Permanente Medical Groups that they moved through the process of forming a federation to establish a governance that balances the needs of individual medical groups with the needs of the collective group.

Editors: We are also interested in the partnership at other levels of the organization, even the physician team leader and nurse partnership. What do you think about the phase we are in for the development of this level of partnership?

Dr Lawrence: I think the partnerships between the Health Plan and Hospitals and the Permanente Medical Groups at the regional level have always been fairly good. I think they are even better now because we have strong medical directors as well as strong leaders in the Health Plan. Partnership has always been strong in most hospitals and in most clinical areas. It is easier to do partnership, of course, when you get closer to patient care, because all the political barriers do not seem to get in the way. This is one area where it depends on the medical group and on the individual physician. I believe that there remains a tension to some extent over the question of physician sovereignty. Although it hasn't happened recently, I still get tickled when I run into a doctor (as I have in the past) who points to me and says 'you have one role, and that is to make my life work.' There were several things I wanted to say, but I was too polite. You get some of that
Editors: I think it is helpful to look at this microcosmic view, because it seems to me an organization lives and dies by virtue of the small work unit—those few people who work together to deliver care. As an example, we just finished a major work life survey in the Northwest Permanente Group in which the physicians said their greatest need was having a consistent staff person to work with. So I wonder what sense you have of what the leadership is doing to support the local units, which you referred to as the care team?

Dr Lawrence: Well, you and I are in complete agreement about the need to support the care teams. How it actually gets accomplished is very difficult to say. It is not driven by national or even regional decisions. Staff support is determined by the local team. Who the staff reports to does not seem to make any difference. If you go to Colorado, Georgia, or Hawaii, you see that they are figuring out a way to deal with staff support.

Editors: You mentioned the challenges and the changes in health care. As you are walking away and looking over your shoulder at the Kaiser Permanente group model, do you think there is a role for us in leading national change?

Dr Lawrence: I think actually the role we play is in demonstrating how good our model can be. It is extraordinarily powerful when we can demonstrate the outcomes we are able to get because of the way we organize and deliver care. Yes, we have to play a leadership role at the national policy level, and we have to continue to do the sorts of things that some of us have done at the Institute of Medicine and the executive session on patient safety and the national quality forum.

Editors: Are there any specific challenges you see in the next four or five years for your successor?

Dr Lawrence: The internal challenges are going to continue to drive the Care Management Institute as the evidence base for how we practice. Another will be the clinical information system rollout. It is going to be a massive challenge for us and will be hard work.

Since we have invested so heavily in the delivery system and the infrastructure for the delivery system, I think we are behind the curve in terms of our insurance capabilities. This is a major challenge for us. Health care delivery is local and needs to stay local with the infrastructure support of groups like the Care Management Institute and CIS. However if we can consolidate insurance capabilities with appropriate governance and are sensitive to what the needs are locally, we can achieve the necessary economies of scale. It is really a function of the intellectual capital and putting the decision making and focus at the right level of the organization. Competition and the demands are forcing us to be both local and national. When we go to large national employers, they simply can’t understand why we are unable to put together an offering that would be consistent across all their locations.

Editors: Anything you want to share with the readers about what Dr Lawrence will be doing in the near future?

Dr Lawrence: For the rest of this year, I am going to be doing a lot of speaking and working on a couple of commissions. I have been asked to spend some time in England to move forward with discussions comparing their national health service to Kaiser Permanente as reported in a recent British Medical Journal article. Afterwards, when I retire formally, I will continue to be active on several boards with Rand and the Rockefeller Foundation and a couple of profit, publicly traded companies not in health care. I have been asked to consider doing some work with the American Association of Medical Colleges. It will still be a lot of fun.

Editors: Any final thoughts that you would like to pass along to our readers?

Dr Lawrence: I would like to say that the overwhelming feeling I have as I leave is one of enormous gratitude. When I was named CEO ten years ago, Dan Wagster said ‘Congratulations, Dave, you have just been given the most exciting job in the world of health care.’ He was right. It has been a privilege. The more I learned about the organization, the more I realized what extraordinary people and what enormous resources and capabilities we have at Kaiser Permanente. I just couldn’t be happier or more grateful about having been able to work with such a wide range of wonderful people. It has been an amazing privilege.

Editors: We assume that you are still going to be an avid reader of The Permanente Journal.

Dr Lawrence: Absolutely—always have been.

Editors: Dr Lawrence, thank you so very much for your time. On behalf of the physicians and staff of the Permanente family across the country, we want to thank you for your many years of service, dedication, leadership, and vision. We would all like to wish you the very best of luck in the future.

Dr Lawrence: My pleasure.
Connections

It has been four years since my retirement, after 26 years with Northwest Permanente Medical Group (NWP). As one of the people who helped birth this publication and the Clinical Contributions Editor for the inaugural issue, I was asked to comment for this fifth anniversary issue.

My appreciation of history—personal, professional, and general—has become stronger in direct relation to my age. As I’ve grown older I’ve had an increased desire to look for the connections to the past. I’m sure it has to do with the realization there are more years behind me than in front. That fact pushes self-examination and the need to look for meaning. Increasing age adds its own perspective to the mix.

A Doctor Reading About Doctors

I’m rereading one of my favorite books, *Doctors, the Biography of Medicine* by Sherwin Nuland, a surgeon and medical historian. Having a long line of professional ancestors, I feel a deep sense of connection with this type of history. Each time I read this book, I am stirred, inspired, and awed by the biographies of the individuals responsible for some of the landmark contributions in our continuing evolution as medical practitioners. These were people who, through their observations, reasoning, and devised methodologies, found new truths, which changed medical history because they had the courage to share their ideas, often radical and revolutionary, and not always welcomed.

The inspiration from reading Nuland’s book comes from his describing the ability of a practitioner who can change and intermingle perspectives. It has to do with seeing one patient at a time and having to deal with the “here and now” for that specific person on the one hand, but also having the ability to put the patient into a broader context as well. It’s as though we work in a forest: at times we need to concentrate on the leaves and at other times it is important to consider the limbs, the tree itself, or the forest in its entirety. It is this resonance from the one to the many to the one that gives perspective; that brings connection.

Physician As Editor

Deciding to be a physician editor came from a passionate belief in Permanente’s rich fund of knowledge and collective wisdom and the feeling that the more we can share our clinical experiences and perspective with each other, the better. It is right and good to promote institutional and individual communication.

Dr Robert McFarlane preceded me as Director of Continuing Medical Education for NWP and had started the planning for a written forum for the physicians of NWP. When I became Director in 1986, the planning continued and we started the newsletter *Permanente Practice*. This led to the establishment, several years later, of a regional journal, *The NWP Journal of Clinical Practice*, which, in turn, ultimately served as the basis for the proposal to create a national journal, *The Permanente Journal*.

Reflecting on Medicine After Retiring From Practice

I feel fortunate for the professional life I’ve had, being a doctor, a director of education, an editor, and being with Permanente. I have no regrets. I would do it again in a heartbeat. Looking back at the history of medicine, with its long, rich cast of characters and events, and looking at what we are doing now, I marvel at the still unfolding story. This medical group is part of that still unfolding story and *The Permanente Journal* embodies the effort to communicate ideas and ideals. Professionally, we share a long tradition that embraces all of the human traits, both splendid and low. To me, though, the nobility of our professional heritage comes from the caring about others and a determined search for truth. It is in the learning about each other and how we connect to the world that matters.

Reference

Did You Know You Are A Leader?

Introducing a New Section: Physicians as Leaders

A hallmark of Permanente Medicine is that physicians determine what is best for patients in a system of care that is truly team-based and patient-centered. In this system, is the Permanente physician just another team member?

Not at all! Although all members of successful health care teams have a strong sense of participation and influence over their work environment, it is the physician members of the team who set the pace of the practice and create the atmosphere for teamwork and patient service for the nonphysician members of the team. Although the physician team leader is essential, the contributions of the other team physicians, who lead without titles [“informal leadership”], create an environment that enables the team to succeed. This is the finding of a focus group study summarized in the article by Debra Mipos (page 55): specifically, all physicians on the team are leaders.

Because this is so important, this edition of The Permanente Journal introduces a new section—Physicians as Leaders (page 55), in which we will provide articles on physician leadership in each edition. This section will be for all physicians, whether or not they have formal leadership titles. The main contributors will be experienced Permanente human resource leaders from the Federation and from the various Permanente Medical Groups.

This new Physicians as Leaders section will complement the regular evidenced-based approach articles highlighted in the Clinical Contributions section, the contributions on Clinician-Patient Communication, and the community activities highlighted in the External Affairs section. Taken together, these are all descriptive of Permanente Medicine.

I believe that you will enjoy this new section and will find the information valuable in your role as leaders.

Do you have a story on how leadership skills have enhanced your practice? Let us hear from you! ❖

Let us hear from you.

We encourage you to write, either to respond to an article published in the Journal or to address a clinical issue of importance to you. You may submit letters by mail, fax or e-mail.

Send your comments to:
The Permanente Journal / Letters to the Editor
500 NE Multnomah St, Suite 100, Portland, Oregon, 97232
Fax: 503-823-2348 • E-mail: permjournal@kpnw.org

Be sure to include your full address, phone and fax numbers, and e-mail address. Submission of a letter constitutes permission for The Permanente Journal to publish it in various editions and forms. Letters may be edited for style and length.
Abstracts of Articles Authored or Coauthored by Permanente Clinicians

From Southern California:
Hand washing and physicians: how to get them together

OBJECTIVE: To determine the motivating and behavioral factors responsible for improving compliance with hand washing among physicians.

DESIGN: Five unobtrusive, observational studies recording hand washing after direct patient contact, with study results reported to physicians.

SETTING: A 450-bed hospital in a health maintenance organization with an 18-bed medical-surgical intensive care unit (ICU) and a 12-bed cardiac care unit.

METHODS: An infectious disease physician met individually with participants to report study results and obtain a commitment to hand washing guidelines. Follow-up interviews were conducted to evaluate behavioral factors and educational programs. Hand washing study results were presented to all staff physicians by live and videotaped inservice presentations and electronic mail (e-mail) newsletters. The importance of influencing factors and the educational effectiveness of the hand washing program were evaluated.

RESULTS: Five observational hand washing studies were conducted in the ICU between April 1999 and September 2000. Rates of physician compliance with hand washing were 19%, 85%, 76%, 74%, and 68%, respectively. There were 71 initial encounters and 55 follow-up interviews with the same physicians. Physician interviews revealed that 73% remembered the initial encounter, 70% remembered the hand washing inservice presentations, and 18% remembered the e-mail newsletters. Personal commitment and meeting with an infectious disease physician had the most influence on hand washing behavior. Direct inservice presentations (either live or videotaped) had more influence than did e-mail information. Rates of ventilator-associated pneumonias did not significantly change before and during the study periods. A decrease in the rate of central-line-related bloodstream infections from 3.2 to 1.4 per 1000 central-line days was found, but could not be solely attributed to improved physician compliance with hand washing.

CONCLUSIONS: Physician compliance with hand washing can improve. Personal encounters, direct meetings with an infectious disease physician, and videotaped presentations had the greatest impact on physician compliance with hand washing at our medical center, compared with newsletters sent via e-mail. Local data on compliance with hand washing and physician involvement are factors to be considered for physician hand washing compliance programs in other medical centers.

Clinical Implication: On the basis of information in this article, the National Kaiser Permanente (KP) Hand Hygiene Program has been instituted. All KP Medical Centers are required to have a hand hygiene program with continuous education, assessment of hand washing compliance, and feedback to the physicians and health care workers. We show in our study that strong motivating factors to improve physician hand washing require local compliance data and a personalized approach. —TC

From the Northwest:
Association of asthma control with health care utilization: a prospective evaluation

Population-based disease management should be enhanced by good risk assessment models and instruments. We prospectively evaluated the ability of a simple measure of short-term asthma control (scored 0 to 4) to predict asthma 12-month health care utilization (HCU). A total of 5172 adult asthma patients completed a brief questionnaire in fall 1997 to assess current level of asthma control. We then evaluated HCU for calendar year 1998. Ninety-three percent had health plan eligibility in 1998 and were included in this analysis. Both acute and routine asthma utilization increased with increasing numbers of asthma control problems. Rates of acute care episodes were 3.5 (95% confidence interval [CI] = 2.9, 4.3) times more likely for those with three to four control problems versus those with no control problems. Lesser, but statistically significant, increases were seen for those with two (relative risk [RR] = 1.7, 95% CI = 1.4, 2.2) or one (RR = 1.4, 95% CI = 1.1, 1.8) control problem. These patterns were similar for men and women, and diminished with increasing age. The asthma control index contributed significantly to prospective prediction models even after adjusting for administrative data such as medication use and prior HCU. These data reinforce the usefulness of measures of short-term asthma control both for the individual clinician and for those interested in population-based asthma management.

Clinical Implication: The article shows that the Asthma Therapy Assessment Questionnaire (ATAQ) index of asthma control, which can be readily administered and scored in the clinic setting, can be used to identify asthma patients who are at increased risk for future hospital-based care due to acute exacerbation of their disease. We believe this simple index can be a useful clinical vital sign for patients with asthma and that those scoring three to four on the index should be evaluated closely concerning their medication regimen, inhaler use technique, possible adherence problems, and allergen avoidance. —BV
From the Northwest:

**Helicobacter pylori eradication in dyspeptic primary care patients: a randomized controlled trial of a pharmacy intervention**


**OBJECTIVE:** To determine the effectiveness of structured adherence counseling by pharmacists on the eradication of *Helicobacter pylori* when using a standard drug treatment regimen.

**DESIGN:** Randomized controlled clinical trial.

**SETTING:** Nonprofit group-practice health maintenance organization (HMO).

**PARTICIPANTS:** HMO primary care providers referred 1393 adult dyspeptic patients for carbon 14 urea breath testing (UBT).

**INTERVENTIONS:** Those whose tests were positive for *H pylori* (23.3%) were provided a standard antibiotic regimen and randomly assigned to receive either usual-care counseling from a pharmacist or a longer adherence counseling session and a follow-up phone call from the pharmacist during drug treatment. All subjects were given the same seven-day course of omeprazole, bismuth subsalicylate, metronidazole, and tetracycline hydrochloride (OBMT). Dyspepsia symptoms were recorded at baseline and following therapy.

**OUTCOMES:** The main outcome was eradication of *H pylori* as measured by UBT at three-month follow-up. Secondary outcomes were reported adherence to the treatment regimen, self-reported adherence by pharmacists did not affect medication adherence or eradication rates in this sample, but additional counseling did increase patient satisfaction with treatment. *H pylori* eradication did not affect symptoms of dyspepsia. —VS

**RESULTS:** Of the 333 participants randomly assigned to treatment, 90.7% completed the three-month follow-up UBT and questionnaires. Overall eradication rate with the OBMT regimen was 80.5% with no significant difference in eradication rates between the two groups (p = 0.98).

**CONCLUSIONS:** In this study, additional counseling by pharmacists did not affect self-reported adherence to the treatment regimen, eradication rates, or dyspepsia symptoms but did increase patient satisfaction.

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**Clinical Implication:** We found that *Helicobacter pylori* was not as prevalent in this sample of dyspeptic patients as recent studies would suggest. A good eradication rate was achieved with the use of pharmaceutical treatment (OBMT). Special added counseling by pharmacists did not affect medication adherence or eradication rates in this sample, but additional counseling did increase patient satisfaction with treatment. *H pylori* eradication did not affect symptoms of dyspepsia. —VS

**From the Northwest:**

**Mortality of intrathoracic sarcoidosis in referral vs population-based settings: influence of stage, ethnicity, and corticosteroid therapy**

Reich JM. Chest 2002 Jan;121(1):32-9

**STUDY OBJECTIVES:** To compare the sarcoidosis mortality in referral settings (RS) and population-based settings (PS), and to identify the contribution of stage, ethnicity, and corticosteroid therapy (CST) to their disparate outcomes.

**DESIGN:** All observational studies identified in a MEDLINE search and bibliographic review published in the English language since 1960 dealing with the course and prognosis of sarcoidosis were reviewed and subjected to meta-analysis.

**MEASUREMENTS AND RESULTS:** Sarcoidosis mortality in RS (4.8%), in which 11% of patients were identified at this stage. The magnitude of this disparity could not be accounted for solely by adverse selection, as indicated by stage or by ethnicity. Patients in RS received CST with sevenfold the frequency of PS, and its provision was highly correlated with stage-normalized mortality.

**CONCLUSION:** The prognosis of patients with intrathoracic sarcoidosis in PS is far more favorable than that obtained in RS. Sarcoidosis mortality is largely independent of ethnicity. The possibility cannot be excluded that excessive employment of CST may unfavorably influence the long-term course of the disease in some individuals. —MK

**Clinical Implication:** Mature Electronic Medical Records (EMR) deliver, in part, on their promise of decreasing medical errors and increasing the quality and cost-effectiveness of care via electronic alerts and reminders. Primary care clinicians indicate that alerts are not all “created equal.” Specific characteristics contribute to user acceptance, and users have preferences for alert style and topic. EMR developers and implementers should seek to understand and encompass these important usability and usefulness lessons. —MK

**From Colorado:**

**A comparison of clinical outcome studies among cholesterol-lowering agents**

Lousberg TR, Denham AM, Rasmussen JR. Ann Pharmacother 2001 Dec;35(12):1599-1607

**OBJECTIVE:** To review and compare clinical trials of cholesterol-lowering agents that evaluated clinical end points as the primary

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Abstracts of Articles Authored or Coauthored by Permanente Clinicians

**From the Northwest:**

**Objective assessment of usefulness and appropriate presentation mode of alerts and reminders in the outpatient setting**

Krall MA, Sittig DF. Proc AMIA Symp 2001:334-8

There is very little known about the limits of alerting in the setting of the outpatient Electronic Medical Record (EMR). We are interested in how users value and prefer such alerts. One hundred Kaiser Permanente primary care clinicians were sent a four-page questionnaire. It contained questions related to the usability and usefulness of different approaches to presenting reminder and alert information. The survey also contained questions about the desirability of six categories of alerts. Forty-three of 100 questionnaires were returned. Users generally preferred an active, less intrusive interaction model for “alerts” and a passive, less intrusive model for order messages and other types of reminders and notifications. Drug related alerts were more highly rated than health maintenance or disease state reminders. Users indicated that more alerts would make the system “more useful” but “less easy to use.” Reprinted with permission from the American Medical Informatics Association.
Abstracts of Articles Authored or Coauthored by Permanente Clinicians

From the Northwest: Effects of hearing impairment on use of health services among the elderly

OBJECTIVES: To assess the effects of hearing impairment on health-service use in an elderly population, controlling for factors associated with hearing difficulties known to affect utilization.

METHODS: Diagnoses of hearing impairment, depression, and chronic illnesses were used in hierarchical regression procedures to predict the volume and probability of any service use among 1436 randomly selected 65-year-old health maintenance organization members.

RESULTS: Hearing impairment substantially increased the likelihood of making at least one visit to a health care provider (OR = 3.31, 95% CI = 1.55–7.06). Among those who made such visits, however, hearing impairment did not lead to use of additional services despite expectations to the contrary.

CONCLUSIONS: Further research should explore whether underutilization of services exists, and, if so, whether it stems from clinician or patient attitudes about the seriousness of hearing impairment, from a paucity of available treatment strategies, or from some combination of these and other factors.

From Southern California: Vision loss among diabetics in a group model Health Maintenance Organization (HMO)

PURPOSE: To report the management of diabetic retinopathy in one group model health maintenance organization and assess the quality of care.

METHODS: Cross-sectional study. A chart review of 1200 randomly identified patients with diabetes mellitus, continuously enrolled for three years in Kaiser Permanente (KP) Southern California, the largest provider of managed care in Southern California, was performed. A total of 1047 patients were included in the analyses. Patient characteristics as well as information from the last eye examination were abstracted. Charts from patients with visual acuity less than 20/200 in their better eye (legal blindness) were selected for extensive chart review to determine the cause of visual loss and the antecedent process of care. T tests or the Wilcoxon rank sum test was used to compare continuous variables. The chi(2) test or the Fisher exact test was used to compare categorical variables. All analyses were performed on the Statistical Analyses System (SAS Institute, North Carolina).

RESULTS: Our study population of 1047 diabetic patients was 51.7% male, had a mean age of 60.4 years, a mean duration of diabetes of 9.6 years, and a mean hemoglobin A1c of 8.3%. During the study period, 77.5% of patients received a screening eye examination with examination by an ophthalmologist, an optometrist, or review of a retinal photograph. Of those with a visual acuity assessment (n = 687, 65.6% of 1047), 1.5% had visual acuity of 20/200 or worse (legally blind) in the better eye, while 8.2% had this level of visual acuity in the worse eye. Of eyes with new onset clinically significant macular edema and visual acuity < 20/40, 40% had documentation of focal laser performed within one month of diagnosis. Of eyes with vitreous hemorrhage and visual acuity < 20/40, 50% had documentation of vitrectomy. Among eyes that had vitrectomy, over 80% had this procedure within one year of diagnosis of vitreous hemorrhage.

CONCLUSIONS: The current report is the largest study of diabetic retinopathy outcomes among patients enrolled in a prepaid health plan. Further research is necessary to investigate the impact of managed care on health outcomes.

From the Northwest: Randomized trial of a brief dietary intervention to decrease consumption of fat and increase consumption of fruits and vegetables
Stevens VJ, Glasgow RE, Toobert DJ, Karanja N, Smith KS. Am J Health Promot 2002 Jan-Feb;16(3):129–34

PURPOSE: This study tested the efficacy of a computer-assisted counseling intervention to reduce diet-related cancer risk.

DESIGN: Randomized controlled trial.
SUBJECTS: Healthy women HMO members (n = 616) aged 40 to 70.

INTERVENTION: Participants were randomly assigned to nutrition intervention or an attention-control intervention unrelated to diet. Intervention consisted of two 45-minute counseling sessions plus two five- to ten-minute follow-up telephone contacts. Counseling sessions included a 20-minute, interactive, computer-based intervention using a touchscreen format. Intervention goals were reducing dietary fat and increasing consumption of fruit, vegetables, and whole grains.

MEASURES: Twenty-four hour diet recalls and the Fat and Fiber Behavior Questionnaire (FFB).

RESULTS: Four-month follow-up data were collected from 94% of the intervention participants and 91% of the controls. Testing with a multivariate general linear models analysis showed improvements on all dietary outcome variables. Compared to the control, intervention participants reported significantly less fat consumption (2.35 percentage points less for percentage of energy from fat), significantly less fat consumption (2.35 percentage points less for percentage of energy from fat), significantly greater consumption of fruit and vegetables combined (1.04 servings per day), and a significant reduction in a behavioral measure of fat consumption (0.24 point change in the FFB).

CONCLUSIONS: These four-month results are comparable to several other moderate-intensity studies showing that, in the appropriate circumstances, moderate-intensity dietary interventions can be efficacious. Study limitations include the short follow-up period and the use of self-reported outcome measures.

From Northern California:

Discontinuing or switching selective serotonin-reuptake inhibitors


OBJECTIVE: To describe reasons for discontinuing or switching selective serotonin-reuptake inhibitors (SSRIs) at three and six months after starting treatment, and to identify information provided to patients that may help prevent premature discontinuation of medication.

METHODS: Telephone surveys were conducted at three and six months after patients (n = 672) were started on an SSRI for a new or recurrent case of depression.

RESULTS: Significantly more patients discontinued or switched their SSRI because of an adverse effect within the first three months of starting (43%) compared with the second three months (27%; p = 0.023). The adverse effect most frequently reported as the reason for early discontinuation or switching was drowsiness/fatigue (10.2%), followed by anxiety, headache, and nausea—all at just over 5%. The odds ratio for discontinuation was 61% less in patients who recalled being told to take the medication for at least six months compared with those who did not (OR 0.39; p < 0.001). Patients who recalled being informed of potential adverse effects increased their reported incidence of mild to moderate adverse effects by 55% (OR 1.55; p < 0.05) without affecting rates of premature discontinuation (OR 1.06; p = 0.77).

CONCLUSIONS: Adverse effects are the most frequent reason for discontinuing or switching SSRIs within the first three months of treatment. Patients are more likely to continue taking their antidepressant if they fully understand how long to take the medication. Informing patients of potential adverse effects does not appear to prevent premature discontinuation, but may increase the patient’s awareness and reporting of mild to moderate adverse effects.

From Colorado:

Preeclampsia in multiple gestation: the role of assisted reproductive technologies


OBJECTIVE: To estimate the relationship of assisted reproductive technologies and ovulation-inducing drugs with preeclampsia in multiple gestations.

METHODS: This historical cohort study was conducted on 528 multiple gestations from a Colorado health maintenance organization. Using univariate and logistic regression analysis, we determined if women who conceived a multiple gestation as a result of assisted conception were at a greater risk of preeclampsia than those who conceived spontaneously.

RESULTS: Between January 1994 and November 2000, there were 330 unassisted and 198 assisted multiple gestations. Sixty-nine multiple gestations followed assisted reproductive technologies (in vitro fertilization and gamete intrafallopian transfer). Human menopausal gonadotropins and clomiphene citrate were associated with 38 and 91 of the multiple gestations, respectively. Compared with unassisted multiple gestations, the relative risk of mild or severe preeclampsia among mothers who received assisted reproductive technologies was 2.7 (95% confidence interval [CI] 1.7, 4.7) and 4.8 (CI 1.9, 11.6), respectively. Adjusted for maternal age and parity, women who received assisted reproductive technologies were two times more likely to develop preeclampsia (odds ratio 2.1, CI 1.1, 4.1) compared with those who conceived spontaneously. The adjusted odds ratios of nulliparity and maternal age for preeclampsia were 2.1 (CI 1.3, 3.4) and 1.1 (CI 1, 1.1), respectively. Although the incidence of preeclampsia was greater in mothers who received clomiphene citrate and human menopausal gonadotropins, this association did not reach statistical significance at the p < .05 level.

CONCLUSION: Women who conceive multiple gestations through assisted reproductive technologies have a 2.1-fold higher risk of preeclampsia than those who conceive spontaneously.


CLINICAL IMPLICATION: This study, distinguished by careful definition of preeclampsia and adjustment for the confounding effect of other risk factors, found that assisted reproductive technologies, nulliparity, and advancing maternal age were independent risk factors for preeclampsia. Furthermore, the risk of severe preeclampsia was increased almost fivefold among mothers receiving assisted reproductive technologies compared with mothers having unassisted multiple births. The results suggest that women with multiple gestations resulting from assisted reproductive technologies should be carefully monitored for preeclampsia by their health care providers.
The Perioperative Medicine Service: An Innovative Practice at Kaiser Bellflower Medical Center

By Marcus D Magallanes, MD

Abstract

Context: Perioperative medical care is widely recognized as an integral component of overall surgical case management. The perioperative medicine service at the Kaiser Permanente (KP) Medical Center in Bellflower, California (KPBF) was created to address major problems relating to medical preoperative evaluation and postoperative care, particularly for high-risk patients.

Objective: To illustrate successful, innovative practices implemented as functions of the newly formed perioperative medicine service at KPBF.

Design: Review of the genesis, structure, and beneficial outcomes of the perioperative medicine service.

Main Outcome Measures: Number of canceled surgical procedures and physician satisfaction.

Results: In 2000, the number of canceled surgical procedures was reduced by more than half compared with the number of cancellations during 1997. Surgeons, anesthesiologists, and primary care physicians expressed satisfaction with the new perioperative medicine service that led to this reduction.

Conclusion: The newly created perioperative medicine service at KPBF has been highly successful and may serve as a model of perioperative medical management for other KP facilities nationally.

Overview

Perioperative medicine addresses the medical care of the surgical patient and focuses on the patient’s status before, during, and after the actual surgical procedure. Perioperative medicine is not a subspecialty of medicine but rather a body of medical knowledge that enables physicians to manage medical illness during the perioperative period, assess operative risk, and respond to complications. The past two decades have seen burgeoning interest in perioperative medicine, an interest that has spawned medical research and an impressive collection of literature pertaining to this once-obscure topic, particularly with regard to surgery-related cardiopulmonary issues. Clearly, perioperative medical care is now well recognized as an integral component of overall case management for surgical patients. Furthermore, with regard to the patient’s ultimate outcome, the importance of perioperative medical care is widely appreciated by surgeons, anesthesiologists, and internists alike. To put things into perspective, the clinical significance of perioperative medical care is demonstrated by one older study, which showed that approximately 80% of postoperative deaths on the surgical service were attributable to underlying medical conditions, whereas only 20% of the deaths were due to surgery or anesthesia.

Medical Center Background

The Kaiser Permanente Bellflower Medical Center (KPBF) is a Southern California KP facility serving approximately 290,000 Health Plan members, for whom 750 to 1000 outpatient surgical procedures are scheduled each month. These members are outpatients when the procedure is scheduled, but many require postoperative hospitalization, and a few require preoperative admission. (I note that outpatient surgery nowadays is no longer synonymous with elective surgery.) All major surgical disciplines except neurosurgery and cardiac surgery are represented at KPBF.

Past Problems Requiring Solution

The previous system of outpatient preoperative assessment and management at KPBF was essentially identical to that of most other facilities, both KP and non-KP. Patients scheduled for surgery were referred to their primary care physician (or to a subspecialty service) for pre-
operative medical evaluation and “clearance” for surgery if the surgeon had specific concerns regarding underlying medical conditions. (The reality, of course, is that no one can clear a patient for surgery; instead, the duty is to evaluate the patient’s medical status, assess operative risk, and ensure medical optimization for surgery.) The previous system at KPBf manifested a number of problems, the most prominent of which was last-minute outpatient surgery cancellation. In 1997 alone, more than 800 scheduled surgical procedures were canceled on the day of surgery—equivalent to one month’s worth of surgical procedures. This circumstance resulted in completely lost time in the operating suite, a loss which had obvious financial impact as well as impact on surgical access. A subsequent case-by-case review of these cancellations showed that about half were due to unforeseen causes and were not preventable (ie, patient failed to keep the appointment, patient became ill with flu, or doctor became ill and thus had to postpone surgery); other cancellations were due to known patient conditions that were not addressed sufficiently before surgery (eg, congestive heart failure, chronic obstructive pulmonary disease, diabetes). This latter group of cancellations was felt to be preventable.

In addition, the previous system led to less objective problems: surgeons and anesthesiologists were dissatisfied with primary care practitioners’ preoperative assessment and preparation of patients with complex medical problems, and primary care physicians were frustrated by the difficulty of trying to perform adequate preoperative evaluation in their clinics with little background or training in perioperative medicine. There also existed inconsistent postoperative medical care for patients who remained in-house after surgery, particularly in high-risk cases.

The Solution: A Perioperative Medicine Service

These problems prompted the medicine and surgery departments at KPBf to combine their efforts and resources in search of a solution. The outcome was a novel concept: a perioperative medicine service whose primary goals were to evaluate and optimize high-risk cases preoperatively (thus minimizing last-minute surgery cancellation and lessening the burden on the primary care physicians) and to provide consistent in-house medical care for these same patients postoperatively. To achieve this result, the planned service would consist of an outpatient preoperative medicine clinic as well as inpatient perioperative follow-up and consultation.

Personnel for the service currently consists of one caseworker, one scheduler, and one physician (myself). The caseworker receives all requests from surgeons for medical preoperative evaluation and is in charge of arranging and following up any pending issues or studies before surgery. The scheduler makes appointments for the preoperative medicine clinic and conducts basic intake assessment of the patient by phone when assigning an appointment date. As the sole physician of the perioperative medicine service, I am staff for the preoperative clinic and provide inpatient follow-up and consultation. My background is in internal medicine with a one-year fellowship in general medicine consultation, focusing primarily on preoperative assessment and perioperative management. I have no clinical duties apart from the perioperative medicine service.

Results of Implementing the New Service

The outpatient preoperative referral and evaluation process for KPBf patients is completely centralized. All referrals are channeled through the preoperative medicine clinic, which became operational in May 1999. The primary care department has since been relieved of performing preoperative evaluation, and, in general, the primary care physicians have been pleased by this development. Surgeons and anesthesiologists invariably are more satisfied with the current system of outpatient preoperative evaluation and by postoperative inpatient follow-up. The number of scheduled surgical procedures canceled on the day of surgery has diminished markedly. In the year 2000, only 344 (3%) of 11,426 surgical procedures were documented as canceled on the scheduled day of surgery; this figure represents a reduction of more than half compared with 1997, when about the same number of surgical procedures were scheduled but more than 800 were canceled. (Rate of same-day cancellations for 2001—3%—was identical to the rate for 2000.)

The Preoperative Medicine Clinic

In general, the surgeon is the one who refers patients for preoperative medical evaluation. (A few referrals to the preoperative clinic come from anesthesiologists, primary care physicians, and subspecialists.) The referral process is simple: The surgeon writes “medicine preop” on the sur-
The perioperative medicine service: An innovative practice at Kaiser Bellflower Medical Center

... the perioperative service has both emphasized and advertised implementation of prophylactic beta-blocker therapy for surgical patients with clinically diagnosed coronary artery disease ...

Practice Tips

- Implement prophylactic beta-blocker therapy for surgical patients with clinically diagnosed coronary artery disease.
- Standardize the management of chronic anticoagulation for surgery for our outpatients.
- Institute a Medical Release for Dental Procedure form containing guidelines and recommendations.
- Implement preoperative evaluation protocols or low-risk surgical procedures or for patients at low surgical risk.

Inpatient Follow-up and Consultation

The inpatient service has been somewhat problematic, particularly given our high volume of surgical patients overall. Most of our hospitalized surgical patients have been admitted from the emergency department or urgently from various clinics; these patients are not the group who remain in the hospital postoperatively after having outpatient surgery performed. Because of inherent limitations to a one-physician service with major outpatient responsibilities, the role of the inpatient perioperative service has evolved mainly into follow-up care and medical management of patients who have been evaluated preoperatively by the preoperative clinic but require postoperative hospitalization. Otherwise, surgical patients who have been admitted to the hospital from the emergency department or urgently from a clinic and who require inpatient medical care are automatically assigned a medicine team that provides care jointly with the surgeon. (At KPBF, the medicine teams consist of hospitalists and rotating clinicians who see patients during hospital rounds.) Perioperative consultation can still be requested on any surgical inpatient and is used mainly to address particular perioperative problems or to assist with medically complex patients having major surgery.

Inpatient service has been advertised more than a year now, its standard of care at our institution just as it is nationwide. The Bellflower Perioperative Pocket Manual, a convenient inpatient guide to medical care of surgical patients, was locally produced in September 2000 and was widely disseminated to physicians at our medical center. This manual has proved to be a convenient, useful resource to surgeons, internists, and anesthesiologists. A second, updated edition is planned for 2002. A quick and easy Medical Release for Dental Procedure form has recently been made available to all our primary care clinics. The form contains guidelines and recommendations (ie, for use of local anesthetic, antibiotic, and anticoagulant medication) that are easy to scan and apply according to the patients’ diagnoses.

Inpatient Follow-up and Consultation

In the years 2000 and 2001, the preoperative clinic performed 1096 and 1067 evaluations respectively—figures which correspond to approximately 10% of surgical procedures scheduled during those years. The remaining 90% of scheduled surgical procedures were done on patients who did not require evaluation in the preoperative medicine clinic. For those patients, the required preoperative visit with the surgeon and the anesthesiologist was sufficient.

Special Projects of the Perioperative Medicine Service

A major benefit of having a dedicated perioperative service is its focus on improving hospitalwide perioperative care. To that end, several projects are in progress or have been completed at our medical center. For more than a year now, the perioperative service has both emphasized and advertised implementation of prophylactic beta-blocker therapy for surgical patients with clinically diagnosed coronary artery disease or with major risk factors for coronary artery disease. Prophylactic beta-blocker therapy is progressively becoming the standard of care at our institution just as it is nationwide.

Management of chronic anticoagulant therapy for surgery has been standardized for our outpatients, and guidelines for inpatient management are currently being distributed. The Bellflower Perioperative Pocket Manual, a convenient inpatient guide to medical care of surgical patients, was locally produced in September 2000 and was widely disseminated to physicians at our medical center. This manual has proved to be a convenient, useful resource to surgeons, internists, and anesthesiologists. A second, updated edition is planned for 2002. A quick and easy Medical Release for Dental Procedure form has recently been made available to all our primary care clinics. The form contains guidelines and recommendations (ie, for use of local anesthetic, antibiotic, and anticoagulant medication) that are easy to scan and apply according to the patients’ diagnoses.

Outpatient preoperative evaluation done by the use of protocol (ie, not requiring an actual clinic visit) has now been implemented successfully for two years. The protocols are designed specifically for low-risk surgical procedures (eg, cataract surgery, procedures for foot or ankle) or for patients at low surgical risk (for example, those with hypertension, obesity, or hypothyroidism but no...
other major surgical risk factors). I initially screen all referrals to the perioperative clinic by reviewing computer-listed diagnoses and medical transcriptions; cases categorized as low-risk on the basis of patient characteristics and type of surgery are referred to the caseworker, who in turn interviews the patient by phone. I do the final chart review and assessment and make recommendations; these activities complete the protocol-based process. Retrospective review of more than 200 protocol-based cases, done from November 1999 to November 2000, found the process safe and reliable with no documented problems related to the protocol process itself. Nearly 20% of all preoperative evaluations done by the preoperative clinic are protocol-based, and this process has both saved time and improved clinic access without compromising patient care.

**Conclusion**

The perioperative medicine service at KPBF has been a successful, innovative practice. This article elucidates the genesis, structure, and benefits of this novel service, particularly for other KP medical centers which may have the same problems as encountered at KPBF before inception of the service. In my opinion, the system within which we, as Kaiser Permanente physicians, work is ideal for such a service, particularly given three factors: our available informational infrastructure; our familiarity and working relationships with surgeons and anesthesiologists within the same medical center; and our essentially enclosed patient referral base. To create such a service is certainly not an easy task; it requires collaboration between both the medicine and surgery departments as well as ultimate buy-in from anesthesiology. However, the beneficial outcome of creating a perioperative medicine service will more than likely be worth the effort.

**Acknowledgments**

David Liem, MD, *Internal Medicine*, and William Buchanan, MD, *Orthopedics*, were instrumental in creating the perioperative medicine service at Bellflower and assisted with preparing the final draft of this paper and its review. Kim E Kaiser, MHA, Department Administrator for the Surgical Service, provided background data and review. Joyce Shaw, RN, BSN, caseworker, and Estella Corral, Case Manager/Scheduler, have provided key assistance for the perioperative medicine service since its inception.

**References**

Exceeding Patients’ Expectations for Culturally Competent Care

A clinician who develops trusting, mutually cooperative relationships with patients increases patient adherence to treatment plans, patient satisfaction, and likelihood of improved health outcomes. Because culture shapes health care beliefs, health behaviors, and expectations for health care experience, understanding the role of culture can contribute to the clinician-patient relationship; and thus, to the delivery of quality care and clinical effectiveness. Culturally competent care can enhance clinician-patient communication and create an atmosphere of shared decision making.

Some important factors that influence health care beliefs and practices include place of birth, primary language spoken, immigrant status, and religious background. Questions specific to health care treatment and affected by cultural influences include:

- What has the patient already done?
- Who does the patient trust with primary health care: a primary care physician, a traditional healer, or an osteopathic doctor?
- What are the patient's health care beliefs, expectations of the clinician and of the treatment, and desires/preferences for treatment?

How Does a Clinician Obtain all this Information?

The Culturally Competent Care Pocket Card, included in this issue of The Permanente Journal, is a portable point-of-care tool that guides clinicians through a set of questions that integrate these cultural factors into a patient visit. The pocket card defines culturally competent care and suggests ways to help build culturally competent knowledge and skills. Tips include:

- How to identify the patient's linguistic needs, oral and written.
- How to elicit the patient’s feelings/beliefs about the illness, treatments already tried, and preferences for learning approaches.
- How to create a mutually accepted treatment plan.
- How to work with interpreters.

The pocket card contains information about cultural differences in:

- communication
- religion
- folk medicine
- dietary practices
- health beliefs
- end-of-life decision making

The pocket card is an evidence-based, practical synthesis of best practices and current knowledge in culturally competent care, developed jointly by the Care Management Institute (CMI) and the Institute for Culturally Competent Care (ICCC). The National Diversity Council’s culturally competent care handbooks, a resource and organizing tool for the pocket card, can be accessed online at: http://kpnet.kp.org/national/diversity.

CMI and the ICCC offer the Culturally Competent Care Pocket Card as a tool to improve the clinician-patient relationship and to exceed patients’ expectations for high quality, patient-centered care.

The following is a partial bibliography for the pocket card development:

- The development of the handbooks included a broad literature review of medical and other health-related journals and state and federal publications on health.
A Monk Meditating on Sutra
By Masatoshi Yamanaka, MD

This woodcarving, mounted on alderwood, was created from a piece of white oak picked up as firewood. The Chinese characters are copied from “The Great Prajna-Paramita Heart Sutra,” a widely chanted sutra in the Buddhist canon. The translation is: “Shariputra, all things are essentially empty; not born, not destroyed; not stained, not pure; without loss, without gain.”

Masatoshi Yamanaka, MD, is an Orthopedic Surgeon at the Skyline Medical Office in Salem, Oregon. He is also a woodcarver and recently won a blue ribbon at the Oregon State Fair.
How Do We Care for Ourselves?

Introduction
A physician in our group died.
That in itself is not surprising; every one of us will. But when a colleague dies, it’s a little more personal. Perhaps we see ourselves in that physician; we think about our own mortality. Could we have done something for that person? Can we do something for ourselves?

How Do We Come to Make Choices About Self-care?
Selflessness is a personality trait of most physicians. We have extraordinary demands from our work. The coordination of patient care, the communication between physicians, the number of patients on our panel all speak to how we care, how we have decided to go into a field where caregiving takes precedence over almost anything. Physicians often place the needs of every patient before their own. We give up sleep in residency, give up evenings and nights for our call schedules, give up concentrating on eating lunch, and give up our own nights with our families for administrative meetings. Slowly, the accolades of a dedicated physician at work lure us into giving more time to work. We give up the necessities of sleep, play, and even give up taking care of our own health. In medical school and residency, we were trained to deny our own needs and desires. Another important meeting at night? It will be all right, we tell ourselves. Don’t have time for lunch? It will be OK. It happens to many physicians; we give up caring for ourselves in order to serve the group.

Why Are We Often Not Good Caregivers for Ourselves?
More often than not, we are not good caregivers to ourselves. We do not tend to take time off to get a checkup, to do a cholesterol test, to assess our own well-being. We often feel overwhelmed, overworked, even sometimes burned out. We feel guilty about ignoring what the patient demands of us to do a checkup, to deliver a cholesterol test, to assess our own well-being. Our profession, our physician culture, does not promote self-care. Our medical groups often promote physicians who are obsessive workers to positions of prominence as physician-leaders or administrators. They are respected by top administrators. By promoting the overachievers and compulsive workers, we are, in effect, saying that they are the models of behavior for all physicians. In this day of population management of diabetic, asthmatic, and congestive heart failure patients, are we ignoring a very important patient population—us? Many of us do not promote evidence-based self-care for ourselves. In a time when member access is of great importance, self-care often becomes secondary. Do we have our priorities straight?

What Can We Do to Help Ourselves?
Fellow physicians and health care clinicians, before our medical groups sort this out, take some time to do some self-care by going to see your own doctor. Go through some of the evidence-based exams that we so vehemently insist our patients do. I urge you also to remember your colleagues, who may someday become your patients. Seek them out, ask them to come in, establish that clinician-patient relationship, and care for them. It’s all right to add some pages to your medical records in the fond memory of that colleague who has just died.

Bibliography

Edward C Wang, MD, is an Internal Medicine physician at Woodland Hills Kaiser Permanente Medical Center in Southern California. He is the chair of the Southern California Clinician-Patient Communication Committee and is very involved in the wellness of physicians in the region. E-mail: Edward.C.Wang@kp.org.
Abdominal Cutaneous Nerve Entrapment Syndrome (ACNES): A Commonly Overlooked Cause of Abdominal Pain

By William V Applegate, MD, FABFP

Introduction
Abdominal cutaneous nerve entrapment syndrome (ACNES) may sound like an esoteric condition rarely seen by clinicians but is a common condition. When a patient is seen for abdominal pain without other clinically significant symptoms, ACNES should be high on the list of likely diagnoses.

Beginning in 1792 with J P Frank’s description of the condition he named “peritonitis muscularis,” a sampling of pertinent medical literature on this subject shows how often the subject has been written about over the years. These articles state that abdominal wall pain is often wrongly attributed to intra-abdominal disorders and that this misdiagnosed condition can lead to unnecessary consultation, testing, and even abdominal surgery, all of which can be avoided if the initial examiner makes the right diagnosis. In a study of 117 patients in 1999, Greenbaum estimated that the amount of money expended on unnecessary workup was $914 per patient. In 2001, Thompson et al noted that an average of $6727 per patient was required for previous diagnostic testing and hospital charges. Hershfield listed preliminary diagnoses of patients referred to him as irritable bowel, spasitic colon, gastritis, psychoneurosis, depression, anxiety, hysteria, and malingering. Many of these patients were given a psychiatric diagnosis when the actual diagnosis could not be determined. In fact, the most common cause of abdominal wall pain is nerve entrapment at the lateral border of the rectus abdominis muscle. Carnett, in the early 20th century, called this syndrome “intercostal neuralgia” and claimed to have seen three patients per week with this diagnosis and as many as three per day in consultation sessions. In my own primary care practice, I have seen one or two patients with this diagnosis for every 150 patients overall but have seen as many as three such patients per consultation session in a busy evening clinic where 15 or more clinicians were on duty.

Acute cases of ACNES are usually seen in the evening, especially in spring and summer, when people are more active. Chronic and recurrent cases are more likely to be seen in the daytime throughout the year.

To avoid causing the patient unnecessary anxiety and tension, loss of work time, and both the expense and possible hazard of multiple diagnostic procedures, the first physician examining the patient must establish the diagnosis of ACNES if this condition is present. Compiled from my own experience and that of other investigators who have written about ACNES, the information presented here should give readers the tools necessary for diagnosing and treating this condition.

Pathophysiology of ACNES
Kopell and Thompson stated that peripheral nerve entrapment occurs at anatomic sites where the nerve changes direction to enter a fibrous or osseofibrous tunnel or where the nerve passes over a fibrous or muscular band and that entrapment can be at these sites because mechanically induced irritation is most likely to occur at these locations. Muscle contraction at these sites may add additional insult by direct compression, although I believe that traction on the nerve from muscle activity also is likely. Mechanical irritation causes localized swelling that may injure the nerve directly or compromise the nerve’s circulation. Tenderness of the main nerve trunk may be found proximal or distal to the affected portion (Valleix phenomenon). Proximal tenderness may result from vascular spasm or from unnatural traction.
on the nerve trunk against the point of entrapment. In ACNES, all these mechanisms can be at work.

**Anatomy Pertinent to ACNES**

The thoracoabdominal nerves, which terminate as the cutaneous nerves, are anchored at six points (Figure 1): 1) the spinal cord; 2) the point at which the posterior branch originates; 3) the point at which the lateral branch originates; 4) the point at which the anterior branch makes a nearly 90° turn to enter the rectus channel; 5) the point from which accessory branches are given off in the rectus channel, shown (although not labeled) in previously published microphotographs; and 6) skin.

The most common cause of abdominal wall pain is nerve entrapment at the lateral border of the rectus muscle. In the rectus channel, the nerve and its vessels are surrounded by fat and connective tissue that bind the nerve, artery, and vein into a discrete bundle capable of functioning as a unit independently from surrounding tissue. At a point located about three quarters of the way through the rectus muscle (from back to front), there is a fibrous ring that provides a smooth surface through which the bundle can slide. Positioned anterior to the ring, the rectus aponeurosis provides a hiatus for the exiting bundle.

The hypothesis that nerve ischemia is caused by localized compression of the nerve at the level of the ring is deduced from juxtaposition of the soft bundle to the hard ring. Herniation of the bundle through the ring due to too much pressure from behind or from pulling from in front will compress the bundle’s vessels and the nerve itself. Too much traction on the bundle from behind or from pulling in front will cause the bundle to be “strummed” against the ring, which then causes irritation and swelling even before herniation occurs.

Anything that increases pressure behind the abdominal wall can cause the bundle to herniate through the fibrous ring and aponeurotic opening. Use of the abdominal muscles can add additional insult. Enlargement of the abdomen from any cause will put the nerves under greater traction. Scar or suture around the nerve in front of the rectus can directly compress the nerve or place it under further traction. Disparate motion between skin and muscle will aggravate this situation. Although any main branch of the nerve may become symptomatic, the anterior branches are most likely to be affected, because stretching of the nerve is greatest at the point most distant from its origin (ie, the spinal cord). Because the anterior branches enter the back of the muscle at nearly a right angle, they are more susceptible to mechanical irritation than are the posterior and lateral branches, which enter the muscle at a more oblique angle. Lateral branches are affected by lateral bending and twisting of the trunk; posterior branches are affected by bending, lifting, and twisting. Accessory branches perforate the muscle wall above and below the main branches but also exit from adjacent muscle mass. These branches are difficult to palpate unless symptomatic and tender to touch.

**Diagnosing ACNES**

**Clinical Presentation**

Symptoms of ACNES can be acute or chronic. The acute pain is described as localized, dull, or burning, with a sharp component (usually on one side) radiating horizontally in the upper half of the abdomen and obliquely downward in the lower abdomen. The pain may radiate when the patient twists, bends, or sits up. Lying down may help but sometimes worsens the pain. Younger people, who are usually more physically active than older persons, are more often seen for the first episode of acute pain. The pain may have started during the night but did not cause these patients to miss work the next morning. Nonetheless, they come to the evening clinic because the pain persists, worsens, and causes them to be afraid that they won’t be able to work the next day. Young women often express concern about their “ovaries,” “kidneys” (the bladder is meant), or both.

Brief discussion of the ovarian complaint here is important because it occurs frequently and is the predominant initial reason for women with ACNES to be seen in the clinic. Concern about their gonads is uppermost in the minds of young people who have re-
cently matured sexually. Because the testicles are located in the externally positioned scrotal sac, men have the advantage of being able to examine their testicles easily, whereas women’s ovaries, being located inside the abdomen, are inaccessible to examination except by medical personnel. Consequently, women may attribute any abdominal complaint to an ovarian disorder until a different cause of pain is shown. Given a chief complaint of “pain in the ovary,” the examiner should certainly examine the ovaries but should remember that this is often the way ACNES clinically manifests itself.

Unfortunately, women are not the only ones to attribute abdominal pain to gynecologic pathology when the source of pain is actually in the abdominal wall. Noting that between 30% and 76% of diagnostic laparoscopic procedures done for pelvic pain show normal tissues, Slocumb20 expressed concern about surgical exploration with removal of pelvic structures for normal variants in women with chronic pelvic pain when the problem was actually traceable to the abdominal wall. One of my patients was a woman who had surgery first for “ovarian cyst” and then for “adhesions” but still complained of the same pain, which, I discovered, was caused by ACNES. A study of 120 emergency admissions to the hospital for abdominal pain21 showed that 23 of 24 patients who had abdominal surgery with a positive Carnett’s sign (see below) had no intra-abdominal disorder; instead, the pain was traced to the abdominal wall.

Young men with ACNES are often seen in the daytime for a chief complaint of “hernia” or “ulcer,” complaints considered more common in men. Older men and women may express concern about cancer (not an unreasonable concern among seniors). These patients may need further examination, even if ACNES caused the pain that brought them to the doctor. A history of multiple abdominal operations should raise suspicion about ACNES. Finding several surgical scars on the abdomen should alert the examiner to this possibility.

Chronic complaints due to ACNES are usually seen during the day in older patients. Medical history in these patients shows that acute exacerbation of pain may occur over several days or weeks and then disappear for varying lengths of time, sometimes for years. One of my male patients with ACNES reported that he had pain intermittently for 47 years. He had long ago decided that the pain was of no great consequence but was happy to hear my explanation of its cause. If a patient says, “I have this pain in my stomach, and nobody seems able to find the cause,” the examiner should immediately think of ACNES.

ACNES-related pain is well localized and usually affects only one side. However, the pain can occur on both sides at the same level (usually in the lower abdomen), or more than one nerve can be affected on opposite sides and at different levels. Pain radiating into the scrotum or vulva suggests involvement at the T12/L1 level, but inguinal or femoral hernia and pain arising from the adductor muscles of the thigh must be ruled out. Pain and tenderness posterolaterally just below the iliac crest can occur with involvement at the T12/L1 level. This finding is useful because it is present with abdominal wall pain but is absent if the pain arises from inside the abdomen. Pain radiating from T11 and T12 runs at an oblique angle and follows the course of these nerves. Such pain can suggest urolithiasis; however, patients with urolithiasis are usually seen writhing in pain, whereas patients with ACNES tend to lie quietly on the table with their hand placed over the area of discomfort. T11 involvement on the right side may suggest appendicitis, and involvement on either side may suggest ovarian involvement or spigelian hernia; all these conditions should be identified by proper physical examination. Pain on the right side at the T8 or T9 level may suggest cholecystitis or peptic ulcer; however, as Carnett3 has suggested, deep tenderness is not detected without peritoneal involvement. Pain at the T6, T7, or T8 levels can suggest pleurisy, costochondritis, or slipping rib syndrome (which is probably a form of ACNES caused by traction). Pain and numbness laterally in the thigh and hip may be caused by meralgia paresthetica, mentioned here as a matter of interest because it is also caused by nerve entrapment; in this case, the lateral femoral cutaneous nerve is entrapped between the iliac ligament and the anterosuperior aspect of the iliac spine.13 For a complete list of conditions other than ACNES that can cause abdominal wall pain, the reader is referred to Carnett,1 Hershfield,6 Suleiman and Johnston,9 Gallegos and Robsley,17 and Greenbaum.22

Chronic ACNES patients suffer considerable anxiety and worry that they may have some horrible condition ...
tranquilizers, muscle relaxants, or pain relievers. Such a medical history should raise the question of ACNES.

**Physical Examination**

A suggestive medical history should direct the examiner to precisely locate the tender spot by asking the patient, “Where exactly is the pain?” The patient usually responds by placing several fingers over the area, whereupon the examiner says, “Show me with one finger.” As patients place a fingertip on the exact spot, pushing a little harder to find it, they usually say, “Right here!” and flinch as the tender spot is pressed.

To proceed beyond this point in the examination, the examiner must be familiar with the exact location of each neuromuscular foramen. To do this, the examiner should practice finding these depressions on his or her own abdomen and on someone else. In addition, each time a patient’s abdomen is examined for any reason, the examiner should feel for these aponeurotic openings; their size differs widely among persons. Larger openings, usually found in obese patients, are easier to palpate and provide familiarity with the feel of a foramen so that the examiner will know what to look for when presented with smaller dimensions in another patient.

The anterior exits are easiest to feel and are often best felt with the patient standing and pushing the abdomen out: T10 is at the lateral edge of the rectus margin at the level of the umbilicus; T12/L1 is at the level of the internal inguinal ring; and T11 is halfway between T10 and T12/L1 at the rectus margin, which is closer to the midline for these last two points. T8 is at the junction of the rib margin (eighth rib) and the lateral rectus; and T9 is halfway between T8 and T10. T6 and T7 are located where their respective ribs meet the edge of the rectus muscle.

The lateral muscular foramen are more difficult to palpate and are most easily felt with the patient leaning away from the side being palpated. Firmer pressure with the finger is required. These openings are in the vertical groove found at the junction between the back and abdominal muscles. Lateral T10 is located at the point where the 10th rib meets the groove. Lateral L1 can be felt in the groove just above the iliac crest, and the other two lateral branches are in the groove between T10 and L1. The examiner should not be discouraged if finding such a foramen seems difficult; they are easier to find when they are symptomatic.

Posterior foramina are found in the groove between the paravertebral muscles and the more lateral back muscles. These, too, are more difficult to palpate, but the muscular depression at that site is easier to find when it is associated with symptoms and localized tenderness.

A description of how the anterior foramina actually feels will help examiners to find them. Approaching the opening with the hand resting lightly on the abdomen from the lateral side, the middle fingertip is moved over the rounded edge of the rectus, where the examiner may feel an oval-shaped depression oriented horizontally but sloped posteriorly on the edge of the rectus at levels T8 through T12/L1. As pressure from the straight finger tuft is gradually increased, the examiner feels, in order: 1) firm skin; 2) spongy-textured subcutaneous fat; 3) the oval, firm ring of the aponeurosis containing a morbilliform mass of fat (the fatty plug); and 4) deep to these structures, the firm, round ring which prevents further invasion of the channel. The aponeurotic openings for these nerves may vary in size from that which barely admits the tip of the finger tuft to a size that allows placement of the entire finger tuft into the depression. The ring felt deep in the channel may feel too tough to push beyond. The fatty plug varies in size from 2 mm to 2 cm, depending on how dilated the aponeurotic openings have become. In practical terms, it is the aponeurotic openings and enclosed fatty plug that are most easily distinguished from surrounding tissue. These fatty plugs can often be pal-
Abdominal Cutaneous Nerve Entrapment Syndrome ACNES: A Commonly Overlooked Cause of Abdominal Pain

Pain in the abdominal wall, splinting the muscles will not reduce the pain and may actually increase it. Practically, if the area of tenderness can be localized to one of the palpably identifiable nerve exits, these other tests (with the possible exception of Carnett’s sign) are probably only of academic interest.

Having come this far in the examination, if either the patient or the examiner needs further convincing of the ACNES diagnosis, local injection of an anesthetic agent is appropriate (described later under “Treatment”). Complete relief of pain by the anesthetic agent establishes the diagnosis.

**Recommended Treatment for ACNES**

A properly administered local injection of an anesthetic agent completely relieves the pain of ACNES. Technique is critical for both diagnosis and treatment, and the tendency is to inject too deeply.

The patient is given an injection of .5 mL to 1 mL of a 2% lidocaine solution (or its equivalent) using a #21 or #22 needle of length appropriate for the thickness of the subcutaneous tissue present. A needle of this size best allows the clinician to feel the anatomic landmarks while administering the injection, but a #25 or #26 needle can be used if the clinician is sufficiently familiar with the landmarks. For patients with a thick layer of adipose tissue, a spinal needle may be needed to reach the front of the muscle.

The injection serves two purposes: to relieve pain and to reduce herniation of the neurovascular bundle through the fibrous ring. Sequentially as the needle is introduced, the clinician feels resistance to the needle from the patient’s skin, the nonresistant texture of the subcutaneous fat, and then mild resistance to the needle from the aponeurosis and fatty plug. (The needle should not be introduced deeper than this level; deeper injection can cause ecchymosis and may increase pressure on the neurovascular bundle in an already tight fibromuscular channel.) At this point, the needle should already be in the center of the channel and fatty plug and just beneath the aponeurosis. If the examiner is unsure that the needle is positioned correctly, it may be pulled back into the subcutaneous fat to prepare for another attempt at placing the tip of the needle beneath the structures in front of the fibrous ring.

As mentioned above, landmarks of the pertinent structures can best be felt with the patient standing and bearing down, and the injection can be given in this position. However, if the patient is more comfortable lying down, the injection may alternatively be given in this position.

To be sure the needle is positioned precisely (Figure 3) at the correct place for injection, the examiner should...
first place the middle finger of one hand in the aponeurotic opening and then, without lifting the finger off the skin, move the fingertip inferiorly, cleanse the skin with alcohol using the other hand, and with that hand introduce the needle above the tip of the examining finger. When the needle is properly situated beneath the aponeurosis, the clinician stabilizes the syringe for injection by gripping it using the same hand used to locate the opening. The patient should be asked not to breathe during aspiration and injection. These instructions may seem rudimentary; however, if followed exactly, they will guarantee success in diagnosing and treating ACNES.

A patient who feels faint after receiving the injection should be allowed to lie down until s/he feels better; otherwise, the patient should be encouraged to move about the room. When the syringe has been disposed of and the patient has taken a few steps, the clinician should ask if the patient still feels pain. If the injection has been effective, patients often volunteer, with a look of amazement on their faces, “It’s gone!” Clinical response sometimes takes more time than this if the injection has been made slightly off the locus. If the response is mediocre and the clinician suspects the reason may be because the injection was not placed accurately, a second injection may be attempted after about ten minutes or on another day. Occasionally, a patient reports relief from pain upon arriving home. In such circumstances, a patient should be encouraged to return to the clinic if the pain recurs or if new symptoms arise.

Mehta5 and McGrady15 used a Teflon-coated needle with exposed tip to locate the nerve by electrical stimulation. I tried this technique with several patients and found the procedure cumbersome and time-consuming. After learning to locate the nerve as described here, clinicians can place the injection accurately in minutes without using a nerve locator.

In many patients, one injection gives prolonged relief or may sufficiently reassure younger patients that the condition is benign and will not require another visit unless another injection is needed for pain relief. Older persons should be advised to return whenever the pain recurs or when other symptoms develop so that underlying causes can be addressed if necessary. Because repeat injection requires only a few minutes in patients who have already been evaluated, these patients may often be scheduled for a same-day appointment, even to evaluate new associated symptoms. An alternative is to schedule three return appointments a few days apart, a tactic that gives patients the option to cancel the appointment if they do not think they need it. Some patients need multiple injections to eliminate the pain completely, but these patients seldom need more than four or five injections. Each injection should provide relief for a longer and longer time until no more are needed. For patients who tolerate local anesthesia well but must return every few weeks for another injection, alternative regimens are available.

The clinician must first decide whether further evaluation is justified. Does the patient have musculoskeletal conditions (eg, scoliosis or one short leg) that might subject a particular nerve to undue traction? Especially in older patients, are underlying medical problems causing abdominal enlargement? If for any reason the pain is recurrent or persistent, it can be treated by destroying the symptomatic portion of the nerve. Some patients with ACNES have nerve entrapment in an abdominal scar.6,16-18 Excising this part of the scar or removing the suture from around the nerve may solve the problem by two mechanisms: 1) relief of direct compression of the nerve and 2) relief of dis-
Abdominal Cutaneous Nerve Entrapment Syndrome (ACNES) is a commonly overlooked cause of abdominal pain. Almost everyone has written about abdominal wall pain overlooks the diagnosis of ACNES. The condition is diagnosed and treated by local anesthetic injection into the muscular channel through which the affected nerve passes. Precise application of an ice cube in a thin washrag can help by acting as a local anesthetic and by reducing swelling around the nerve. Application of an elastic bandage for counterpressure may be helpful. Heat applications may relieve associated muscle spasm.

**Practice Tips**

- The most common cause of abdominal wall pain is nerve entrapment at the lateral border of the rectus muscle.
- Ask the patient, “Where exactly is the pain?” “Show me with one finger.”
- Diagnosed and treated by local anesthetic injection into the muscular channel through which the affected nerve passes.
- The injection serves two purposes: to relieve pain and to reduce herniation of the neurovascular bundle through the fibrous ring.
- Precise application of an ice cube in a thin washrag can help by acting as a local anesthetic and by reducing swelling around the nerve.
- Application of an elastic bandage for counterpressure may be helpful.
- Heat applications may relieve associated muscle spasm.

Almost everyone who has written about abdominal wall pain overlooks the diagnosis of ACNES ...

In 1926, Carnett called this condition “intercostal neuralgia.” However, recent studies of the anatomy and histopathology of this condition indicated that it is not so much an inflammatory condition as a matter of nerve entrapment. Accordingly, I prefer the name abdominal cutaneous nerve entrapment syndrome (ACNES). This condition is diagnosed and treated by local anesthetic injection into the muscular channel through which the affected nerve passes. This article discusses in detail how to identify the muscular neuroforamina by palpation as well as the specific technique for injecting them.
Almost everyone who has written about abdominal wall pain overlooks the diagnosis of ACNES while admonishing the medical profession against subjecting patients to unnecessary tests, but each writer also says that if a patient does not respond to the usual treatments, the patient should be further evaluated for underlying contributing causes. This instruction is particularly important for older patients. Diagnostic procedures for these patients are ultimately a matter of clinical judgment, but certainly clinicians and patients can be spared much trouble if the diagnosis of ACNES is established at the first visit. The information given in this article should make that early diagnosis of ACNES possible. Srinivasan and Greenbaum feel that an ACNES patient monitored very closely for three months without convincing evidence that local anesthetic injection or other treatment has really helped should receive further study for visceral disease. Obviously, if new symptoms arise suggesting visceral disease, further diagnostic evaluation is justified at any time even though the treatment for ACNES seems to be effective.

Acknowledgments

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Juan Domingo provided original adaptations of the illustrations.

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4. Mehta M, Ranger I. Persistent abdominal pain. Treatment has really helped should receive further study for visceral disease. Obviously, if new symptoms arise suggesting visceral disease, further diagnostic evaluation is justified at any time even though the treatment for ACNES seems to be effective.

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Evidence-Based Clinical Vignettes from the Care Management Institute:

Diabetes Mellitus

Introduction

Patients with diabetes mellitus comprise 7% of Kaiser Permanente (KP) nationwide membership. However, because complications accompany the disease, patients with diabetes account for a disproportionately increased share of medical expenditures. In the KP Northern California Region, patients with diabetes use 2.4 times more medical resources than patients without diabetes. Cardiovascular complications of diabetes are particularly excessive and devastating. In the KP Northwest Region, macrovascular complications account for 62% to 89% of the cost associated with inpatient treatment of diabetes-related complications. KP members with diabetes are admitted to the hospital for myocardial infarction at a rate of 18.5 admissions per 1000 members compared with a rate of 6.6 admissions per 1000 members without diabetes. This difference between members with diabetes and members without diabetes has increased in the past two years. Historically, treatment of diabetes emphasized control of blood glucose level. However, recent studies have shown that glucose control alone does not have a statistically significant effect on preventing cardiovascular disease (CVD), although the trend for successful prevention of CVD is in a positive direction.

This article, part of a series highlighting key aspects of guidelines and care programs from the KP Care Management Institute (CMI), is an overview of part of the recently completed Evidence-based Guidelines and Technical Review for the Management of Diabetes Mellitus. Members of the committee that assembled these guidelines are listed in Table 1. One section of the guidelines is devoted to CVD prevention and discusses the evidence supporting seven interventions proven to decrease macrovascular complications of diabetes. The clinical practice guidelines are available through the CMI product line at 510-271-6426, CMIproducts@kp.org, or http://pcp.kp.org.

Case Study: Dan’s Devastating News

During what he thought was to be a routine office visit, Dan learned he had diabetes. Dan was instantly devastated—after all, he was only 55 years old—but then recalled that his father was diagnosed with diabetes at age 52 years. His father’s diagnosis was quickly followed by onset of hypertension, a heart attack, congestive heart failure, and, finally, death from a stroke (at age 58 years). Equally disconcerting to Dan was the fact that three of his uncles had diabetes and that, despite good control of their blood glucose levels, all three died of similar complications before age 60 years.

Dan’s doctor told him that his blood sugar was 300 mg/dL (16.65 mmol/L) and that his was overweight at 240 lb (108 kg). Dan also learned his blood pressure was elevated at 150/90 mm Hg, his LDL cholesterol level was high at 160 mg/dL (4.14 mmol/L), and his HDL cholesterol level was low at 35 mg/dL (0.91 mmol/L). In addition, although he tried many times to quit, Dan still smoked. Dan’s doctor told him that he had a high risk of having a heart attack, stroke, cardiac surgery, or hospitalization in the next ten years.

The doctor said other things, but Dan couldn’t remember anything else. A feeling of hopelessness overwhelmed him. He felt that he would inevitably follow in his father’s footsteps.

What Dan did not yet know was that if he used an appropriate diet, exercise, and several commonly used medications, he
Evidence-Based Clinical Vignettes from the Care Management Institute: Diabetes Mellitus

could take control of his diabetes and would probably proceed down a markedly altered path from that of his father.

Calculating Dan’s Risk for CVD Events: “High Risk” as Defined Using The Framingham and HOPE Data

Which patients with diabetes have the highest risk for heart disease? The CMI diabetes guidelines recognize that not every type of treatment for CVD reduction can be given to all patients with diabetes; treatment risks, side effects, compliance with medical follow-up and medication regimen, and resource limitations preclude such uniform treatment. However, assessing CVD risk in each patient with diabetes and targeting for treatment those patients at “high risk” (these patients stand to benefit the most from preventive therapy) constitutes a logical, practical approach to population-based diabetes care.

The Southern California Permanente Medical Group guidelines use the classic Framingham formula to calculate risk of a CVD event (eg, heart attack, stroke, or hospitalization). At the time and place of the office visit, most KP clinicians already have the data needed to determine this risk (Table 2). These data are used in a formula to calculate risk (expressed as a percentage) of a CVD event occurring during the next ten years. Different methods are available for accessing tools to calculate this risk. One such method is to use the Intranet at the Web site http://kpnet.kp.org/california/scpmg/CPG/images/Dyslipidemia.pdf, where the formula to calculate this risk is available (Figure 1). The CMI diabetes guidelines define “high cardiovascular risk” as ≥20% ten-year risk of having a CVD event. Alternatively, high risk may be defined by the criteria used in the HOPE study:

- Patients with known CVD or patients with diabetes aged ≥55 years who have one of the following additional CVD risk factors: hypertension; total cholesterol level of >200 mg/dL (>5.17 mmol/L) or LDL cholesterol >130 mg/dL (3.36 mmol/L); HDL cholesterol level <35 mg/dL (<0.91 mmol/L); or being a smoker.

To calculate Dan’s ten-year risk for CVD by using the table shown in Figure 1, first scan the top rows of the table (choose the table for males) to find Dan’s age (55 years), LDL cholesterol level (160 mg/dL [4.14 mmol/L]), and HDL cholesterol level (35 mg/dL [0.91 mmol/L]). Next, using the risk factors in the left-hand column, find the cell that reflects a hypertensive smoker with diabetes; this cell is found at the bottom of that HDL column. The table shows that Dan’s risk of having a CVD event in the next ten years is 36%. Dan would have reason to be depressed about such news if it were not for the powerful tools that are available that may literally make a life-or-death difference to him.

Preventing CVD is as Simple as AABBCC’S

A convenient way to recall seven types of CVD prevention treatment is to use a memory cue, the AABBCC’s (Table 3): aspirin; angiotensin-converting enzyme inhibitors (ACE-I); blood pressure level; beta-adrenergic blocking drugs (beta blockers); treatment for cholesterol and dyslipidemia; glucose control with metformin; and smoking cessation.

<table>
<thead>
<tr>
<th>Table 2. Major risk factors for cardiovascular disease (CVD)</th>
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<tbody>
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<td>Age</td>
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</table>

A: Aspirin

The CMI diabetes guidelines state that patients with diabetes and a ≥10% ten-year risk of CVD events should be treated with ≥75 mg/dL of aspirin. For patients at lower CVD risk, the CMI diabetes guidelines workgroup decided that the potential risks for aspirin-induced bleeding outweighed the proven benefit of aspirin therapy for CVD.

Key support for this conclusion is provided by a meta-analysis of “high-risk” patients with diabetes (most of whom have established CVD) treated with aspirin vs placebo: That analysis showed a decline of 16% in CVD events in the treated group (absolute risk reduction [ARR] = 2%, number needed to treat [NNT] = 50). The appropriate age to start aspirin therapy is not established; however, the consensus recommendation of the guidelines workgroup is to start aspirin therapy in patients with diabetes excluding patients with low CVD risk (<10%).

B: Blood Pressure Control

The CMI diabetes guidelines recommend initiating antihypertensive therapy in patients with diabetes who have systolic blood pressure level ≥140 mm Hg, diastolic blood pressure level ≥85-90 mm Hg, or both. The target blood pressure level is 130/80 mm Hg. ACE inhibitors are the recommended first-line antihypertensive therapy, but other antihypertensive medication may be needed for optimal control. A simple way to remember the types of blood pressure treatment documented as effective in CVD prevention is another ABC memory guide: ACE-I, Beta blocker, and hydrochlorothiazide (HCTZ).

One large study, the United Kingdom Prospective Diabetes Study (UKPDS), showed that people with diabetes who were treated with either an ACE inhibitor or beta blocker had a 44%
decline in incidence of stroke (ARR = 3.7%, NNT = 27) and in incidence of myocardial infarction (ARR = 7%, NNT = 14) as well as a 24% decline in any diabetes endpoint (i.e., stroke, myocardial infarction, sudden death, angina, heart failure, renal failure, amputation, eye disease, or peripheral vascular disease) (ARR = 1.65%, NNT = 60). This study also showed that 29% of the patients needed three or more medications to lower their blood pressure.13 Use of thiazide diuretic agents produced a 34% decline in CVD events (ARR = 10.1%, NNT = 10) compared to placebo in the subpopulation of patients with diabetes described in the large Systolic Hypertension in the Elderly Population (SHEP) study.14

B: Beta Blocker

The CMI diabetes guidelines list use of beta blockers as an option for secondary prevention of CVD in patients with diabetes.1 The best evidence of benefit is shown for patients after myocardial infarction: in the BeZafibrate Infarction Prevention study,15 subgroup analyses of patients with diabetes receiving beta blockers during the study period showed that these patients had 44% fewer myocardial infarctions (ARR = 6.2%, NNT = 16) than did patients with diabetes who did not receive beta blockers. These study findings were supported in a retrospective review.16

C: Cholesterol

The CMI diabetes guidelines recommend treating patients with diabetes and dyslipidemia for secondary prevention of cardiovascular events. It also recommends treating patients with diabetes for primary prevention of CVD if they have an LDL cholesterol level of ≥130 mg/dL (≥3.36 mmol/L), or if they have

How to use the drug treatment tables:
1. Select the table corresponding to the person’s sex.
2. Find the columns corresponding to the person’s age, LDL-C level, and HDL-C level.
3. Find the row that matches the person’s nonlipid risk factors: none, hypertension, diabetes, etc.
4. The number in the intersecting “cell” is a person’s percent risk of a CAD event in the next 10 years.
5. If treatment is indicated, the LDL-C goal is ≤130 mg/dL.

**Figure 1. CAD risk and recommendations for Dyslipidemia drug treatment (for people without established coronary, carotid or peripheral artery disease)**

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There is evidence that people with diabetes have a risk for a CAD event comparable to people who have already had an event. In addition, compared to people without diabetes, those with diabetes have increased morbidity and mortality when they do have a CAD event. As a result of this increased risk, though there is no direct evidence, many experts recommend treating all individuals with diabetes to an LDL-C <130 mg/dL, and, if other risk factors are present, an LDL-C <100 mg/dL may be appropriate.
Table 1: LDL cholesterol levels and CVD event rates by age and sex.

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<tr>
<td>LDL (mg/dL)</td>
<td>80-119</td>
<td>120-159</td>
<td>160-199</td>
<td>200-239</td>
<td>240-279</td>
<td>280-319</td>
<td>320-359</td>
<td>360-399</td>
<td>400-439</td>
<td>440-479</td>
<td>480-519</td>
<td>520-559</td>
<td>560-599</td>
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<tr>
<td>No Risk Factors</td>
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<td>Hypertension (HTN)</td>
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<td>Diabetes (DM)</td>
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<td>Tobacco (TBCO)</td>
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<td>HTN + DM</td>
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<td>TBCO + DM</td>
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<tr>
<td>HTN + DM + TBCO</td>
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General notes:
1. The CAD Risk and Recommendations for Dyslipidemia Drug Treatment tables use the Framingham equations (1991) to estimate the ten-year risk of a CAD event in people who do not have atherosclerotic disease at baseline.
2. In deriving the treatment recommendations, weights were applied to predicted events to compensate for the longer life expectancy in younger age groups. The CAD event risk (%) in each cell is not weighted. For information on assumptions used in the model for the CAD Risk and Recommendations for Dyslipidemia Drug Treatment, go to the Clinical Practice Guidelines Intranet Web site at: http://kpnet.kp.org/california/scpmg/CPG.
in patients with diabetes; instead, the committee accepted the conclusions in the British Medical Journal’s Clinical Evidence: “People with diabetes are likely to benefit from smoking cessation at least as much as people who do not have diabetes but have other risk factors for cardiovascular events.” Although little new or diabetes-specific data on smoking cessation exist, many data conclude that the subgroup with diabetes is likely to benefit from smoking cessation and that this group should therefore be advised to stop smoking.

### Implementing Treatment Protective Against CVD: Impact on Dan’s CVD Risk

On the basis of the large studies cited here, the additive relative risk reduction for a CVD event exceeds 50% for aspirin, ACE inhibitors, statins, metformin, and smoking cessation. However, not all benefits are certain to accrue by simple addition. Nonetheless, some evidence exists that the benefits may be cumulative. For example, in regard to the combined effect of taking ACE inhibitors, the HOPE study showed that benefits of this therapy occurred in patients who were already taking aspirin, lipid-lowering drugs, and beta blockers. Therefore, a reasonable plan would be to tell Dan that he will probably reduce his risk substantially by starting the recommended treatment.

### What Dan’s Doctor Should Recommend

#### A: Aspirin

Dan is at “high CVD risk” because he has a 36% risk of having a CVD event in the next ten years. Starting 81 mg/dL or 325 mg/dL of aspirin is recommended.

#### B: Beta-Blocker

Dan does not have known CVD and thus does not meet the guideline’s criteria for treatment. However, because many hypertensive patients with diabetes eventually need three antihypertensive agents, use of a beta blocker (ie, atenolol, 25-50 mg/dL) would be reasonable if other antihypertension treatment fails to achieve the target pressure level of 130/80 mm Hg.

#### C: Cholesterol Treatment

Dan’s baseline LDL is >150 mg/dL and his ten-year risk for CVD is >20% indicating initiation of lipid-lowering therapy. The recommended action is to start drug therapy with 40 mg lovastatin daily, confirm normal kidney and liver function when starting the medication (to assure safety), and check lipid panel results and alanine aminotransferase (ALT) level after two months.

#### D: Glucose Control with Metformin

Dan meets the criteria of being a middle-aged, obese patient with type 2 diabetes. The recommendation is therefore to prescribe 500 mg/day metformin for glycemic control initially and then titrate the dosage to achieve a usual glucose target.

### Smoking Cessation

Dan should be advised to stop smoking. Use of a KP regional smoking cessation program is suggested. When Dan and his physician had a talk, the doctor noted Dan’s disheartened look and asked about the cause. Dan admitted he was depressed because he felt that he was inevitably progressing to a heart attack, stroke, or early death. Dan’s doctor presented to Dan facts that encouraged him to actively change his path. Using these facts, Dan should be able to reduce his risk of myocardial infarction and stroke by stopping smoking, improving his diet, exercising, and taking a few pills each day. Dan became energized; knowing that he could take achievable steps to prevent a death similar to his father’s was “just what the doctor ordered.” Dan knew it would not be easy...
to change his path, but he now had the hope that by getting involved and taking charge of his health-related behavior, he could change his own future.

Table 4 presents a practical summary of the CMI diabetes guidelines for CVD prevention.

**Summary**

Providing population-based care to patients with diabetes requires stratification of patients according to their risk for CVD. On the basis of this risk profile, patients with diabetes at high risk for CVD should receive evidence-based forms of intervention proven to reduce CVD risk and, in some cases, to decrease mortality. Although not included in the CMI diabetes guidelines for CVD prevention, specific medications and dosages are suggested.

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**References**


17. MRC/BHF Heart Protection Study of cholesterol-lowering therapy and of antioxidant vitamin supplementation in a wide range of patients at increased risk of coronary heart disease death: early safety and efficacy experience. Eur Heart J 1999 May;20:725-41.


soul of the healer

Butterfly Wings and Tears
Acrylic on canvas
By Kitty Evers, MD

Kitty Evers, MD, is a retired physician from Kaiser Permanente’s Northwest Division. She is currently the Medical Director of Physician’s Advocate Resources and Lead Physician for the Health and Renewal Program. Dr Evers painted this piece in response to a poem she wrote not long after the bombing of the World Trade Towers. Another of Dr Evers’ paintings can be seen on page 67.
Can Some Clinicians Read Their Patients’ Minds? Or Do They Just Really Like People? A Communication and Relationship Study

By Tom Janisse, MD; Nancy Vuckovic, PhD

Introduction
A clinician’s skill in interpersonal communication and relationships is a component of health care so important that patients may both seek and select health care practitioners on the basis of this skill.

Findings published in the medical literature illustrate the importance of good communication and interpersonal skills for achieving effective, satisfying health care encounters and episodes of care. Humaneness is the first patient priority for general practice care, and patients rated communication in the top three out of seven aspects of patient care. Patients’ rates of adherence to recommended treatments were increased 2.6-fold when a physician’s knowledge of a patient as a whole person was strongest. The trust level between patient and physician predicted self-reported adherence at six months. A patient’s perception of a clinician’s humanity did correlate with satisfaction. Of five distinct communication patterns in primary care practice, patients were most satisfied with the psychosocial pattern (inclusion of psychologic, social, and personal questions and information). A review article on communication and health outcomes concluded that “most of the studies … demonstrated a correlation between effective physician-patient communication and improved patient health outcomes.”

Methods: Patient Satisfaction Survey and Database

“Art of Medicine Survey” of Patient Satisfaction
Routinely since 1992, Kaiser Permanente Northwest (KPNW) has evaluated the communication and interpersonal relationship skills of physicians and affiliated clinicians by using the Art of Medicine Survey (AOM), a data collection tool developed in 1992 by Karl Weiss, President, HealthCare Research, Inc (HCR). The survey, routinely distributed in a single mailing to KPNW Health Plan members who recently visited a health care clinician, asks patients about their satisfaction with their care as delivered by a specific clinician. The mailing achieves about a 35% response rate, and differences in response rate are not related to survey score. More than a million AOM surveys received from patients in multiple KP Regions have been analyzed, and both validity and reliability of the survey have remained constant. The number of surveys mailed in the NW has been large enough to obtain 75 completed questionnaires for each clinician every six months. The survey was administered in six-month cycles (during 1995 and 1996) and in 12-month cycles (in 1997 and 1998), thus producing six data sets spanning four years.

The AOM Survey asks patients seven questions to assess positive attributes of clinicians’ communication skills (Table 1). Between 1992 and 1999, Northwest Permanente Medical Group (NWPMG) has administered the AOM survey to patients seen by 400 physicians and 200 affiliated clinicians over seven years. In the spring of 1999, survey data collected at KPNW from

Table 1. The Art of Medicine Survey questions

<table>
<thead>
<tr>
<th>Question</th>
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<tr>
<td>1. How COURTEOUS and RESPECTFUL was the clinician?</td>
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<tr>
<td>2. How well did the clinician UNDERSTAND your problem?</td>
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<tr>
<td>3. How well did the clinician EXPLAIN to you what he or she was doing and why?</td>
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<tr>
<td>4. How well did the clinician LISTEN to your concerns and questions?</td>
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<tr>
<td>5. Did the clinician SPEND ENOUGH TIME with you?</td>
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<tr>
<td>6. How much CONFIDENCE do you have in the clinician’s ability or competence?</td>
</tr>
<tr>
<td>7. OVERALL, how satisfied are you with the service you received from the clinician?</td>
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</table>

Tom Janisse, MD, is Assistant Regional Medical Director for NWP, is responsible for the CME & Professional Development Department, the Physician Health Committee, is a member of the Interregional Clinician-Patient Communication Leadership Group, the national Care Experience Council, and chairs its subgroup on MD Work Environment. E-mail: Tom.Janisse@kp.org.

Nancy Vuckovic, PhD, is an investigator at the KP Center for Health Research, and Principal Investigator for the Measurement and Adherence Core for the Oregon Center for Complementary and Alternative Medicine (OCCAM) in Cranial Facial Disorders. E-mail: Nancy.Vuckovic@kp.org.
1995 through 1998 were comprehensively analyzed.

**Highest Rated Clinicians: Cohort Selection**

In 2000-2001, clinicians who consistently scored in the top 10% in the AOM Survey—specifically, the “overall satisfaction” question—were interviewed to learn what they say, how they behave, and what they believe are the reasons why patients rate them so highly. From the six data sets collected from 1995 through 1998, this high rating was achieved by 35 clinicians.

**Pilot Study of Clinicians**

A pilot study was conducted in fall 1999 after a recognition dinner held for the 35 clinicians. Twenty-one clinicians attended, and after the dinner, the clinicians were asked, “Why do you feel that your patients rate their interactions with you so highly?” The clinicians responded with the following kinds of comments:

“I introduce myself. I shake their hand. I acknowledge their presence.”

“I talk to them as a person.”

“I explain things, and involve them in decisions.”

“I am with them when they are with me.”

“I’m conscious of what it takes to please people.”

“Meet the patient where they are.”

“I am with them when they are with me.”

**Methods: Qualitative Research Study**

Research study participants included all those physicians and affiliated clinicians in the highest rated group who responded to a request for an individual interview about their patient interactions. Twenty-six clinicians (74%) of the highest rated group agreed to participate (Tables 2, 3).

**Interview Approach**

The qualitative method used in the interviews is sometimes called “conversation with a purpose.” Data were collected on specific, research-defined topics by means of a conversational interview in which participant’s responses influenced the sequence of questions as well as the probes used to explore issues more deeply. The study used an interview guide (Table 4).

Interviews were conducted by one of the authors (NV) and by three other interviewers trained in qualitative methods. Interviews were conducted in the clinician’s office and lasted between 30 and 60 minutes. With the clinician’s permission, all interviews were both audiotaped and transcribed for analysis.

Analysis focused on features of good practice identified by clinicians and on perceptions of the role of intuition in their practice. The interviewers and Dr Vuckovic read a sample of the transcripts and developed coding based on the interview questions and themes that emerged in the transcripts.

**The Coding Elements**

Ten coding elements were included: reason for high rating, what patients value, connection to patient, finding meaning at work; intuition; listening; time; respect; nonverbal communication; caring about the patient. These codes were applied to the remaining transcripts using Atlas ti (Scolari Sage), a software program for text-based data analysis. This software enables electronic labeling of sections of text with codes and retrieval of coded segments.

**Results**

**Interpersonal Communication**

Clinicians’ statements were recorded verbatim because these personal narratives most specifically convey the main themes highlighted by the coding. From clinicians’ stated beliefs about what patients value, four common themes emerged:

1. **Being respected as a person and an individual.**
2. **Being listened to and heard by the clinicians.**
3. **Full presence and undivided attention of the clinician.**
4. **Being cared about and cared for.**

**1. Respect for Patient**

Participants uniformly reported that respect for the patient as a person and an individual was both a fundamental aspect of their interactional style and an aspect of their practice of medicine that patients valued. Individual clinicians’ ways of demonstrating that respect varied but had in common a desire to both recognize the patient as a person and minimize social distance between patient and clinician.

“I try to treat people like I’d want to be treated.”

“Patients value that I treat them with respect.”

“When I come in the room … I always try to shake their hand, just to establish a touch contact.”

“It’s such an imbalance of power for one person to be naked and the other to be wearing an extra lab coat over their clothing.”

“Even just a two-second personal

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<tr>
<th>Table 2. Demographics of study participants</th>
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<tr>
<td>Physicians</td>
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<td>Men</td>
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<td>Women</td>
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<td>Specially Care</td>
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<td>Average</td>
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<td>Full time</td>
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<td>Part time</td>
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<th>Table 3. Demographics by clinician group and by discipline</th>
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<td>Physicians</td>
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<td>Specialists</td>
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<td>General Surgery</td>
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<td>Primary Care</td>
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<td>Family Practice</td>
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<td>Internal Medicine</td>
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<td>Pediatrics</td>
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<td>Obstetrics/Gynecology</td>
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Can Some Clinicians Read Their Patients’ Minds? Or Do They Just Really Like People? A Communication and Relationship Study

interjection: ‘I’m sorry. I’m running late.’ Just acknowledging that yeah, their time is not going unnoticed either. It’s a big deal for them. It translates into showing some mutual respect.”

2. Listening

Another aspect of their practice that participants believed patients valued was the attempt to listen to patients’ concerns. Some participants described nonverbal strategies they used to communicate to patients that they were attentive to what the patient had to say.

“What they tell me they value the most is when I take the time to listen to them.”

“I give them time to address whatever problems they have. I don’t start by telling them things. What I say is, ‘How are you doing?'”

“And most times they say, ‘You know, you’re the only person who listens,’ or ‘You’re the only person who cared,’ or ‘I feel like you’re going to get to the bottom of it.’ That type of thing.”

“When I go into a patient’s room, I always sit down to talk with them. People just get this sense that you’re listening to them longer, or something, if you’re seated than if you’re standing by the door.”

“You need to look directly at them when you talk to them. If you’re typing on the computer, then you’re not really listening, at least in their perception.”

3. Presence

Several participants also described a style of focused attention—which we have termed “presence”—that contributed to patients’ sense of ease and satisfaction. The essence of this practice was to let go of events or thoughts that have preceded or that will follow an encounter and to focus on the moment and on the person in the exam room.

“And even if it’s not very long, you’ve given them a sense that you’re just there for them, to listen to them . . . . And even if I’m really, really rushed, when I walk in the patient’s room I really try hard that they never know that’s going on.”

“When I’m talking to them, I’m talking to them, and everybody else is out of the picture for the time being.”

“I don’t appear rushed. Even when I am. So when I go in that room, that is their sacred time.”

4. Caring About Patients

For most participants, the behaviors described above were motivated by a sincere liking for patients, not merely techniques applied to improve satisfaction scores. For some clinicians, their enjoyment of patients as people was the most meaningful part of their work.

“I pretty much like all my patients. I think it’s important that you find something to like about them.”

“I really care about my patients and I think that probably comes through in the conversation and I think they realize it then.”

“They know, first and foremost, that I actually, really do care about them, and I will help them in any way I can.”

“I enjoy my patients. I wouldn’t keep doing this if I didn’t enjoy them.”

“They’re wonderful. In fact, that’s the most rewarding part of it.”

We were interested in the phenomenon of intuition as it relates to clinician-patient interaction. This interest arose from our familiarity with the anthropology and transpersonal psychology literature. In these disciplines, intuition, as a part of the communication process has been explored more explicitly and deeply and is recognized as a potent and effective way to gain information without sensory input.

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<th>Table 4. Interview guide</th>
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<td>• Why do you think your patients rate you so highly?</td>
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<td>• What would you say your patients value most about the way you practice medicine?</td>
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<tr>
<td>• How would you describe your philosophy of caring for your patients?</td>
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<tr>
<td>• What about your work is most meaningful to you?</td>
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<tr>
<td>• Tell me about what you do to connect with your patients?</td>
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<td>• Some practitioners describe a “gut instinct” or intuition as a part of practice. Have you had this experience?</td>
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When posed to participants, our question about use of intuition in medical practice elicited responses that classified intuition into three categories:

1. knowledge that comes from experience;
2. knowledge that comes from being open to information from multiple sources;
3. information from other (spiritual, paranormal) sources.

1. Knowledge That Comes From Experience

Some participants described intuition, or “gut instinct,” as the result of years of experience in medical practice. A clinician might sense that something is wrong with a patient because the clinician has lived through other, similar situations.

“I think a lot of what seems like intuition is actually observation, a lot of training, and a lot of just repetition and judgment that you’ve learned from making mistakes before.”

“I don’t know that it’s really intuition. I think a lot of it is experience and it’s training. You learn to interpret and observe people very carefully.”

“It’s something that I didn’t just have off the bat. It’s something that came after a few years.”

2. Being Open to Information

For other participants, intuition about how to act resulted from being aware of and open to sensory information beyond clinical tests and standard diagnostic procedures. This information could be visual (eg, how
a patient looks or acts) or embedded in information given by the patient.

“Everybody knows that there’s an instinct thing and that some people are good at it and some people aren’t. I don’t know if certain people are just more open. You go in and you just get a feeling of how that person looks and is moving around and acting. You know, I’ll come up and say ‘I just didn’t get a good feeling.’ It’s hard to quantify.”

“You know, when a car goes by and you just know it’s a Chevy. You just know. It’s hard to put into words.”

3 Information from Other (Spiritual, Paranormal) Sources

This experience of intuition was identified by only a few participants. For these clinicians, intuition came from a source outside the individual and was not seen as a cognitive process. This form of intuition was not the result of clinician experience, skill, or being open to other sensory information; the clinician only needed to be receptive to it.

“This sounds really crazy, but sometimes I do feel it’s more spiritual where you almost feel like at some point, somehow, something tells you to do something … You don’t know why you did the right thing at the right time, but you did.”

“The closest thing I can even relate it to is almost like a psychic phenomenon. You know, something just enters your mind as if another voice was telling you information.”

“It has nothing to do with you.”

Hindrances

Time constraints were the most frequently named hindrance to practicing medicine in a caring, attentive way. Clinicians said that they often chose to ignore appointment time limits to give patients the time they needed and that patients were willing to wait to receive this kind of attention:

“I’m way behind a lot of the time, but mostly they’ll say ‘It’s worth waiting for. I know you’re going to spend the time that I need with me, so it’s ok to wait.’”

Clinicians acknowledged that providing extra time for patients extracted a personal cost from clinicians who chose to do so:

“It is a challenge, though, with our schedule, to provide that time. I think it’s a big issue that if you do provide the time, it’s usually your own time and not company time. That has a lot of problems, because what I’ve found is that a number of the really good doctors—who have provided that time—end up burning out and then they’re not there.”

Discussion

Interpersonal Communication

Our results indicate that, as perceived by clinicians, qualities that patients find important in interpersonal health care encounters are consistent regardless of medical specialty, gender, years with Kaiser Permanente, practicing as a physician or affiliated clinician, or schedule (ie, whether seeing patients part-time or full-time). Although physicians and clinicians would naturally be keyed to what patients think is important by focusing on the questions of the AOM survey, these attributes were initially chosen as important characteristics of overall patient satisfaction. HRC has validated that these six attributes individually show high correlation with overall satisfaction. Clinicians’ results on the “overall satisfaction” question were used to determine the most highly rated cohort.

Clinicians believe that what they do to satisfy their patients so highly and so consistently is about interpersonal relations, not simply about ordering the right test. Fundamentally, it is about listening, whether passively (ie, by being quiet) or more actively (ie, by hearing patients’ words as well as by divining the meaning behind the words). The interpersonal relationship skills necessary for patient satisfaction also include being so attentive as to hear the person within the patient, being a person within the professional, and being present in the moment enough to share a personal moment. An ultimate demonstration of personal regard is listening deeply and being present fully, as if the world is only this moment.

Are these communication skills transferable, or do they just represent innate ability that only a few elite professions possess? Observations made in a Seattle public fish market confirm our belief that many people can, with practice, learn to communicate in this effective way. How employees of the fish market interact with customers demonstrates that people can learn presence. Paying attention and being present in the moment have “street value,” so to speak. These concepts are illustrated by sample quotes from fish market employees:

“You have to always be there. I mean, being aware of what the customers are saying. Actually dealing with them face to face.”

“You are being with them. You are, like, just with them. Things are going on all around, but you are taking care of just them.”

“Be with the people from moment to moment.”

“We are 95% of the time present from moment to moment. You have to keep bringing yourself back to being present now and do what you have to do.”

If this full presence is important to customer satisfaction in a commercial encounter, how much more important it must be in situations where health care is the purpose of the encounter! The
health care encounter should provide an enhanced opportunity for the clinician to be attentive and present. The encounter is a private, personally important, and meaningful moment for patients because it relates to their health, their body, their emotional well-being, and sometimes their survival.

The basic elements of what clinicians think is most important about satisfying patients in interactions are well-known and are taught in communication courses. Clinicians with high patient ratings have not necessarily taken these basic elements to a level of social sophistication or high intelligence but have deepened the communication experience between two people to create a highly respectful, personally meaningful, highly important moment.

Qualitative studies such as ours often identify new hypotheses for future exploration and may confirm or explain hypotheses on the basis of previous work. One such hypothesis is that clinician awareness of, and reliance on, intuition in medical practice can influence both the process and outcome of care. Further controlled studies will be necessary to understand this phenomenon and its implications for education and practice.

Transpersonal Communication: Intuition and Intention

The anthropology and transpersonal psychology literature demonstrate that information flows between people in both sensory and non-sensory ways. "Intuition" is a term used commonly to describe the knowledge a person gains through this process. "Intention" is a conscious and compassionate act of mentation intended to benefit the physical and/or emotional state of another.11-13

A secondary hypothesis for this study was that in the highest-scoring clinicians, intuition and intention were factors in creating patient satisfaction. Patients were consistently highly satisfied because the clinicians better knew what the patients needs were (intuition), and patients' felt more cared about and cared for (intention).

Intuition and intention can have powerful therapeutic effects, especially in the context of the clinician-patient interaction. These processes can result in a therapeutic moment—an intuitive moment in which patient and clinician share knowledge of need or concern. A caring act of intention may initiate the treatment process before the first pill is swallowed; or this caring act may become the treatment itself (for example, validation of a self-care approach that could work in place of a prescribed pill).

Clinicians’ responses given during interviews group intuition according to one of three themes:

- knowledge that comes from experience;
- knowledge that comes from being open to information from multiple sources;
- information from other (spiritual, paranormal) sources.

Clinicians are trained mainly from a physical science perspective and from scientific belief systems where knowledge is derived three ways: from collecting and analyzing quantifiable, tangible, sensory data; from use of physical techniques; and from applying physical agents and procedures. Clinicians are taught that with time and clinical experience, they will develop "clinical judgment," which is part of the art of medicine. Given this orientation, the comments of this first group may be expected. The clinical encounter is a vehicle for gathering historical and physical examination information from a patient; for presenting therapeutic options; and, more recently, for implementing a shared-decision process. However, only a mental health therapist would view the encounter as primarily a "therapeutic encounter."

The second group of clinicians, either because of their personality, holistic belief system, or both, understands that the clinical practice of medicine requires a broader perspective than physical science alone. These clinicians are open to other information, value this information, and use it. They admit that "non-scientific" (ie, subjective) knowledge is not publicly acceptable to the medical community and do not discuss this knowledge with colleagues or patients.

The third group of clinicians is willing to admit (at least confidentially in an interview) to having a belief system that includes existence of "another source" of information or to admit that people can know things in ways that extend beyond usual sensory processes, even though these ways are not understood. These clinicians state a belief that this way of knowing could represent spiritual or psychic phenomena.

What is important to us as investigators is not to advocate for replacing current interpersonal communication processes with intuitive and intentional processes. Instead, we believe that creating awareness and some understanding of processes that may be at work in the clinician-patient interaction could benefit both patients and clinicians.

Study Limitations

Although the sample size for this study was small, it represents 74% of the cohort. However, other questions remain that were not addressed by this study. First, the participants were not interviewed by a clinician; might clinicians have solicited different responses or prompted deeper exploration of some areas? Or would clinicians, acting as interviewers, have introduced bias?
A second question merits additional research: On a scale of overall patient satisfaction, what is the natural point of differentiation between competent and superior patient communication during clinical interactions? The study does not answer this question.

In addition, the main data is second or third derivative: 1) clinician intent and attitude; 2) clinician behavior; 3) high KP patient satisfaction; 4) clinician (self-perception) recall and description of clinician attitudes and behavior. Something these clinicians do makes patients satisfied, but it is not clear the clinicians themselves best know what that is. Neither can we characterize structural or environmental factors at play.

Finally, we relied on face-to-face interviews with clinicians only.

We are now conducting research now in which we videotape the physician-patient interaction and then interview patients and physicians about this interaction. This research will deepen our understanding of highly successful interactions, communication, and relationships.

Conclusions
In our health care delivery system, we must not only find ways to guide low-performing clinicians toward greater competence. To substantially improve clinician-patient interactions, we must elevate competent performance to high performance. The learnings from this study give us guidance and tools for developing this competence. The market employee’s communication and service behaviors are one example of how these skills are broadly transferable and not just the purview of a select few.

Other successful tools for improving communication skills include CME courses, tutorials, and coaching sessions, in addition to the “Four Habits Model” (Table 5) the importance of which is confirmed by this study.

Of particular note, a new video training tool is now available from the Permanente Medical Group Physician Health Department, “Mindfulness Practice for Busy Doctors and Healthcare Professionals,” featuring Jon Kabat-Zinn. With practice clinicians can integrate mindfulness (being fully present in the moment) into their patient interactions and into interactions with their care teams.

Excellent service and commitment to the highest medical quality, are what we and patients both want; patients view medical quality through their perception of service quality. We must therefore enhance the work environment, while providing sufficient time to be fully attentive to patients and meet their highest expectations. We must also be willing to provide the leadership direction, resources, and training to promote these goals. Excellent communication is an aspect of excellent service that distinguishes practitioners in the health care marketplace and can become a hallmark of Permanente Medicine, thereby producing a sustainable competitive advantage to enhance the health and well-being of our patients and our community.

Table 5. The Four Habits Model

<table>
<thead>
<tr>
<th>Invest in the beginning</th>
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<tr>
<td>• create rapport quickly, elicit patient’s concerns, plan the visit with the patient</td>
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<tr>
<th>Elicit the patient’s perspective</th>
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<tr>
<td>• ask for patient’s ideas, elicit specific requests, explore impact on the patient’s life</td>
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<tr>
<th>Demonstrate empathy</th>
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<tr>
<td>• be open to patient’s emotions, make at least one empathetic statement, convey empathy nonverbally, be aware of reactions</td>
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<table>
<thead>
<tr>
<th>Invest in the end</th>
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<tr>
<td>• deliver diagnostic information, provide education, involve patient in decision-making, complete the visit</td>
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References
A Clinical Information System Research Agenda for Kaiser Permanente

Abstract
Clinical information systems (CIS) could drive progress in health care in the 21st century: information captured in a CIS could be used within a general “CIS research landscape” (described by us previously) to develop research projects that examine and potentially improve delivery of health care services. The CIS research landscape also identifies aspects of the delivery system that must be addressed before quality of care can be improved. In addition, the CIS research landscape portrays the research process and how it relates to operational aspects of health care delivery.

In this article, we describe how we used the CIS research landscape in conjunction with known operational, financial, technical, governmental, and social constraints of Kaiser Permanente (KP) to develop a specific CIS research agenda. We identified four CIS research priorities: clinical decision support systems, population-based care systems, personal health record systems, and establishment of a functional baseline against which future CIS enhancement can be measured. These research priorities should help guide researchers so they can focus their time, effort, and money on important questions that will inform KP and other health care providers about the use of CIS to improve health care.

Introduction
Clinical information systems (CIS) could drive progress in health care in the 21st century. However, to understand their potential uses, benefits, and overall effects on health care delivery, we must examine the organizational and social issues surrounding these information systems. Information captured in a CIS could be used within a general “CIS research landscape” (described by us previously) that enables us to develop research projects to examine and potentially improve delivery of health care services. The CIS research landscape also identifies aspects of the health care delivery system that must be addressed before the quality of care can be improved. In addition, the CIS research landscape portrays the research process and how it relates to operational aspects of health care delivery. In this article, we describe how we used this research landscape in conjunction with known operational, financial, technical, governmental, and social constraints of Kaiser Permanente (KP) to develop a specific CIS research agenda.

Methods
In describing the research framework, we previously presented a grid relating key components of the health care delivery system (ie, patients and families, process of health care, health care practitioners, organizations, patient populations, and clinical knowledge) and key dimensions for improvement of health care (ie, ensuring that the care delivered is safe, effective, patient-centered, timely, efficient, and equitable). Accordingly, we divided our project team into working groups whose subcommittees were each assigned to discuss one component area of the framework.

The subcommittees’ work was expected to be representative of KP research throughout the nation as much as possible. To increase the subcommittees’ visibility, a Web site was created to facilitate review of the work and communication among a large number of collaborators. The Web site listed references to previous research agenda descriptions; described several CIS-related research projects in progress or in the proposal phase; and outlined the research agenda framework. In addition, we developed a Web-based messaging system that allowed all interested parties to communicate about the documents posted.

Each leader of a research framework area identified four to ten additional KP researchers to help identify and clarify specific research questions within that framework area. The research questions identified were neither exhaustive nor prioritized. Reports from individual research areas were posted to the Web site for review and comment.

Each subcommittee worked to further refine a description of the research areas. Members of the subcommittees quickly realized that each area overlapped with, depended on, or related to each of the other areas in one or more ways. The following sections briefly describe how each subcommittee conceptualized its task.

Subcommittee Topic 1: Patients and Families
Research questions about effects of CIS on patients and their families have two distinct dimensions: 1) patient-related information encoded by the CIS and 2)
care-related processes or practices (created by health care organizations) that characterize how patient-related information is or could be used. The CIS contains four categories of encoded patient-related information: 1) representation of the patient’s medical history; 2) representations of the patient’s current health status; 3) representations of the patient’s or clinician’s future plans; and 4) representations of knowledge related to the patient’s information (e.g., diagnosis- or intervention-related information). These two dimensions—CIS-encoded patient information and the processes that characterize its use—give us a convenient way to conceptualize research questions of interest to subcommittee members researching effects of CIS on patients and their families.

Subcommittee Topic 2: Health Care Practitioners

Because they deliver health care to patients, clinicians are the primary generators of health information data. In addition, clinicians need access to the data for several purposes: 1) to interpret these data for patient populations. Access to data involves both local and remote access while care is being delivered. Access to data may also involve short- and long-term analyses of patient and population outcomes that can inform processes of care and enrich clinical information and knowledge.

Subcommittee Topic 3: Health Care Delivery Organizations

Adoption of a CIS presents challenges as well as opportunities for health care delivery organizations. Specifically, a CIS can:

- Allow information to be delivered using new structures or methods, such as a virtual medical center accessible via the Internet;
- Help manage information existing within the health care delivery structure: disseminate new information and practices to clinicians, evaluate changes, and integrate care; and
- Enhance ability to conduct research and to generate new knowledge on various patient populations.

The technologic innovation necessary to support these changes represents major capital investment that could transform the organizational structure of health care systems and reshape relationships between the health care organization and its clinicians, the patients they serve, and other organizations involved in the health care system (e.g., health care insurers, employers, and suppliers). The organizations could improve in quality, productivity, and service; they could better integrate different clinical areas; and they could improve the processes used to coordinate operations, both within and among organizations. Potential harm introduced by this technologic innovation includes loss of confidentiality and creation of a more fragmented delivery system because of poor or incomplete implementation and resultant loss of data integration.

Subcommittee Topic 4: Clinical Data, Information, and Knowledge

“Data,” “information,” and “knowledge” are interrelated concepts but are not defined identically. These three concepts can be represented on a continuum with “data” at one end, “information” in the middle, and “knowledge” at the other end. Each step along this continuum represents added meaning or content; information is the synthesis of various data elements, and knowledge is the synthesis, or generalization, of various types of information. In this section of the CIS research agenda, we examined this entire continuum, how it relates to systems in health care, and specific implications for studying CIS content.

At one end of this research spectrum, this examination overlaps with clinicians because they are responsible for reviewing the data and knowledge and entering it into the CIS. At another edge of the spectrum, the content of a CIS interacts with populations because, by combining data from individual patients, a “population” is identified. At yet another edge of the spectrum, the content of a CIS interacts with patients whenever data must be collected from them or presented to them as an overview. If the CIS successfully incorporates various forms of operational information (e.g., surgery or on-call schedules) and clinical knowledge about the care processes, then this area of research will overlap the organizational and procedural sections of the agenda.

Subcommittee Topic 5: Patient Populations

Patient populations are formed or identified on the basis of clinical, demographic, or financial information common to a particular set of individual patients. After a specific group of patients has been identified (a process which can be greatly facilitated through use of sophisticated search techniques on a CIS database), clinicians become concerned with management of these patients’ care. Health care organizations are concerned that members are treated fairly with the highest service standards and by optimally using available resources. Clini-
CIS Research Application

Identification of Specific Research Questions and Potential Projects

Research agendas are never totally free of external constraints, although they are often discussed as if such constraints either never existed or have no appreciable effect on the relevant science. In reality, these constraints are important. Researchers and funders must explicitly incorporate external and internal operational constraints into the CIS research agenda. These constraints include organizational knowledge, skills, and capabilities, technologic opportunities and challenges, financial constraints, and government regulations. Figure 1 illustrates this process.

These constraints help to focus the research agenda. Research outcomes should alter the operational environment to improve the patient’s care experience, the work lives of clinicians, the ability of clinicians to manage large patient populations, the processes used to deliver the health care, or the organization’s efficiency. Research outcomes should create new data, information, and knowledge that furthers our understanding of both the health care delivery system and our health plan members.

After each subcommittee identified several CIS research priorities: clinician decision support systems, population-based care systems, personal health record systems, and baseline criteria for measuring future CIS enhancement.

CIS Research Priorities for Kaiser Permanente

After we developed the full range of potential research questions and projects, we applied the external and internal constraints discussed above and identified several CIS research priorities: clinician decision support systems, population-based care systems, personal health record systems, and baseline criteria for measuring future CIS enhancement.

Clinical Decision Support Systems

We must develop information management tools to help us acquire, manipulate, apply, distribute, and display appropriate clinical knowledge to clinicians and patients at the appropriate time and place to help them make correct, timely, and evidence-based clinical decisions. Accordingly, two key research questions must be answered:

- What are the most effective methods for representing the complex clinical knowledge required to facilitate data entry, review, analysis, and synthesis for clinicians at the point of care?
- How does presence of clinical decision support (eg, re-
minders about drug-drug interactions or suggestions for using less-expensive, alternative medication) at the point of care affect the quality of care delivered as well as the efficiency of clinicians?

**Population-Based Care Systems**

We must develop systems that enable us to create large, integrated databases of patient-specific information that allow clinicians to begin real-time management of populations of similar patients. Mining data in these databases may provide insight into new associations between disease states and how to effectively manage them. Two key research questions must be answered:

- Can we develop systems that scan all clinical and administrative databases for events and conditions that signal imminent serious decline in health status (e.g., stroke, heart attack, fall, hip fracture, and vertebral fracture) and that enable us to intervene in time to prevent these conditions?
- Can we develop large, disease-specific patient registries that enable us to identify best practices sooner and with less expense than currently?

**Personal Health Record Systems**

We must develop new information management technology that enables patients to begin taking more responsibility for their health and for their health care. These systems must provide patients easy access both to their shared personal health record data and to reliable patient-specific information resources that help patients to decipher complex medical data. Patients can then participate in the clinical decision-making process while ensuring the privacy and confidentiality of their medical information. Two key research questions must be answered:

- Will patients use a system that allows them to enter and review their personal clinical information from a shared copy of their electronic medical record?
- How will availability of patient-specific clinical information, coupled with the ability to send secure messages to the health care practitioner, affect the clinician-patient relationship?

**Baseline Criteria for Measuring Future CIS Enhancement**

We must develop methods for establishing baseline criteria against which future CIS enhancement can be measured. These baseline measurements must take into account the quality of care delivered, as well as the patient’s overall health status, clinical productivity, and cost estimates. In addition, we must develop techniques for assigning quantitative value to these otherwise qualitative estimates. Two key research questions must be answered:

- How can we create reliable, baseline estimates of the important aspects of current functioning of our health care delivery system so that we can determine the impact of the CIS after it is implemented?
- How can we establish metrics for quality of care, quality of service, and overall patient health that can be used to calculate cost-benefit or return-on-investment ratios achieved after a CIS is implemented?

**Summary**

Clinical information systems (CIS) may represent one of the most important tools in delivery and management of health care. We identified four CIS research priorities for Kaiser Permanente (KP): clinical decision support systems, population-based care systems, personal health record systems, and a baseline against which future CIS enhancement can be measured. The CIS research agenda described in this article is only one possible research agenda that could be developed, but this agenda provides KP with an accurate and valuable map of the CIS research landscape. This landscape should help guide researchers so that they can focus their time, effort, and money on important questions to inform KP and others about how to use CIS to improve delivery of health care.

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A complete list of the exemplar research questions from each of the six sub-committees is available at http://kpchr.org/ACIRM/agenda/appendix.pdf.

**References**

On Returning to Clinical Practice

I began practicing internal medicine and gastroenterology for the Southern California Permanente Medical Group (SCPMG) in 1969. Over the years, I became interested in medical group management and, in 1989, I left the clinical practice of medicine to take on the role of Area Associate Medical Director for the SCPMG West LA Medical Center. I then had the honor of becoming SCPMG’s Regional Medical Director in 1994. Thus, I haven’t seen a patient in 13 years.

I’ll be retiring as Medical Director at the end of 2003 and am determined to regain some of my medical skills. I have already spent four months at our Inglewood medical offices studying and being proctored. I want to thank Dr Manny Myers in internal medicine for helping to guide me through this process (ironically, I hired Dr Myers in 1979 while I was Chief of Medicine at West LA). I’m finding that the medical journals I’ve skimmed through in the last 13 years haven’t prepared me for so many changes—it feels like I’ve been in outer space. While the interpersonal aspects of medicine have largely stayed the same, the differences in the technical aspects are striking. I would like to describe what I have encountered upon returning to clinical practice.

The nurses, physicians, and staff members are just as wonderful as ever, but now seem very respectful toward me (maybe they’ve realized I sign their checks—hmm …). They also seem a lot younger than they were 13 years ago. In contrast, the patients are definitely older these days, and it’s very encouraging to see our members living longer, healthier lives. Wow … the number of things that have to be done to meet the needs of elderly patients! Thank goodness the chief of service is scheduling me lightly until I get up to speed.

Additionally, I now have access to an endless array of systems and technology that simply were not in place before 1989. When I was practicing then, a patient might come in and ask for the results of a cholesterol screening performed the previous week. It would take me up to 20 minutes to find those results—getting the patient’s name, calling the lab, finding the chart … Now, all of the information available on the computer makes interactions like this effortless. Online test results, online appointment schedules, e-script, e-referral—all of these technologic advances have made managing the care of patients easier. I am also able to make my progress notes appear erudite by taking information from the Permanente Knowledge Connection (PKC).

I’ve noticed a reduction in the frustration level of our members as a result of access improvement. In the past, patients would spend the first few minutes of their appointment talking about their difficulties with the phones and how long they had to wait to see somebody. This doesn’t happen nearly as much as it did in the ’70s and ’80s. Of course, members can become frustrated, but the remarkable improvement

Oliver Goldsmith, MD, is Medical Director and Chairman of the Board of the Southern California Permanente Medical Group (SCPMG), and a member of the Executive Committee of The Permanente Federation. E-mail: Oliver.A.Goldsmith@IREMail.
in access, especially on the phones, is a wonderful accomplishment.

The number of drugs, tests, and therapeutic options available to me are simply awesome. I’ve had to become familiar with new drugs for diabetes and to choose from countless medications—all while trying to follow the clinical guidelines. And for each patient I’ve seen, there has always been an additional way to provide care—a test, a medication, a referral—whereas 12 to 15 years ago, I would more often have to tell a patient that there was nothing more to be done. There are fewer instances of that now.

In some respects, I feel as if I never stopped practicing medicine. My techniques of physical examination and diagnostic skills have returned to me easily. Also, I haven’t lost my bedside manner—my ability to get close to a patient—something of a surprise after more than a decade of dealing exclusively with physicians, staff, and administrators.

More than anything, I realize that I’ve been missing out on the fun of interacting with patients. Recently, while examining an 84-year-old patient, I explained to him and his wife that because I was just recently back in practice, another physician would review my work. His wife recognized me because she had been a nurse in the ICU at Kaiser Permanente in the ’70s. I appreciated her confidence because she had been a nurse in the ICU at Kaiser Permanente in the ’70s. I appreciated her confidence—

as far as she was concerned, I didn’t need any help treating her husband. Of course, I can’t expect all of my patients to trust me so quickly. But, as always, my demonstration of caring elicits the same level of confidence it did when I was actively practicing medicine.

Returning to patient care after being away for so long reminds me how fortunate I am to be a physician. After more than a decade of working in a leadership role, returning to clinical practice has really made me happy. The array of options has broadened, but the satisfaction that comes with caring for a patient remains the same. It feels so good to begin the journey home.

Hope of Joy

There is no hope of joy except in human relations.

— Antoine de Saint-Exupéry, 1900-1944, pioneer aviator, poet and novelist
A Model for the Nation’s Health Care Industry: Kaiser Permanente’s Institute for Culturally Competent Care

By Nilda Chong, MD, DrPH, MPH

Introduction

Our nation’s increasing diversity heightens the relation between medicine and culture to an unprecedented level. Provision of medical care to culturally diverse patients now relies more heavily on cross-cultural communication than at any other time. Medical care that addresses the cultural needs of diverse populations stands at the forefront of many discussions in the health care industry. As stated by a primary care physician in Minnesota, “While cultural diversity problems in medical care might seem 'soft' and beyond the pressing concerns of our highly regulated health care system, in fact, they end up being bottom-line issues as well. Patients of other cultures now compose a large segment of many practices, and the numbers are growing quickly as demographics shift.”

The Health Plan membership of Kaiser Permanente (KP) reflects our nation’s rapidly changing demographic profile. We serve one of the most culturally diverse communities in the world. KP Southern California Regional membership consists of 24% Latinos and 12% African Americans; KP Georgia’s membership includes 37.8% African Americans; and KP Hawaii’s membership is 33% Asian and 21% Hawaiian. Our members speak more than 80 different languages, each representing a culture with unique beliefs, attitudes, and behavior. KP brings to life the complexity of our nation’s diversity and multiculturalism. In a seminal article, epidemiologist Geoffrey Rose wrote, “It is an integral part of good doctoring to ask not only, ‘What is the diagnosis, and what is the treatment?’ but also, ‘Why did this happen, and could it have been prevented?’” Finding answers to these questions can be complex because cultural differences may exist between clinicians and patients. In 2001, the Institute of Medicine’s Committee on Quality of Health Care in America examined the US health care system and proposed “patient-centered health care” as one of the six dimensions necessary to meet patient needs in the 21st Century. The health care system must aim to provide “… care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions.”

A year earlier, in 2000, Oliver Goldsmith, MD, wrote, “… cultural competency does create a compelling case for understanding the different ways patients act in a clinical setting and for communicating with patients to ensure the best possible clinical outcome.”

Culturally competent health care organizations acknowledge and understand cultural diversity in the clinical setting, respect members’ health beliefs and practices, and value cross-cultural communication. Eliciting the patient’s perspective is important “… to assess the patient’s point of view concerning the meaning of symptoms and the request for care … [and] serves at least two important functions: showing respect for the patient’s experience and individuality and gathering clinical information in an efficient way.”

Acknowledging and understanding a patient’s cultural values can lead to effective communication, promote treatment adherence, and positively affect health outcomes.

The KP West Los Angeles Medical Center—our first Center of Excellence in Culturally Competent Care—highlights the importance of understanding members’ cultural values. With a patient population exceeding 45% African American, the center was started in 1999 with a focus on sickle cell anemia, congestive heart failure, and prostate cancer. Prostate cancer appears in African American men at a younger age; and in this population, lower prostate-specific antigen values indicate disease, the cancer is more aggressive, and mortality rate from the disease is higher than among other groups. A year later, the impact of the center’s culturally competent care surpassed expectations: meperidine therapy was stopped for 93% of members in the Sickle Cell Anemia Program, dramatically enhancing their quality of life. Of the 49 patients who successfully completed the Congestive Heart Failure Program, none were hospitalized for congestive heart failure or used the emergency department for any other medical condition. Implementation of the Prostate Cancer Screening Program is underway.

National Standards for Culturally and Linguistically Appropriate Services in Health Care

Issued by the US Department of Health and Human Services’ Office of Minority Health, the National Standards for Cultur-
How Does the Institute for Culturally Competent Care Work?

The ICC is the catalyst for concentrating our expertise, for facilitating development of new knowledge, and for guiding our strategy to integrate cultural competence into our care delivery system. By increasing our understanding of cultural competence, the Institute facilitates operation of the concept through the Centers of Excellence in Culturally Competent Care.

Each Center of Excellence in Culturally Competent Care is a regional center that successfully integrates cultural competence into its local health care delivery system. The center focuses on two or three health issues that significantly affect a population that is highly represented in the local membership. The center then develops culturally relevant care management programs to positively affect health outcomes by maintaining and improving the health status of the given population. The centers have a commitment to share the effective practices and knowledge that they generate with KP Regions serving demographically similar member populations.

The ICC selects and supports the Centers of Excellence in Culturally Competent Care in identifying the most effective approaches to delivering culturally competent care. The Institute serves as a multidisciplinary resource, coach, and consultant as centers build culturally sensitive care systems in facilities across the nation. The institute assists the centers by:

• Providing expertise and technical assistance to KP teams interested in incorporating cultural competency into their programs;
• Acting as a repository of information, including extensive literature and the most current knowledge base on culturally competent care;
• Facilitating the sharing of experience and expertise across centers;
• Disseminating to all KP regions the new knowledge generated by the centers;
• Supporting research that can validate innovative initiatives to promote health and treat diseases among members of diverse cultures;
• Assessing community linkages and assisting centers in choosing the most effective approaches for culturally diverse communities;
• Providing and assisting with identification of financial support.

With the Institute’s support, three new Centers of Excellence for Culturally Competent Care were launched at the end of 2001. The focus of the centers reflects the increasing diversity of our membership: Latinos (Colorado), Linguistic Services (San Francisco), and Members with Disabilities (Vallejo, California). Future Centers of Excellence focusing on Eastern European populations and women’s health, among other groups and topics, are in the planning stages.

Advantages of Providing Culturally Competent Care

Providing culturally competent care can be a strategy to decrease rates of hospitalization. African Americans as well as Latinos are the most likely groups to be hospitalized for preventable causes. Designing culturally appropriate instruments may also lead to collecting quality data on patient satisfaction. In addition, clinician satisfaction is likely to increase when effective communication is established with patients.

Mental Health

When migrants arrive from patriarchal societies, the gender roles they bring with them may be attached to values of their culture. For example, Mexican women who involuntarily migrated to the United States because of imposed male authority have more depression than their counterparts who migrated voluntarily.

Diabetes

A diabetes intervention project was undertaken to provide a culturally sensitive, community-based alternative to the mainstream health care system in management of diabetes in a multiethnic community in Waianae, Hawaii. The intervention facilitated early detection of problems and increased the oppor-
tunity to coordinate care. In addition, timely physician visits promoted effective medical intervention. In turn, intervention during early stages of acute illness avoided both hospitalization and more costly care.\textsuperscript{11}

**Postoperative Use of Analgesic Agents**

Ng, et al reported “significant differences ... in analgesics administered to black, Hispanic, and white patients.”\textsuperscript{3,14} These researchers concluded that the cultural elaboration of pain involves experiences and expressions that are highly diverse because they are based on cultural perception, interpretation, meaning, and the level of distress communicated to staff.\textsuperscript{14}

**Rising Health Care Costs**

Containing the rising cost of health care also is critical. Annually, Americans invest 13.6\% of the US gross domestic product (GDP) in the health care sector; and this expenditure will reach an estimated 16\% of GDP—or more than $2 trillion—by 2007.\textsuperscript{15} Most health care expenditures involve care for patients with chronic disease, which affects almost 50\% of the US population.\textsuperscript{16,17} According to the Institute of Medicine, “Health care for chronic conditions is very different from care for acute episodic illnesses. Care for the chronically ill needs to be a collaborative, multidisciplinary process.”\textsuperscript{14,15}

**Crosscultural Communication**

“Effective methods of communication, both among caregivers and between caregivers and patients, are critical to providing high-quality care.”\textsuperscript{3,16} Thus, knowing \textit{what} to say is as important as understanding \textit{how} to say it. For example, a diabetic Latina who is advised to eat foods to which she is accustomed, instead of newly introduced foods, and is encouraged to enlist family support may be more likely to manage her disease effectively, to stay healthier, and to decrease her chance of requiring hospitalization. A monolingual Chinese patient with heart disease who, aided by an interpreter, more clearly understands the impact of exercise on his health, may be more inclined to adhere to an exercise regimen than he would if he lacked the assistance of an interpreter. A lesbian woman may be more likely to return regularly for a Papanicolaou smear if she is asked about her sexual relationships using gender-nonspecific language; and these regular checkups may reduce the likelihood of late-stage cervical cancer. A member with a disability will feel more comfortable hearing that he or she “uses a wheelchair” instead of being classified as “wheelchair-bound.” An elderly African American man with congestive heart failure may adhere to his prescribed medication and be less likely to visit the emergency department if he believes that his religious beliefs are integrated into his treatment plan. In sum, providing culturally competent care is about communicating effectively and about respecting diverse health beliefs and practices.

**Future of the Institute for Culturally Competent Care**

The ICCC actively seeks partnerships to develop training tools. The Culturally Competent Care (CCC) Pocket Card\textsuperscript{18} is a perfect example of a collaborative effort undertaken jointly by the ICCC and the Care Management Institute (CMI) in 2001. The CCC Pocket Card reaffirms the KP Promise through the ICCC and CMI. The ICCC and CMI work together to embed evidence-based best practices and current knowledge in culturally competent care into care management programs and tools as well as to personalize and enhance clinical encounters between our clinicians and our diverse membership. This year, the ICCC and CMI received one of two American Association of Health Plans grants in Innovation to Diversity to develop “Cultural Pearls of Wisdom for Chronic Disease Prevention and Management.” The “Cultural Pearls of Wisdom” is a point-of-care tool that will describe key points to assist clinicians in communicating with patients or their representatives from diverse cultures and in negotiating treatment for their patients.

This expertise will positively impact the health of our diverse membership and further define Permanente Medicine as the standard-bearer in the industry.

The first module of the ICCC’s training curriculum, “Introduction to Diversity and Culturally Competent Care,” has been introduced as a pilot program and will be used to train regional teams. Three other modules are in the planning stages: Module 2, Cultural Awareness; Module 3, Cultural Knowledge; and Module 4, Cultural Skills. Completion of the four modules will lead to KP’s own certification process in culturally competent care for regional trainers. In addition, the Culturally Competent Care Toolkit will be disseminated throughout the KP Regions in 2002.

The ICCC’s long-term goal is to develop culturally competent clinical expertise for each major population group represented in the Program’s membership. This expertise will positively impact the health of our diverse membership and further define Permanente Medicine as the standard-bearer in the industry. As the work of the ICCC and individual Centers for Culturally Competent Care is validated and as knowledge is transferred across the KP Program, we will further distinguish ourselves as the leader in a highly competitive health care market.

**Acknowledgments**

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**References**


A Clear Social Purpose

As a mission-driven, not-for-profit integrated health care program, we have a clear social purpose to meet the needs of our members and to set the standard for the marketplace.

— David M Lawrence, MD, former Chairman and CEO Kaiser Health Plan & Hospitals, Perspectives, Fall 1996
Smoke and sip bad coffee in this dingy ward
Schizophrenic guy
Is your affect flat or are you bored?
Oriented where and when and why?

Hearing voices?
Ah, what do they say?
Do you have a hard time making choices?
Motivation low to work or play?

I’ll apply pure neuroscience
Block your synapse dopamine
Sure you’ll soon relapse from non-compliance
Again to schizophrenic

Lest UR pounce I’ll document your stay
Now let’s go beyond the mental status
Relate as two who must get through the day
And have a conversation, gratis

Ringmaster condescends to clown
Yeah, I’m the doc and you’re the schiz
I wear a suit while you endure a gown
My ego’s fairly whole, yours crumbled bits

But I like you, patient friend, a lot
Affiliative thirst requires slaking
We are more alike than not
Both flakes who only differ in the flaking.

— William Goldsmith, MD
Ten Evidence-Based Practices for Successful Physician Retention

By Hannah King, MPH; Carrie Speckart, MA

Retaining qualified, dedicated, and satisfied physicians is critical to the success of Kaiser Permanente. Losing physicians greatly impacts patient and physician satisfaction, as well as continuity of care. There are also large costs.1 A recent Colorado Permanente Medical Group (CPMG) study showed that patients whose Primary Care Physician (PCP) had left the medical group had significantly more hospital admissions, emergency and specialty visits, and laboratory and x-ray tests. These patients also had dramatically reduced satisfaction scores and greater disenrollment rates.2 Compounding these issues is the difficulty in recruiting the right replacements from shrinking pools of primary and specialty care physicians. These are just some of the factors that combine to make a compelling case for focusing our strategies on supporting and retaining Permanente physicians. Although we currently engage in many programs to encourage physicians to remain with the program, there is more that can be done. This article outlines critical retention elements cited in the literature and provides several examples from the medical groups.

Using Effective Hiring Techniques

CPMG has become “militant about fit,” says Simone Ince, MD, Regional Department Chief, Internal Medicine, and a speaker at the 2002 Permanente Executive Conference. The first step to a lasting physician relationship, according to Dr Ince, is hiring physicians who share the values of the CPMG, clearly spelled out in the CPMG Code of Conduct. By using a cross-functional team of physicians trained in behavioral interviewing, CPMG asks specific, standardized questions to determine if the physician will fit in with the high-quality, patient-focused culture and behavioral norms of the physicians already in the group. Years of organizational research backs up their hiring philosophy: “The best predictor of future behavior is past behavior.”3 CPMG interviews focus on how each candidate has acted in previous situations, such as working on a high-performing team, disagreeing with a colleague, and going to extremes for a patient. Of course, says Dr Ince, it is also important to ask traditional questions regarding the candidate’s qualifications and interests.

Also integrated into the CPMG recruitment methodology is honesty about what a new physician can realistically expect at Kaiser Permanente. Empirical evidence emphasizes the importance of not only stating the positives but also the challenges of the position and the organization. In the literature, this is called a “realistic job preview.”4 Jack Cochran, MD, Medical Director, CPMG, says, “We want the physician candidates to leave the job interview scratching their heads and thinking, ‘is this the right environment for me, does this fit my values, am I going to be successful here?’” If the candidate is not given a good idea of exactly what s/he will be doing, what type of control s/he has over the work environment, and what support is available, the physician may not get off to a good start with the organization and is more likely to leave.5

Gracious Welcome and Startup Resources

Literature suggests that the first few days and weeks of employment are the best time to secure the loyalty of employees, and many successful organizations seize this opportunity to impress their new hires. At Mayo Clinic, they are very conscious of welcoming new physicians and building loyalty through the use of symbolic gestures that say “you are now one of us” such as nametags, nameplates, welcome dinners and gifts, and receptions for new families. New physicians and their families that quickly feel a part of the medical group community are not only more likely to stay but are more likely to be fully committed to the organization.6

In addition to the symbolic gestures, it is critical to provide the resources that physicians need to do their jobs.7 In a recent focus-group survey of new physicians of The Permanente Medical Group (TPMG) in Northern California, many new physicians complained that they did not have the “nuts and bolts” to effectively begin serving members. They lacked lab coats or parking passes in their first days or weeks on the job, they did not have adequate training on the computer systems, and some were uncertain about how to perform crucial procedures—like making a referral or ordering a laboratory test. One physician stated, “I had no office/desk, no computer, printer or e-mail. In the days following, when I asked about getting a printer, I was yelled at by a nurse for asking.” Yet this same group of 90 physicians said they were eager to get up to speed with their jobs as quickly as possible.

The first step to a lasting physician relationship ... is hiring physicians who share the values ...
sible and were eager to excel but couldn’t without the essential tools and training they needed to do those jobs.

One other gift that welcomes a physician to Kaiser Permanente is a slow start. For new physicians, having time to acclimate to their practice by being given a lighter load when they first start out is essential.6,7 This tactic gives new physicians time to attend orientation and training sessions, and to learn about systems on the job. In addition, many new TPMG physicians felt that they needed extra time in their schedules for opportunities to network and socialize with colleagues within their specialty, both within their department and throughout TPMG. “It is really helpful to have a lighter load when you first start out. It allows you more time to go through the steps.”6 These opportunities effectively acclimate new physicians not only to the workload but to the medical group community.

Orientation, Enculturation and Mentoring

In addition to having the nuts and bolts supplies and the most basic training, new PMG physicians need timely orientation to their department, facility, and region. New TPMG physicians surveyed wanted practical orientation with a tour of the facility and introductions to chiefs and/or key department contacts within weeks of being brought on.7 They also wanted practical, department-specific orientation. Ideally, the department orientation should occur before the physician starts or very shortly thereafter.6,7 David Shearn, MD, Director of Physician Education and Development, TPMG, says, “We must treat our new physicians like we treat our new members and provide a great care experience for them.”

In addition, the literature shows that the best orientation programs go beyond basic introduction to a department and provide an opportunity to “enculturate” a person into an organization to foster a feeling of belonging and loyalty.6 Richard Pitts, DO, Assistant Area Medical Director, Southern California Permanente Medical Group (SCPMG) in Orange County, has developed an orientation program entitled “Finding Your Path to a Successful Permanente Partnership.” All new physicians meet together every two weeks for nine months, beginning in September each year. During these biweekly breakfast meetings, they are introduced to SCPMG’s leadership and managers from various departments. They learn about Kaiser Permanente’s mission, vision, and social purpose, as well as the SCPMG behavioral norms and operating principles. The sessions address specific aspects of Permanente Medicine to help independent-minded physicians adjust to a collaborative work environment and successfully obtain partnership. Not only do these physicians gain a clear sense of Kaiser Permanente and SCPMG, they get a clear picture of what is required of them to become a Permanente partner while at the same time building organizational commitment and creating strong bonds with other KP physicians across specialties and facilities.

Many new PMG physicians feel a strong need for mentoring—for an accessible clinician who can answer questions and foster feelings of belonging.7 Research has shown that the ideal mentor role is to provide acceptance, confirmation, coaching, counseling, friendship, and role-modeling to the new employee.5 Specifically, physician-mentors help new physicians to learn the often-complex KP systems, to network with other physicians, and to answer clinical and operational questions. In addition, the mentor can help welcome the new physician into the community.6 Because mentors serve multiple roles, they must have a clear program, with training, that outlines the role each facility is asking the mentor to serve, provides time and some funds for the mentor to get to know the mentee, and provides opportunities to provide guidance and support. Dr Ron Copeland states, “As the OPMG (Ohio Permanente Medical Group) Medical Director, I cannot think of any better investment of our professional time, excluding direct patient care, than mentoring fellow colleagues.”

The Role of Leadership: Setting Expectations, Giving Feedback, Providing Recognition, and Listening

The way a department or physician chief welcomes a new physician and demonstrates leadership plays a key role in a new physician’s decision to stay with KP. Physician leaders who not only communicate organizational and individual goals and expectations, but embody them are more likely to retain the committed physicians working with them.7 Key leadership behaviors involved in the clear communication of goals and expectations include listening to new physicians and providing them guidance, feedback, opportunities, rewards, and recognition. These behaviors have been shown to increase commitment in our physicians and to make them feel a part of their new PMG. When physicians clearly understand how they are doing and what is expected of them, they are more focused, committed, and willing to stay.10

Once physicians are hired and oriented, they need accurate, effective, timely feedback about how well they are or are not meeting expectations. The literature shows that effective performance feedback increases performance and satisfaction.11 Physicians cannot improve if they don’t know where they need to improve. Dr Cochran (CPMG) states, “We will have arrived as a culture when the courageous conversation is considered a thoughtful, humane gift and when we seek to receive and seek to give critical constructive feedback.” In addition to feedback on performance problems, recognition must be provided for things done well.12 This, unfortunately, is not done nearly often enough. In recent interviews with Kaiser Permanente physicians regarding the physician work environment, an overwhelming number of physicians stated that more recognition would be greatly appreciated.13 One physician stated, “I truly think that we don’t necessarily need monetary recognition or gifts. All those things are nice, but...
I think it is far better if leadership just walks by you in the hall and says, ‘You are really doing a good job and I appreciate what you have done.’” Empirical evidence backs this up and suggests that the most effective recognition is personalized, timely, and one on one.14

It’s not the money or perks but the relationship with one’s leadership that can have the biggest impact in engagement and retention.12 Yet communication is often missing because leadership perceives themselves as too busy to communicate or only communicates by e-mail and never in person. Physicians want to be listened to and to see that their suggestions for improvement are acted upon. If leadership listens and follows up on physicians’ concerns these physicians feel significant influence and control over their work environment.13 Lack of perceived control was the most important predictor of burnout among a study of 1800 HMO physicians.15 Organizational leaders that listen and involve their physicians with designing service delivery are more likely to have less burnout and more satisfied, happy, and committed physicians.16

**Conclusion**

The Care Experience Council (CEC) has been actively studying the Physician Work Environment for the past two years. In its analysis of the 2000 and 2001 People Pulse Surveys, the CEC found key drivers of physician satisfaction across five regions of Kaiser Permanente.15 These drivers correlated with “feeling supported to do what is necessary to satisfy members,” and include influence and involvement over the work environment; strong leadership and effective communication; and being valued for diversity and recognized for good work. In the case of physician retention, if we can ensure that physicians have what they need to perform their jobs, are involved in decision making and improvement efforts, are listened to and receive feedback, and are recognized for their efforts, we will increase the likelihood of retaining Permanente physicians.

Dr. Shearn concludes, “Physician retention is more than keeping physicians from leaving the organization. It is about retaining the hearts and minds, commitment, and loyalty of our physicians.” There are many opportunities for the Permanente Medical Groups to hire the right physicians (be militant about fit), orient and enculturate them, give them the tools they need to be good physicians including training and mentoring, and listen to them and recognize them so that they can provide the best possible care and service to members.

In return for our efforts, we will create a community of highly satisfied and committed Permanente physicians.

**References**

Are All Physicians Leaders?  
The Opinions of Permanente Physician-Leaders

**Introduction**
During 2001, I conducted a series of focus groups and informal discussions with 75 Kaiser Permanente physician-leaders from six Permanente Medical Groups. The physicians were asked if they believe that every physician is a leader regardless of formal leadership titles. The unanimous response to this question was “yes.” The various ways in which physicians manifest their leadership roles were then discussed.

**Areas of Consensus**
- *All* physicians are leaders regardless of whether or not they hold a formal leadership role.
- Physicians often do not realize that they are seen as leaders by staff members and for that reason are unaware of the major impact they have on the staff’s attitudes and behavior.
- Physicians often do not step up to their role as informal leaders and therefore do not model the most effective behavior for staff members.
- Physicians lead by example, both good and bad.
- To be respected as a leader by other physicians, a physician must be viewed as a good clinician. However, staff members view a physician as a leader simply because he or she is a physician.
- Physician-leaders’ roles are mostly the same at all levels; their role just grows in complexity, scope, and amount of authority and responsibility.

**Roles of the Individual Physician as a Leader**
At the most basic level, physicians set:
- **Tone of the work unit**
  - No matter how small the group or unit, physicians set the tone.

**Embracing the Leadership Role**
By Sharon Levine, MD, Associate Executive Director, The Permanente Medical Group

During the course of a decade spent thinking about leadership, I have come to understand that being a physician at Kaiser Permanente is, by definition, being a leader. And I have come to believe that it is very important that each of us accepts and embraces the role of leader and that, as medical groups, we provide the tools and the opportunities for every Permanente physician to develop as a leader to the fullest extent possible. It is important because, whether or not we see ourselves as leaders, others do. Our patients and the staff we work with follow the direction we set and the example we model, and they expect us to behave as leaders do.

Our leadership role comes from our authority—the power, the right, and the responsibility we have to act on behalf of others within our role as clinicians. But it goes way beyond authority. It comes from the trust we have earned, which creates the opportunities to influence others and to direct their actions. It comes from the courage we demonstrate in making tough decisions and in confronting difficult situations in the exam room and in the hospital. It comes from our stamina and endurance, our ability to work long hours and to endure the intensely emotional aspects of our jobs. It comes from our ability to be confident and assertive and to mix the confidence with an equal amount of humility. It comes from our ability to take our work, our purpose, and our mission seriously while not taking ourselves too seriously. Our leadership role comes from our empathy and ability to connect with others on a personal level without fear of appearing vulnerable. ... And it comes from the energy and optimism we bring to our work each day, which energizes those with whom we work.

These traits and characteristics of excellent clinicians are the same as those of effective leaders—which is why it is so easy for others to recognize us as leaders, even if it isn’t always immediately obvious to us. Our opportunity is to embrace that role and to grow in it, to develop our leadership abilities just as we develop and enhance our clinical skills—and to best serve our patients, to provide direction and meaning for our staff, and, collectively, to strengthen and enhance the capabilities of our organization.
work unit. Implementation of change versus resistance to change depends in large part on physicians’ behavior.

- **Standard of the work unit**
  Good physicians “exude excellence” and raise everyone’s performance to a higher level. As physicians teach others, they develop the skills of those around them. Physicians’ clinical skills, work habits, and expectations set standards that others follow.

### Implications for the (Informal) Physician-Leader

- Improving both service and members’ experience begins with physicians modeling behaviors that facilitate positive interaction. The staff looks up to physicians. The staff’s treatment of members mirrors how physicians treat members.
- The manner in which physicians treat the staff is critical to how well the office runs. Physicians’ treatment of staff affects retention, especially for registered nurses who work closely with physicians. Because they are in short supply, they have many options as they look for a good environment in which to work.
- Physicians affect the quality and cost of care.
- Physicians can make the care delivery system work better.
- Physicians affect other physicians’ behavior. Because role modeling is essential for physicians new to the team, they are more likely to succeed if they observe their colleagues exhibiting positive leadership attitudes and behaviors.

### Preparing Every Physician to be a Leader

**Based on the opinions of Kaiser Permanente leaders in this focus group, orientation programs to prepare each new physician to be an effective informal leader on the team might include these elements:**

- Context of their leadership as well as understanding of expectations about:
  - Their role as an informal leader;
  - Official physician-leaders’ roles;
  - Medical group structure, mission, values, culture, and Health Plan relationship;
  - Health care as an industry; competitive environment.

- An understanding of basic interpersonal communication skills focusing on:
  - Setting expectations with staff;
  - Having meaningful and, at times, difficult conversations with colleagues and staff;
  - How to give effective and regular feedback to staff;
  - Coaching skills;
  - Clinician Patient Communication (CPC) basics—Four Habits or Four E’s models. CPC particularly around common difficult situations, such as the patient with the long list of complaints; patients who want things they don’t need; or patients with different health care beliefs and culture.
- Being an effective high-performing Permanente physician, by learning how to:
  - Use time management skills;
  - Work with ancillary staff appropriately and efficiently;
  - Use a computer proficiently;
  - Develop self-confidence;
  - Understand the key drivers of patient satisfaction and how to have efficient and effective patient interviews;
  - Solve problems in a team environment;
  - Make decisions in a group setting.

### Conclusion

The opinion of this focus group of physician-leaders from six of the Permanente Medical Groups was that all physicians are leaders—whether or not they are in a formal leadership position. Group consensus held that there is a direct relation between how physicians perform in this informal leadership role and how the team cares for patients. Developing all physicians as effective leaders creates an environment in which everyone on the care team views Kaiser Permanente as a place where patients receive excellent quality of care and service as well as a place where the entire care team chooses to build a career.
Retire and Practice

The day I retired was grey and gloomy. My mood matched the low clouds and drizzle. I was sad, dispirited. Medicine, with its challenges, frustrations, and joys, had been part of my life for fifty years. Now my ability to give and teach, to comfort and heal, would be terminated. I would no longer be seeing patients, practicing medicine. I was so convinced of this that I even dropped the MD from my name. However, putting my stethoscope in a drawer and giving my white jackets to my grandchildren for their Halloween costumes did not, as I had anticipated, end the practice of family medicine for me. I am still consulted by friends, neighbors, and former patients. They contact me because they are frightened, bewildered, need explanations and my listening ear rather than penicillin or Prozac.

One recent afternoon, a middle-aged gentleman came to my door to thank me for a plant I had sent to him when he was hospitalized for radical prostatectomy. He refuses the coffee I offer but stays an hour and more to tell me about the frustration he is experiencing due to his postop course. He was prepared for incontinence but not for the embarrassment it is causing him. I have little to offer other than empathy and time to tell me about the frustration he is experiencing due to his postop course. He was prepared for incontinence but not for the embarrassment it is causing him. I have little to offer other than empathy and time to allow him to talk about the problem he faces, always having to carry extra clothing, as well as his concern that his colleagues might notice a urine odor. I am surprised at the candor with which he discusses his difficulties since I am only superficially acquainted with him. He is more relaxed when he leaves and tells me that he appreciates the visit in my home more than the plant I gave him.

He asks if I would permit him to return to talk again? Undoubtedly he values the fact that, as a retired physician, I have more time to listen to him than his surgeon, who always has other patients waiting. It gives me satisfaction that, due to my calling, I understand the devastating effects of illness and therefore can still ease the pain of those around me. No family physician is unaware of the powerful healing qualities of quiet listening. When I was first in practice, I had the luxury of using that tool and learned how much is revealed to the silent listener. At the end of my career, it became more difficult to listen adequately due to time constraints. Now that I am retired, I can once again listen attentively for as long as necessary. My visitor realizes this and therefore wants to return.

A former patient’s husband calls. His wife, in her late seventies, suffers a sudden onset of confusion and difficulty in speaking. He is unable to contact her primary care physician. I advise him to take her to the emergency room at once. She is admitted to the neurology floor but adamantly refuses to get into bed. At her husband’s suggestion, her nurse calls me and tells me that neither she nor the neurology resident can persuade the patient to get undressed. I go to the hospital and have no problem at all helping her to slip off her clothes and get into bed in spite of her confusion. For a moment, I once again enjoy the privilege of practicing medicine, of being in the hospital, of being part of a team—the nurse, the resident, and the patient’s husband. By gentle, firm persuasion, I get the patient ready for her brain scan. I feel reassured that I have not lost my touch, used many times in the past, to get an immediate, necessary task accomplished. Fortunately, in a few days the patient’s mind clears and she is discharged to her home. She continues to consult me about many discomforts she is experiencing, most of which I can improve with warm water bottles, mild massage administered by her husband, and other benign ministrations. Before retirement, receiving calls about minor ailments while seeing another patient irritated me; now I no longer feel resentful but instead feel honored about being interrupted.

There are also less serious problems about which I am consulted. A head lice epidemic and panic simultaneously strike the middle-class neighborhood in which I live. Out

Renate G Justin, MD, was in family practice with her daughter Ingrid Justin, MD, until both joined Kaiser Permanente. Dr Justin is now retired, after 45 years of practicing medicine.
my window I see adults grooming each other, looking for signs of infestation. This epidemic, like many others, wears itself out. Perhaps the experienced voice of the senior member of the community helped to restore calm.

Then comes the phone call from a family who had been patients of mine for 25 years and who now live in a distant town. The parents are desperate because their young daughter has been diagnosed with a rare cancer. I share their concern and worry. A three-year-old child of theirs died many years ago, and I know that the pain of that loss comes to the surface now that they face this potentially fatal illness. They want to know where they should go for care, what is the prognosis, what is the meaning of “nodes lighting up on PET scan”? They are more able, capable, and intelligent than I am and could answer these questions, but they need a familiar, trusted voice to help them through their crisis. Together, we draw up a list of areas they may want to explore with the oncologist. I am sure we will have an ongoing conversation as the cancer reveals its character and we learn how aggressive it is. I think about them often and with deep compassion for their suffering. If our discussion were taking place face-to-face, I would hug the mother and father to express my support during the difficult months ahead. I would have a long talk with the daughter about her future, her anxiety. Now I will communicate by letter and telephone and feel humbled by their thanks for my interest. They help me as much as I help them, because I realize now that my fear of not ever being able to use my medical knowledge again to help someone was unfounded.

Many minor injuries come to my house—cuts, nail avulsions, fractured clavicles. Often, the only request is an opinion: Does it need stitches? Do we need to see our doctor or go to the emergency room? Other times, I can apply a bandage, which the youngsters especially appreciate. Somehow knowing that I am a doctor makes the “owie” improve faster than if their mother or father put a Band-Aid® on the wound. When a scraped knee or a minor cut appears at my doorstep, I wish I had a well-equipped office in my home in which I could apply a neat dressing instead of making do with my ill-lit living room, where I worry about bloodstains on the carpet. Obviously, I have to limit myself to listening and advice, and not get involved in treatment, since I no longer carry malpractice insurance. When, over a cup of tea, the discussion turns to the appropriateness of a new prescription, I remain silent and do not comment, even if I have a strong opinion. If asked directly about a medication, I refer the question back to the prescribing doctor.

At times, I am also asked to see injured animals, but there I draw the line. I did that when I practiced in a remote area early in my career, but now I have an acquaintance who is a retired veterinarian, and I refer to him.

Retirement, fortunately, has not eliminated my occasional involvement with patients. Compassion did not dry up when I cleaned out my desk and put the PDR next to Shakespeare on my bookshelf. Those who consult me can still benefit from my medical training and experience, and I benefit from knowing that I contribute to someone’s well-being.

Somehow knowing that I am a doctor makes the “owie” improve faster than if their mother or father put a Band-Aid® on the wound.

Getting to Choose

You don’t get to choose how you’re going to die. Or when.
You can only decide how you’re going to live. Now.

— Joan Baez, b 1941, folk singer and political activist
Are Your Patients Taking What You Prescribe?

A Major Determinant: Clinician-Patient Communication

Making the Case

Chances are that many patients you saw today will not do what you suggested or take what you prescribed!

It is well established that adherence of patients to prescribed therapy for a variety of diseases is rarely more than 60%.1 This includes studies in HIV,2 child and adult asthma,3 diabetes,4 hypertension,5 and post myocardial infarction (MI) care.6

Taking medications exactly as prescribed is especially critical in HIV care, in which patients must take their antiretrovirals 95% of the time to get complete viral suppression.7 What is considered acceptable adherence (60%-80%) for other chronic illnesses is certainly not good enough for HIV.

The Reasons for Poor Adherence

Why your patients do what they do ... or why your patients don't do what you want them to do!

The many studies of adherence to therapy consistently list various combinations of the following explanations:8

• Logistic issues—access to care; transportation.9
• Perceptions of health benefits from the therapy; concern about side effects.10
• Social and cultural—including practical and emotional support.11 Beliefs.
• Complexity of treatment regimens12—eg, number of daily doses; dietary requirements.
• Patient’s condition: Depression;13 patients over 75 years.14
• Communication and relationship with health care provider.15 16

...the adherence of patients to prescribed therapy for a variety of diseases is rarely over 60%.

Improving Patient Adherence

It’s not the power of the pen, but rather the power of the ear!

So what can be done to improve the likelihood that your patient will take the medicine that you write on the prescription pad? Listen to the patient. You can use your communication skills to probe each of

Lee Jacobs, MD, joined the Hawaii Permanente Medical Group in 1980 as an infectious disease consultant. In 1985, he moved to Atlanta to assist in starting The Southeast Permanente Medical Group and still resides there as the Medical Group’s Associate Medical Director for Professional Development and as an infectious disease consultant. E-mail: Lee.Jacobs@kp.org.
the variables implicated as causes for poor adherence. This central role of clinician-patient communication is demonstrated in the following schematic:

**Central Role of Communication in Adherence**

<table>
<thead>
<tr>
<th>Practical &amp; Logistic</th>
<th>Social Support</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Do you think you will have any problem getting the medication today?”</td>
<td>“Do you have support at home?”</td>
</tr>
<tr>
<td>“Will you have any problem returning to my office?”</td>
<td>“How do you think your family will feel about this therapy?”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Complexity of Regimen</th>
<th>Perceptions of Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Let’s talk about when you take the medication”</td>
<td>“Do you understand how the medication will help you?”</td>
</tr>
<tr>
<td>“Do you foresee any problem in taking the pill?”</td>
<td>“Are you worried about any specific side effect?”</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient-Related Conditions</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Let’s talk about your other health issues and how they might relate to taking this approach.”</td>
</tr>
</tbody>
</table>

**Conclusion**

Finding solutions to address the alarming high rate of poor adherence has to become a priority for the health care community. However, very few trials have been undertaken to study interventions to improve adherence. As suggested in this model, it is recommended that future research focus primarily on team member and clinician communication skills with the patient that would reveal possible barriers to adherence and result in a much more effective and truly shared decision.

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**Contrasting Terms**

- **Compliance:** Implies patient follows doctor’s orders, is less informed, and has little or no input.
- **Adherence:** Focuses more on patient commitment to the regimen. Is based on reasonable negotiations and more patient empowerment than compliance.
- **Concordance:** Is based on notion of patient equality and respect for patient autonomy, the desired relationship in a therapeutic alliance between the care team and the patient.

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**Adherence Defined**

Adherence is the extent to which a person’s behavior (medications, diets, lifestyle changes) coincides with medical or health advice.

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Are Your Patients Taking What You Prescribe?


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Interregional Clinician-Patient Communication Leadership Group (IRPC) Mission:

The Mission of the IRCPC is to ensure that excellence in clinician-patient communication is a distinguishing feature of our members’ care experience throughout Kaiser Permanente, is accepted as a critical aspect of clinical practice, and is recognized as a major contributor to our organizational success.
Neuropsychology: Adaptation for a Busy Pediatric Neurology Clinic in a Managed Care Setting

By Peter F Carey, PhD; Richard J Konkol, MD, PhD

Abstract

Background: Neuropsychologic testing in neurology clinics is often necessary to document cognitive and general intellectual abilities in children with acquired or inborn forms of encephalopathy. Availability of testing is limited, however, because of expense, length of time to complete testing, and difficulty of using long reports in a busy clinic. Our protocol addressed these limitations by contracting with an out-of-plan psychologist to perform selected complementary standardized psychometric tests as an extension of the neurologic evaluation.

Methods: Sixty-nine children were referred from primary care clinics because of diagnostic uncertainty or treatment failure. Children received complete neurologic assessment, after which a neuropsychology battery of tests was administered to screen aspects of cognitive functioning. Psychosocial questionnaires also were administered to collect input from parents, teachers, and the children themselves. Findings were presented in a tabular format organizing specific test scores with standard deviations, followed by a brief narrative conclusion. A synthesis of findings was provided to parents at a follow-up visit with the neurologist and psychologist. Differences in viewpoints were reconciled before a treatment plan was given.

Results: Of undiagnosed children, 70% were found to have attention difficulties, 58% had unrecognized learning disorders, and 17% had major mood disturbance. A postvisit survey of parents reflected satisfaction with the protocol, and 80% of parents expressed relief that the child’s problems were objectively defined. Costs were about 30% to 40% of alternative types of independent, nonintegrated neuropsychologic assessment.

Discussion: This service lessened demands in the primary care clinics because parents were motivated and were specifically directed to pursue specific medical and support services. This plan could be adapted to other specialty clinics, such as psychiatry or developmental pediatrics.

Introduction

The Problem: Cost and Complexity of Pediatric Neuropsychological Evaluation

Although most children can be diagnosed and treated for attention deficit hyperactivity disorder (ADHD) and mood disorders, learning problems are more difficult to define in primary care clinics. Furthermore, children with clearly defined primary encephalopathic conditions often have secondary comorbid disorders impacting mood, learning, and central processing, even with stable primary conditions such as cerebral palsy, seizures, or developmental delay. For instance, an anxious, moody, misbehaving child with well-controlled complex partial seizures may appear to be depressed. However, emergence of these symptoms only during the week and not on weekends or holidays points to the possibility of a specific learning disability or central processing problem and indicates the need for neuropsychologic assessment.

However, feasibility of traditional neuropsychologic assessment has been questioned by managed care administrators because these full evaluations are costly. Even with a comprehensive neuropsychologic report, a neurologist may encounter difficulty that limits the usefulness of consultation: The patient may have to wait for an extended period to obtain an appointment, and then the psychologist’s report may be...
Neuropsychology: Adaptation for a Busy Pediatric Neurology Clinic in a Managed Care Setting

The purpose of this project was to develop an economical, efficient neuropsychologic screening process that could be integrated into a busy clinical setting...

The purpose of this project was to develop an economical, efficient neuropsychologic screening process that could be integrated into a busy clinical setting to develop a more sophisticated and effective neurologic examination and treatment plan. In our protocol, the neuropsychologic assessment period was limited to a half-day clinic and was adapted to each patient on the basis of the neurologist’s assessment. Neuropsychologic evaluation with a limited focus was made possible by integration with neurologic assessment, especially the mental status examinations. Selection of psychometric tests was designed to highlight specific areas of weakness while confirming areas of strength or normal function. The children referred often had complex clinical findings that required further testing to more clearly define their functioning.

In addition, we surveyed parents to determine whether they found the evaluation valuable. This report describes evaluation measures and procedures, summarizes outcomes for the first 69 patients evaluated, and presents results of the parental feedback survey.

Method

Two levels of screening in the primary care and neurology clinics led to selection of subjects who had mood disruption and school failure and whose parents were frustrated with the child’s behavior. Medical evaluation consisted in obtaining the medical history, administering physical examination, reviewing the semistructured psychologic narrative, and administering tests of neurologic and mental status. Neurologic evaluation was done during a routinely scheduled clinic visit.

Sixty-nine patients aged 4 years to 20 years (mean age, 12 years) were evaluated by either a pediatric neurologist or a developmental pediatrician who formulated a specific hypothesis regarding areas of suspected cognitive deficits, behavioral problems, or mood disturbance. A neuropsychologist performed a screening evaluation within the next two weeks to identify specific areas of problems or deficits and to confirm other areas of normal function and skills. The neuropsychologist was an outside consultant paid by KP at a contracted rate for each evaluation. This service also included brief follow-up discussion with both the family and the neurologist.

The screening examination used standardized age-normative measures, lasted approximately 3.5 hours, and included tests of dominant-hemisphere (language) and nondominant (perceptual and constructional) abilities and memory. Frontal lobe function was correlated with tests of executive function; attention and information processing speed were assessed independently. Psychosocial and mood problems

Table 1. Neuropsychologic tests administered to 69 referred pediatric patients participating in evaluation protocol

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<th>General cognitive functioning</th>
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To overcome these limitations, a neuropsychologic screening assessment battery was developed and implemented in the pediatric neurology clinics of Kaiser Permanente Northwest. This screening was structured to complement the neurologic examination and was initiated after a pediatric neurologist or a developmental pediatrician determined the need for this assessment by identifying specific areas of functional concern. Children referred for assessment were frequently failing in school, were considered ineligible for special educational services, or had disruptive behavior that interfered with family and social functioning. Moreover, these children frequently completed standard learning disability assessment through their school district as well as nondiagnostic screening for ADHD or other behavioral disorders through a primary care clinic before being referred to the pediatric neurology clinic.

delayed for two months or more; these reports often exceed 15 or 20 pages and do not necessarily discuss problems that the neurologist must address in the limited time available in the clinic; in addition, this psychologic assessment is costly, sometimes two to three thousand dollars each. Families whose children are evaluated frequently do not understand what was discovered with the neuropsychological testing and are unable to relate the results to school and family life or to the medical diagnosis.

New KP Approach to Effective, Efficient Pediatric Neuropsychologic Evaluation

To overcome these limitations, a neuropsychologic screening assessment battery was developed and implemented in the pediatric neurology clinics of Kaiser Permanente Northwest. This screening was structured to complement the neurologic examination and was initiated after a pediatric neurologist or a developmental pediatrician determined the need for this assessment by identifying specific areas of functional concern. Children referred for assessment were frequently failing in school, were considered ineligible for special educational services, or had disruptive behavior that interfered with family and social functioning. Moreover, these children frequently completed standard learning disability assessment through their school district as well as nondiagnostic screening for ADHD or other behavioral disorders through a primary care clinic before being referred to the pediatric neurology clinic.
were identified from responses to standardized questionnaires and from structured interviews.

For most patients, three or four neuropsychologic tests were administered to review cognitive ability specific to a domain; additional testing was administered to identify problem areas (Table 1). Measures of dominant-hemisphere functioning included tests of expressive language, verbal memory (both short-term and long-term), verbal learning, and anomia/naming. Measures of nondominant hemisphere functioning included visual-spatial reasoning, basic perception, complex perception, and visual construction as well as visual memory. Attentional abilities were documented through measures of processing speed and attention. Executive functioning was evaluated using tests of problem-solving and mental flexibility, fluency, inhibition, and simultaneous processing. Psychosocial functioning was characterized by interviews and by parental responses to standardized questionnaires. All measures were recorded as age-normative standard scores with standard deviations.

Results were summarized in tabular and narrative formats. A table of results using Microsoft® Excel was organized (Table 2) that compares the patient’s standard scores (and standard deviation) with population mean scores. The table was followed by a brief narrative summary of results describing implications for life at school and in the family. An example of the table is shown (Table 2). The psychologist and the neurologist met briefly with each family to present results and to answer questions. The impact of this assessment was estimated through direct feedback as well as from responses to a questionnaire.

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<th>Area of functioning</th>
<th>Test</th>
<th>Raw score</th>
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child and any parental feeling of shame; instead, parents were shown a more realistic view of the child’s weaknesses and strengths. Parents felt more encouraged to take a more positive approach in helping their children.

Feedback from parents and participating neurologists indicated high levels of satisfaction with the program. Parents coming into the clinic often reported that their child was not well understood and was struggling in the school system as well as socially. Of the parents who completed the survey, 80% rated the service as highly satisfactory; 82% reported that the evaluation complemented their consultation with the physician; and 74% indicated that they had learned new information about their child’s strengths and weaknesses. The survey report showed that 80% found the evaluation useful for understanding their child and enabled them to be more effective advocates when seeking specific accommodation and services for the child.

Case Example
An example of the unique integrated assessment used in the project was encountered in the case of a teenager who was thought to have dyslexia and attention problems because she could not read well or finish her homework tasks on time. Because of both her inability to make adequate progress and the numerous hours she was spending on homework, she became increasingly frustrated in her first year of high school. Her reluctant verbalization tended to be simple or reflective, even though school testing found a relatively high verbal reasoning ability. Inadequate compensatory techniques (eg, arguing and avoidance strategies) as well as frequently irritable mood also were observed. On the basis of these symptoms, school-based testing resulted in two diagnoses: oppositional defiant disorder and attention deficit disorder. Additional school testing showed no deficit in decoding or reading single words and showed above-average general intellectual ability with no delay in academic achievement.

Neuropsychologic examination showed that she had poor reading fluency and an upper motor pattern of weakness affecting the left deltoid, triceps, iliopsoas, and hamstring muscles. She also had sensory perceptual deficit in recognizing numbers traced on the left palm while her eyes were closed. The appendicular upper motor pattern of weakness and sensory perception deficit was consistent with dysfunction of the right parietal and frontal areas.

Neuropsychologic screening assessment showed good performance in the dominant hemisphere tasks of naming, decoding, and verbal learning. Testing of the nondominant hemisphere showed average basic perceptual skills as documented on the line orientation task, but relatively weak results were seen for the higher-order drawing recall task as measured using the Rey-Osterrieth Complex figure. This task required higher-order integration of spatial organizational skills.5,4

Neuropsychologic evaluation showed also that although the patient had good basic language skills, her ability to synthesize thematic elements and develop new ideas was much weaker than her ability to define words and comprehend spoken language. For example, although she could define words well, she had difficulty with the Similarities Subtest from the Wechsler Abbreviated Scale of Intelligence,3 which provided a measure of conceptual reasoning. A key piece to this puzzle was the patient’s difficulty completing the recall components on the complex figure test. Although she accurately recalled details of the complex figure, the limitations she experienced reflected a lack of organization or schema by which she could accurately organize the complex figure.

These findings were consistent with the patient’s mother’s observation that the patient could not process words in the context of a paragraph or page of text, even though she could perform well with lists of isolated words. This deficit is consistent with a right frontoparietal lesion: The right hemisphere is uniquely specialized for spatial, perceptual, and constructional comprehension and for overall organization of behavior output and perception. The deficit is also consistent with modern functional neuroimaging studies, which show an important role of the right hemisphere in language processing.2,5 Integration of the information obtained from both neuropsychologic and neurologic examination provided a more complete picture of brain functioning than either discipline could have achieved by itself.

Discussion
We have outlined a modified, multidisciplinary, economically efficient process for evaluating selected children with diagnostic or treatment failure. This approach is unique because it is integrated into the workflow of a fully scheduled clinic but costs about two-thirds less than nonintegrated neuropsychologic evaluation. Our process also offers another unique feature: incorporation of a feedback mechanism to resolve contradictory data and inappropriate conclusions. The neurology clinic seemed an appropriate setting for this approach because neurologic brain involvement has a high probability of affecting learning, central processing, and mood regulation. This model could also be used in other clinics (eg, psychiatry or developmental medicine) if support is provided and if access-related issues are well managed.

This project showed the utility of neuropsychologic screening evaluation on several levels: The evaluation identified neuropsychologic problems previously undiscovered by other testing; the brief report format worked effectively in the clinic; conflicting medical and psychologic viewpoints were easily resolved at a follow-up clinic visit; and the evaluation service was much less costly than other, noncontract referral consultations.

Our interdisciplinary approach yielded a more complete picture of brain and behavioral interrelationships without having the disadvantages of major expense, delay, or misunderstanding—disadvantages to be expected in creating a multidisciplinary clinic with multiple clinicians evaluating only two or three patients per
day or sending children to an outside clinic for testing. The essential component of this economy (ie, focused integration of medical and psychologic viewpoints during evaluation and during summation of test results) departs from the typical psychologic model (an extended standardized battery of tests), where the process of gathering information does not target a specific set of symptoms. Our model provides patients and their families with integrated information.

This multidisciplinary approach has many other conceivable applications in a medical practice. Any medical or accidental intervention that can produce an encephalopathic condition could be an appropriate subject for this assessment. For instance, children with head injury may have subtle changes in behavior, attention, mood, and learning. Specific standardized neuropsychologic testing linked to neurologic findings could not only confirm the primary diagnosis but may also be useful in therapeutic decisions and prognosis. In other instances, drugs such as anti-epileptic agents can affect nonictal brain functioning, and these effects must be distinguished from seizures by means of integrated neuropsychologic-neurologic analysis. Clear definition of these issues can further redirect the care plan, which, if correctly determined, can improve effects of treatment. This result, in turn, decreases utilization of medical services in a patient population that makes heavy demands on the time of clinic staff, and this reduced utilization subsequently improves a patient’s quality of life. This approach is specifically applicable to a specialty clinic and may, with modification, have limited use in a primary care clinic.

The perception that neuropsychologic testing is a time-consuming, costly, inefficient service for most neurology patients represented a prominent challenge to development of this program. Because of the importance of obtaining functional information, a concerted effort has been made to develop brief assessment that leads directly to treatment plans. Strong emphasis on the interview to determine the clinical intervention—as opposed to using the full battery of available psychologic tests—led to de-emphasizing psychologic assessment. This project addressed this limitation by developing a more focused role for limited, selected standardized assessment.

Our protocol was designed to meet criteria commonly defined by the medical model of consultation. In the medical consultative model, clinicians receive brief highlights relevant to the referral question. The utility of developing brief consultative reports to specialists is well established and frequently used; however, the literature on efficacy and cost of brief versus extended modification of the neuropsychologic battery is limited.

Moreover, few reports of protocols in a managed care setting have compared brief psychologic assessment correlated with neurologic examination. Future development of this form of assessment will require further validation of our modification and will focus on integrating use of standardized neuropsychologic, electrophysiologic, and imaging studies to understand the links between brain function and structure.

Practice Tips

Seek an interdisciplinary approach of physician and psychologist to produce a more complete picture of brain and behavioral interrelationships.

Use a neuropsychological screening evaluation when it is a limited, selected standardized assessment based on a specific set of symptoms.

Characterize psychosocial functioning through interviews and parental responses to standardized questionnaires.

Integrate the medical and psychological viewpoints during evaluation and during summation of test results for patients and parents.

Reconcile differences in viewpoints before giving a treatment plan.

Acknowledgment

The authors express their thanks to Dr Robert Butler for advice in the development of this program.

References


This model could also be used in other clinics ... if support is provided and if access-related issues are well managed.
Liberty Park—WTC911

By Kitty Evers, MD

J Seward Johnson’s “Double Check”
Bronze business man
Suit covered in ash
Debris everywhere
Briefcase open
Staring down at his waiting work.
He’ll never get to that.
Did he know
Death waited instead?
Everything around him transformed
Rendered unrecognizable
In the moment
The sky rained down.

Poor bronze man
You are a stand in
For all of us
That awful day.

You are Everyman’s son,
You are Everywoman’s child
Still sitting impossibly frozen
Amidst the dust and debris.

Hate leads to this.
What is there left to say?
What is there left to mourn?

No more music
No more sound
Struck dumb
To feel what has come to pass.

And what the poet said is true:
“This is the way the world ends
This is the way the world ends
This is the way the world ends
Not with a bang but a whimper.”

In the aftermath of the bombing of the World Trade Center Towers, many searched for ways to find meaning or solace. Art and poetry became useful expressions of the search. A photograph of J Seward Johnson’s sculpture, “Double Check,” in Liberty Park, near the World Trade Center, was the inspiration for this painting and poem. In the midst of a normal day, a maelstrom raged around this “Everyman.” It is fitting that in the months since the tragedy, this sculpture has become a memorial of sorts, representing those who died in the bombing of the World Trade Center Towers. Another of Dr Evers’ paintings, “Butterfly Wings and Tears,” also in response to the tragedy, can be seen on page 34.
Writing is not only a salve but often a tool that opens our minds and hearts to things that are deep inside us. The famous American poet, EE Cummings, said, “To be nobody-but-yourself—in a world which is doing its best, night and day, to make you everybody else—means to fight the hardest battle which any human being can fight.” I agree with EE Cummings that people need help to fight the battles of their lives, but first people must be aware of and accept these battles before they can move on to conquer them. As David Spiegel, MD, said in the April 14, 1999 issue of JAMA, “… Smyth and colleagues demonstrate that merely writing about past stressful life experiences results in symptom reduction among patients with asthma or rheumatoid arthritis.” Reporting in The MedServ Medical News on the same study by Smyth and colleagues, Mara Bovsun concluded that “The simple act of writing about bad times can be a potent, and low cost, method of relieving pain and symptoms of chronic illnesses.” This research points out and supports the idea that emotions left unattended can change into symptoms that cause confusion when they present in physicians’ offices. Through a weekly writing workshop offered by Kaiser Permanente’s Positive Choice Wellness Center in San Diego, people become aware of their battles or issues, how to accept them, and how to move more fully into a personal healing process.

Writing has the Power to Heal

In his book, Opening Up, James W Pennebaker, PhD, documented his decades-long research into the healing effects of writing. Pennebaker proved what many people have found incidentally through keeping a journal or diary: If we can create a cohesive personal narrative of our lives and if we can link up our emotions with specific events, then we have the power to take control of how those emotions and events affect our lives. Although many of us might be drawn to simply eliminate the pain in our lives, those who constructively learn how to use that pain are often far healthier than those who don’t. Pennebaker noted that the number of doctor office visits are reduced through the process of writing. In her MedServ Medical News article, Bovsun quoted Smyth and colleagues, “[although it may be difficult to believe that a brief writing exercise can meaningfully affect health, this study replicates what a burgeoning literature indicates in healthy individuals],” and then points out that “[the scientists do not know why writing appears to help, but other research suggests that it may bolster immune function and enhance … ability to cope with painful incidents.”

May Sarton said that “… the only way through pain … is to go through it, to absorb, probe, understand exactly what it is and what it means. Nothing that happens to us, even the most terrible shock, is unusable, and everything has somehow to be built into the fabric of the personality.” By using the different writing forms—fiction, nonfiction, poetry, journaling, list-making, and others—we can use the pain in our lives to further develop the “fabric of our personality.” Through writing, we try to find order in the things that have happened to us; to use our writing as a form of self-analysis; or to give form and sense to what has affected us. Whichever form our writing takes, it has the power to heal us and to help us grow.

Often we form destructive attachments by putting energy into certain activities that seem to give us either pleasure or relief. Writing helps us to understand who we are and where and why we have formed such attachments. Writing can then help us redirect our energy. Writing allows us to get in touch with what is often hidden from us—whether it be the reason behind our weight gain, a hard-to-understand addiction, a compulsion we fight daily, or a pain we wish would go away. Writing helps us to form connections with what is going on inside us and with others.

Karen Cangialosi, MFA, MA, works at Kaiser Permanente’s Positive Choice Wellness Center in San Diego and runs a group called “Healing Through the Written Word” through the Creative Arts Therapy program. She uses writing in therapy with individual clients. Ms Cangialosi is a published poet. E-mail: Karen.A.Cangialosi@kp.org.
How Does Writing Heal?

People simply start by writing about a specific event or situation or relationship that affected them. For example, a woman can begin by writing a letter to her mother or father (that does not get sent) telling the parent about the best and worst things the parent did for her. Or a man can begin by writing about how he experiences the emotion of anger or where in his body he actually feels the emotion of bitterness. People must write freely; ideally, the writing is continued for at least 20 minutes without stopping. People should not edit what they are writing; they shouldn’t worry about grammar or punctuation or how things might sound. They simply need to write and see what comes out; and, according to Pennebaker, they must write about both the event and the emotions surrounding that event.⁴

Although the simple exercise of writing has actually been proven to decrease blood pressure and improve immune functioning,⁴ reading the work aloud and processing it with others can itself further enhance the overall healing effects of writing. The ability to tell their own story often gives people the first chance to really understand that story. Many people have said that they didn’t know what they were going to write until it was written; another way of describing this phenomenon is to say that the writing taps into their unconscious. Healing through the written word happens when people learn about themselves and open themselves to the healing power within.

For example, here are pieces written during the “Healing Through the Written Word” group at Positive Choice:

Frozen In Time
By Diana Medlin

When I was quite small I entered battle.
I did not have any weapons nor armor
To shield me.
All I had were my toys and my stuffed bear.
We created our own foxhole and waited
Out the night.
We did not dare sleep until it had stayed quiet
For a long time.
We held our breath together and looked out the window
Into the frozen midnight.
And when it was safe to breathe we would
Press our faces up against the glass and
Marvel at the fading impression.

Emptiness
By Santo Messina

Emptiness stands,
Great breeze that tickles the skin,
Sounds give music harmony.
Seeing green that transforms into yellow
and bursting in red
tranquilized by orange,
then storming clouded haze gives way to
bright shining streaks of rays that cut the clouds
and warm the skin.
Calmed by water dropping over soft melted stones
bleached by sun and coming slow
then fast
then big
then slow again
and gone
and quiet
and lull
and not
and fragrance breaks the quiet spell.
I meet tranquility and love breaks through
And wetness strikes from nowhere known
without a signal, without knowing
and flood my eyes with sadness-joy
and quiet want
as no one knows
my heart is deep and mended not
without a chance to consider why
as sudden chirp as feathers fly
and land on foot to sobbing heaves
as though the flying friend knew, what lies within
as I do not.
The shriek of voices that comes outside
to violently thrust my pain aside
and dew drops must be hid or else
creatures know and floods will flow.
I cannot stop this flowing yet
I need to hide
so again I smile and brush my hair and know not where to shroud my care.
I cannot stop
and still I hear the voice that comes outside
and is still afar.
I cannot stop
I will not stop.
The voice is louder and louder
not caring, it is slicing parts within me bleeding
and so I hear
and so I hear
I do not want to stop but still
I hear
and hear..............
Each of these people has used writing as a way to get in touch with, understand, and begin to heal from painful events. Specifically, by writing about these experiences, these individuals are able to shift the power of the event from the event or experience itself into their own hands. As they write, they recreate the situation or event mentally and begin to work with it. They gain access to their own feelings, sometimes discovering feelings they didn't even know were there. People who discover or uncover these feelings can begin to work through them.

Positive Choice Wellness Center Includes Writing Workshops

In the weekly writing group at KP’s Positive Choice Wellness Center, each person has an opportunity to share her or his writing with others. Through empathetic listening and response, participants help each other gain “… sufficient honesty to look at the inner self … [and] enough objectivity to view a feeling or behavior pattern from another perspective ….” By taking blood samples before, immediately after, and six weeks after the writing experience, Pennebaker made inroads into measuring the effects of self-expressive writing on the immune system.

References


As a group facilitator, I take the lead in listening with empathy and understanding to help guide people through the often-difficult process of recognizing important emotions and events that have long been left unattended. By working with images and specific language that individuals use, I can often identify behavioral patterns and issues that surface. By gently probing into what their own writing uncovers, people often come to believe that change is possible. Although neither the group nor I try to tell people how they might change, we do create an environment in which change is possible. Emotional change in these groups has led to stress reduction and weight loss, both of which affect a person’s health and well-being. In this way, writing about events and emotions and sharing these with others in a supportive environment is an example of how powerful the healing effects of writing can be.

For those not able to participate in the writing workshop facilitated by the KP Positive Choice Wellness Center in San Diego, the Web site www.journalingmagazine.com offers exercises, suggestions, and inspiration to those who want to write. In addition, many books are available, such as Writing Your Way to Healing and Wholeness by Robin B Dilley, which invites people to write in a journal on a variety of topics, or Writing as a Way of Healing by Louise DeSalvo, which shows how effective a tool writing has been and continues to be for people.
Abstract
Use of an electronic health record (EHR) will help us to realize the full potential of modern medical care. To optimize the functionality of a “virtual” record, universal informatics standards are needed. Standards for coded medical terminologies and for a common representation of clinical data will allow patient information to be transmitted clearly and unambiguously between different computers and different software applications in a secure form which is easily searched, interpreted, and manipulated—and thus most useful. Many of these standards are key components of Kaiser Permanente’s national Clinical Information System (KP CIS).

Introduction
As practicing clinicians in the 21st century, we have become used to change. Just a few years ago, many of us discovered the value of applying to our practice the concepts and terminology taught in business school: “seamless,” “Total Quality Management,” and “transparent.” Now we find ourselves confronted with a set of unfamiliar terms from a new branch of medicine, medical informatics—a field created to study and advance the science of efficiently recording and retrieving medical information.

An increasingly familiar creation of medical informatics is the electronic health record (EHR) containing medical data, ie, information from patient charts, laboratory reports, and radiology reports. To ensure optimal functionality of this electronic record, it must be unambiguous, universally available, transmissible, exchangeable with other EHRs, searchable and researchable, manipulable, secure, and must conform to governmental requirements set forth in regulations. (By “manipulable” we mean that the EHR should allow for automated reminders based on the data being processed and stored. In addition, the EHR will facilitate outcomes research, enable more complete documentation of quality of care delivered, and enable automatic documentation of our level of service to help assure appropriate compensation for services delivered.) These features can be achieved by development and implementation of universal standards for medical informatics.

A new vocabulary of acronyms has been developed to represent medical informatics standards in an abbreviated form. But what do abbreviations such as HL7, XML, LOINC, and SNOMED stand for? Why should we care what they mean? What could these acronyms do for—or, worse, to—us? This article briefly explains some of the most important medical informatics terms and concepts in the context of clinical practice (Table 1).

The EHR and Use of Medical Informatics Standards
We are rapidly progressing beyond handwritten medical information—and even beyond medical reports typed from dictation. Medical information such as medical records, laboratory results, and radiology reports is increasingly being generated and stored on computers—and this trend can be expected to continue. The Health Insurance Portability and Accountability Act of 1996 (HIPAA) is federal legislation which requires formation and acceptance of standards for clinical terminology used in each EHR to impose order and uniformity in health information as well as to assure adequate security and confidentiality of this information. Since 1968, Lawrence Weed—developer of the problem-oriented medical record—has taught us how to organize medical information logically. Standards for electronic records can be expected to incorporate logical systems such as these. Soon, the EHR will be simultaneously created and computer-
ized. Records will be directly input via keyboard devices; structured data entry will be automated by use of templates; and manual input will be bypassed through use of optical character recognition scanning, automatic voice recognition, direct transmission from laboratory machines, and other means.

**Health Level 7 (HL7)**

Accredited by the American National Standards Institute (ANSI), Health Level Seven (HL7)4 is an organization whose mission is to develop standards (not software) for unambiguous transmission of clinical and administrative health care information between computers. According to the organization’s mission statement, HL7 works “to provide standards for the exchange, management, and integration of data that support clinical patient care and the management, delivery, and evaluation of health care services. Specifically, to create flexible, cost-effective approaches, standards, guidelines, methodologies, and related services for interoperability between health care information systems.”

**Tools for Standardizing Transmission of Electronic Medical Data**

**The Reference Information Model (RIM)**

The most widely used standard being developed by HL7 is a messaging standard that enables disparate software applications to exchange clinical and administrative health care data. While interpreting medical communications as multiple discrete messages, HL7 will assign varied types of data (eg, laboratory test results) to predefined locations to show clearly the type of information intended by the user. HL7 will also define relations between data; thus, a given laboratory value can remain correctly linked with a specific patient. HL7 has recognized that designing a complete and usable standard requires regulated criteria for establishing vocabulary and for transmitting data.

As part of its development process, HL7 has created an object model—the HL7 Reference Information Model (RIM)—to represent clinical data pictorially and to identify the life cycle of events carried by a message or by groups of related messages. The RIM thus is used to create a messaging standard. Stated simply, the RIM defines fields (blank areas) that are designed to contain standardized vocabularies meeting certain requirements.

The RIM encompasses the entire domain of health care services, including laboratory and pharmacy services as well as patient admission, discharge, and transfer to and from health care facilities. The RIM has been applied most widely to laboratory data allowing information to be clearly and precisely located so that each laboratory result is clearly associated with a specific laboratory test and with a specific patient: For example, a practitioner must be certain that the potentially ambiguous phrase “patient X’s potassium” designates a laboratory result and not a prescription—and that it refers to the laboratory value of patient X and not someone else’s. HL7 has expanded the RIM to allow unambiguous transmission of more types of information within messages and clinical documents.

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Complete term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANSI</td>
<td>American National Standards Institute</td>
<td></td>
</tr>
<tr>
<td>CDA</td>
<td>Clinical Document Architecture</td>
<td>A standardized representation of clinical documents (eg, reports of medical history and physical examination, Progress Notes)</td>
</tr>
<tr>
<td>EHR/EMR</td>
<td>Electronic Health Record/Electronic Medical Record</td>
<td>Computerized medical record; medical record stored in electronic form</td>
</tr>
<tr>
<td>HIPAA</td>
<td>Health Insurance Portability and Accountability Act</td>
<td>Federal regulations enacted in 1991</td>
</tr>
<tr>
<td>HL7</td>
<td>Health Level 7</td>
<td>An ANSI-accredited standards organization that develops methods for electronically transmitting medical data and information unambiguously</td>
</tr>
<tr>
<td>LOINC</td>
<td>Logical Observation Identifier Names and Codes</td>
<td>A standardized set of codes for representing laboratory result terms</td>
</tr>
<tr>
<td></td>
<td>Metastructure</td>
<td>A universally understood abstraction underlying an information management solution for creating and exchanging views of content</td>
</tr>
<tr>
<td>RIM</td>
<td>Reference Information Model</td>
<td>A Clinical Data Object Model produced by HL7</td>
</tr>
<tr>
<td>SNOMED</td>
<td>Systematized Nomenclature of Medicine</td>
<td>A standardized, logically interrelated medical vocabulary</td>
</tr>
<tr>
<td>Syntax</td>
<td></td>
<td>Rules governing construction of a machine language</td>
</tr>
<tr>
<td>W3C</td>
<td>World Wide Web Consortium</td>
<td>The standards organization that developed XML</td>
</tr>
<tr>
<td>XML</td>
<td>Extensible Markup Language</td>
<td>A standardized syntax used to tag information for transmission over the Internet</td>
</tr>
</tbody>
</table>
The Clinical Document Architecture (CDA)

The expanded capability of the RIM includes use of the Clinical Document Architecture (CDA), a model for exchanging clinical documents (ie, medical records). Derived from the RIM, the CDA converts documents into a format which can be read by machines (ie, for electronic processing) as well as by humans. The CDA standards being developed by HL7 can be used to represent clinical documents such as progress notes, discharge summaries, and results of physical examinations.

It is hoped that computerized medical records (ie, the EHR) will be designed to use the CDA standard. The CDA organizing framework can be used to ensure clear, unambiguous representation of all patient information which is input into a computer and displayed via any software (ie, an EHR developed by the same or a different vendor) adhering to the same standard (ie, HL7’s CDA). Thus, by following the HL7 CDA, any programmer will be able to design an EHR which can be transmitted over computer networks such as the Internet and which can be automatically integrated into any other EHR written to the HL7 CDA standard.

XML: A tool for Enhancing Data Transmission over the Internet

To be widely available, information must use a syntax, or rules governing construction of a machine language, which allows transmission over the Internet. The World Wide Web Consortium (W3C) created XML (Extensible Markup Language), a data representation standard (or open-standard metastructural computer language) which allows information transmitted over the Internet to be clearly interpreted by the receiver of that information.

XML is also a proper, easier-to-use subset of the Standard Generalized Markup Language (SGML), which is used to create HyperText Markup Language (HTML)—the programming code used to encode material for visual presentation as Web pages. (“Surfing the Web” thus involves transparent interaction with SGML.) A standardized syntax like XML enables transmission of HL7 information over the Internet. Computer metastructures such as XML extend the capabilities of computer languages, enhance representation of structured messages, and improve syntactic interoperability. Metastructures embed data “tags” (field names) into the data so that they are hidden from the clinician. These tags automatically instruct the computer where and in what format to place the data to be received by the person using the information (eg, laboratory test results or radiology reports). These metastructure tags enable Web browser software to display information clearly and unambiguously (eg, as text headings) (Figure 1). The content to be displayed (eg, each field value) is contained within the opening and closing tags.

KP CIS currently uses HL7 Version 2 messages. HL7 Version 3 standards, which are derived from the Reference Information Model and are transmitted in XML (including both messaging standards and CDA), are fairly new and are not currently part of KP CIS.

Structural Components of Standardized Clinical Vocabularies

LOINC (Logical Observation Identifier Names and Codes) and SNOMED (Systematized Nomenclature of Medicine) are standardized medical vocabularies that have been accepted internationally and are foundational components of KP CIS. LOINC is a standardized set of names and codes for laboratory tests and clinical observations which was developed in mid-1995 and which has gained wide acceptance. The LOINC database encompasses more than 14,000 codes. To completely characterize the components of laboratory terminology, they are classified into five axes (subject headings): component or analyte (ie, what is measured), property of the component or analyte (eg, its concentration), time aspect of test, system (sample) type, type of measurement scale (ie, quantitative or qualitative), and type of test method.

SNOMED is a reference medical terminology set developed more than 20 years ago and enhanced continuously ever since. Intended to completely and logically interrelate groupings of defined medical terms, SNOMED is a formalized, information-packed set of more than 300,000 coded medical terms. LOINC has more complete defining characteristics for laboratory result data than SNOMED, but the two ter-

Example of XML format

```
<PHYSICIAN>
  <FIRST-NAME>JON</FIRST-NAME>
  <LAST-NAME>LUKOFF</LAST-NAME>
</PHYSICIAN>
<PATIENT>
  <FIRST-NAME>BOB</FIRST-NAME>
  <LAST-NAME>DOLIN</LAST-NAME>
</PATIENT>
```

Figure 1. Example of XML (Extensible Markup Language) format: Patient Bob Dolin and physician Jon Lukoff could be represented in XML in this way. The XML conventions enable programmers to specify options that determine a document’s display format, semantic content, and context. This format, authored by another, is no more difficult to use than many other computer programs. Work completed in the standardized format is transmissible over the Internet for display on World Wide Web sites.
Current Efforts to Further Standardize Clinical Vocabularies

The Convergent Medical Terminology (CMT) Project began as a venture conducted jointly by the College of American Pathologists, the Kaiser Permanente Medical Care Program, the Mayo Clinic, and the National Library of Medicine. This working group has revised SNOMED into the RT (Reference Terminology) version (released in November 2000) by using description logic, which allows us to interrelate terms parsed (divided) into their component parts (eg, “Pneumococcal Pneumonia” is both a “Pulmonary Disease” and an “Infectious Disease” and is caused by the organism “Streptococcus pneumoniae”). Definitions, synonyms, and hierarchical relations are fully defined in SNOMED RT. Definitions from the International Classification of Diseases, 9th revision are mapped to SNOMED, and LOINC concepts are incorporated into the laboratory procedure axis of SNOMED. This incorporation has permitted creation of a reference terminology useful for clinical medicine and will allow KP CIS to capture the richness of SNOMED, whereas mapping to ICD-9-CM enables semi-automated extraction of administrative billing codes. This semi-automated process should allow us to relieve our clinicians from the burden of coding their patient encounters.

In addition, the National Health Service [United Kingdom] READ Codes have been combined with SNOMED RT to form SNOMED CT (Clinical Terminology). Other specialized vocabularies will be integrated or mapped to SNOMED CT as necessary to allow for full interoperability of information systems across the broadest possible range of medical needs. Participants in the CMT Project plan to develop a “comprehensive strategy for representing detailed laboratory terms as well as appropriately classifying … terms.”

Discussion

Further refinement and widespread application of standards for medical informatics will give authorized personnel access to this medical information anytime through the Internet. Why should we—and how will we—further this goal?

Medical informatics standards are critical for design of terminologies, which are increasingly used to populate clinical databases. These databases affect data retrieval for many clinical purposes, such as patient care, audit, research, decision support, epidemiology, and management. In addition, terminologies designed from informatics standards are important for populating databases such as those used for determining eligibility for insurance or employment.

Chris Chute, MD, DrPH writes, “The emphasis on characterizing patient information—including presenting conditions, findings, symptoms, working diagnoses, interventions, and outcomes—is manifest in a broad spectrum of health analyses. Clinical epidemiology, outcomes analysis, health services research, guideline development, continuous quality improvement [CQI], and health economics are among the traditions that rely fundamentally on a consistent representation of underlying patient data.” The body of work Dr Chute describes will lead to better and more rational delivery of medical care. When executed correctly, electronic delivery of medical data will add built-in decision support to our medical records and will enable them to be searchable, re-searchable, interpretable, transmissible, available, clear, and thus more useful. All these processes require standards for clinical data representation and transmission.

Conclusion

Our goal is for each patient to have an EHR which can be used across computer platforms. The combination of clear definitions and interrelations of medical terms (as in LOINC and SNOMED) used to populate an HL7 standardized “message” or document using standardized syntax (eg, XML) will allow medical information to be transmitted to and retrieved from any telecommunication system connected to the World Wide Web. In turn, this achievement could enable a clinician to retrieve any patient’s medical chart, laboratory and radiology reports, and other necessary information anywhere, anytime, given proper security—if, that is, we can all agree on and use these same standards. Information represented in this format will allow manipulation of data to facilitate advanced functions, including record searches, patient-specific guidelines, outcomes research, or other functions. Standardized, precise, logically interrelated and searchable terminology (ie, SNOMED and LOINC) which populates a standardized in-
Standards for Computerized Clinical Data: Current Efforts and Future Promise

Acknowledgments

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The Medical Editing Department, Kaiser Foundation Research Institute, provided editorial assistance.

References


a The KP CIS team is now also referred to as the CMT team.

b The Mayo Clinic and the National Library of Medicine no longer participate in this project.
soul of the healer

I Need a Compass for Retirement
Or: Outline for a Life after Paycheck

A glorious ride into the sunset, or a
Semi-tragic tale of self-pity
Real tragedy:
  Real, not perceived
  Poor health
Death one week after retirement

Motives that trigger action
It is high time
  I can hardly wait
I have a right to it
  I’ve worked my … off (expletive deleted)
  I was taken advantage of
I have a second career planned out
I need to take care of family
I have health problems
  Real or perceived
I fear the innuendoes
  from a boss or colleague
  getting too old
  judgment slipping

Factors that delay decision making
Lack of money
  Real or perceived
Fear of being useless
  In family
  In my head
“I still have boundless energy”
  Real or perceived
  Reality, or wishful thinking

Fear of more time with spouse
  Real or perceived
Other …
  Illusions
  Gadgets
  Quick fixes, and
  Computers

Established Retirement
“Success”
  Attitude
    Optimist, pessimist
    Active, passive
    Self-centered, people-oriented
    Fearful, accepting
  Resourcefulness
    Never had it; that’s a pity
    “Have it just like grandpa”
  Hobbies
    A panacea? For many
    Exercise? Within reason
      Golf’s okay; avoid hang-gliding
  Finances
    Complex
      See an expert
  Family
    Marriage, treasure it
    Nuclear and extended, be a diplomat
    Disability—carry the cross

Ek Ursin, MD, is a retired physician from Northwest Permanente, PC (NWP) in Portland, OR. He was the first “Moment in Time” section editor for The Permanente Journal.
Potential trouble spots; networth not the same as selfworth

Money
Health, any doubts see your doctor
Depression, see your shrink
Isolation, see people

Real trouble spots
Memento Mori
Mental problems
Finances
Real or perceived

Can the leopard change its spots?
What will you/can you be?
Philosopher, Grandma Moses,
Boulevardier, Philanderer,
Bridgeplayer, Skydiver …
or blow it really big! Casino?

Practical steps
Attitude—being, not doing;
networth not the same as selfworth

Values
Combat feelings of guilt
Become a joiner, if it is your cup of tea
AARP
Elderhostel (www.elderhostel.org)
Projects: Joy without fanaticism
Reasonable care of health
Exercise
KP “Silver Sneakers” program
Avoid having a fool for a doctor
Vaccinate
Diet without fanaticism
Two glasses Merlot, 81mg ASA/d.

The Inevitable Last Chapter
The cliché: sudden and unexpected,
a blessing

The final diagnosis given in advance,
fate.

Epilogue
We should not lose sight of our glorious workdays, invigorating climate, congeniality.

Dr José Bilbao defines Retirement as Life-W2 (R = L-W2).

Can we sum up our life in a clever outline or poem? Of course not. The reality of our being is much more adventurous, challenging, hopeful, as well as hopeless, able to organize, irrational and rational, sad and cheerful.

Can we prepare for life without challenges and boundaries? You know the answer. The gurus of many persuasions have part of the answer and so had giants such as Leo Tolstoy and Thomas Mann. Our Medical Group has shown talents in many fields from learning to sculpture to writing a book about religion. Do these talented people experience happiness? Again, components of luck, fate, and genes play a large, if not major, part. Are we immortal? Not in the same body, of course, but in our children and in the writings, creations, or, for a while at least, in the memory of those who know or knew us. In summary: All is well!

Bon voyage.
Free Clinic Healing Los Angeles
A Decade After Riots

Kaiser Permanente Pediatrician Cofounds Muslim Clinic

By Karla Pérez Villalta

Two blocks from the epicenter of the 1992 Los Angeles riots stood a symptom of what ailed the city—an abandoned childcare facility, closed due to violations, where prostitutes and drug dealers sold their wares. Ashes, violence, and the momentum from the events that year gave way to the dreams of eight Muslim UCLA students. Together they established the University Muslim Medical Association (UMMA) Free Clinic on that very spot.

Altaf Kazi, MD, a pediatrician at Kaiser Permanente’s (KP) West LA Medical Center, was one of the eight students. He said the idea for a free clinic had been fermenting in their minds long before the riots, in keeping with one of the five pillars of their Islamic faith—to perform acts of charity. The riots called attention to the third-world-like conditions of the LA inner city and opened doors for them.

Councilwoman Rita Walters, now retired, was impressed with the “naïve students with no political affiliation,” Dr Kazi said. “She took us in in an almost motherly way, mentored and helped us.”

Before long, Walters’ staff secured $650,000 of city funds for the project. The city bulldozed the decrepit building and assigned an architect to work with the students to build the clinic from the ground up. Dr Kazi’s father, Mohammad Kazi, an architect, had already designed the clinic free of charge. The students got a $700,000 grant from the US Housing and Urban Development Department to run the clinic and gathered more than $150,000 in equipment and supplies from corporate donations. Drew University and UCLA School of Medicine stepped in as sponsors and continue to use the clinic as a teaching institution for third- and fourth-year medical students. KP has donated more than $32,500 to the clinic since 2000.

UMMA Free Clinic opened in 1996. Today, it is a state-of-the-art primary care facility with a patient base of 6000 adults and children—all below the federal poverty line. Five paid employees, including one part-time physician, and a pool of more than 100 volunteer physicians, nurses, physician assistants, and students make up the clinic’s staff. Dr Kazi clocked in 705 volunteer hours in 2001 as an attending pediatrician, faculty supervisor-preceptor, and

Ashes, violence, and the momentum from the events that year gave way to the dreams of eight Muslim UCLA students.

Karla Pérez Villalta is the Public Affairs Representative at Kaiser Permanente’s West Los Angeles Medical Center. Her articles have appeared in The Los Angeles Times Magazine and in The Oregonian in Portland, OR, where she interned as a city beat reporter. E-mail: karla.x.perez@kp.org.
board member. UMMA is beginning a feasibility study to expand the site in the near future.

“The physical facility and how it’s set up, run, and managed is more on a par with a private practice that you would find in West Los Angeles than a community-run free clinic,” Dr Kazi said.

A patient at UMMA added, “It’s not a run-down place. It’s a nice place, set up like a regular doctor’s office where you have regular insurance. They treat you like that. That makes a big difference, when you’re treated with dignity.”

The community’s support spoke loudest during the post-September 11 climate of distrust toward Muslims. When the clinic organized a blood drive to benefit victims in New York, more than 100 donors showed up in a single day.

“Rather than receive backlash from the community,” said Dr Kazi, “they helped us show that this project is a shining example of Islamic humanitarianism and compassion. If you go in and roll up your sleeves and help people in need, they respect you.”

“It’s a humble step in fulfilling a religious obligation for me as well as making a significant contribution to the lives of children and families in need,” he said. “It’s satisfying on an emotional, spiritual, and professional level. As physicians, we all went into medicine to serve people, but the medical arena nowadays is very businesslike. UMMA Free Clinic reminds me why I went into medicine in the first place.”

UMMA Free Clinic is seeking physician volunteers. For more information, please contact Altaf Kazi, MD, AMKazi@scal.kp.org or 323-857-2548.

To Do Good

The world is my country, all mankind are my brethren, and to do good is my religion.

— Thomas Paine, 1737-1809, Revolutionary War patriot
No Ordinary Year

For the 435 members of the US House of Representatives and 34 of the 100 Senators, 2002 is an election year. As you no doubt would expect, election years are simply different—more complicated—for Congress. Although most Members of Congress start running for reelection the day after they are elected, their concern about holding their seats is now growing quickly and will crescendo in September, just before Congress adjourns for the year.

Although adjournment is less than six months away, few real workdays remain in this year’s session. No votes are taken on Mondays or Fridays, so Members can be in their districts for long weekends. There are several extended recesses this year so that Senators and Representatives can campaign—first in their home-state primary elections and then in the general election, to be held on November 5th. This year, they will take two weeks at Easter, one week for Memorial Day, and one week for July 4th. Then comes August, the traditional summer break. House Members will be away from Washington for more than five weeks; Senators take just over four weeks.

What are the priorities this year? As I said, except for the few House Members who are retiring and the 66 Senators whose terms don’t expire, being reelected is the highest priority. And while reelection is the goal, the means by which it is achieved are time-tested, tried-and-true. First comes the money. Most Members of Congress, those who feel the least insecure about reelection, spend as much time raising campaign funds as they do anything else. The sad fact is that money translates into media, which translates into votes. Second come the issues. Few things are more important to a Member of Congress in an election year than making certain that the voters in their districts have a clear understanding of what the Member stands for and how s/he differs from his/her opponents.

Congress takes many votes each year on bills that are never enacted into law. The Members do this so that they can stake a claim to a position, and point to voting for something that they believe in. Last year, the House of Representatives passed Medicare reform legislation, which included adding prescription drug coverage to the program. The bill had no hope of becoming law, as Senate Democrats never gave it a second look, but GOP House Members will campaign on this and will point to inaction on the part of Democrats. So, much of this year will be used by Members to distinguish themselves from their opponents while creating the illusion of action.

This year, perhaps more than ever before, working to make clear the differences between the parties is important because the last half of 2001 was a time when bipartisan-ship, real or pretend, was the order of the day. Our nation was attacked; we had begun a military action in Afghanistan; and, in Washington, we felt the increased insecurity that came from the anthrax crisis. As a result of Congressional efforts to come together and to support the President, there simply wasn’t the opportunity to clarify the differences. So, differentiation will be the hallmark of the session of Congress.

Medicare Will Get Much Attention—Little Action

No block of the electorate votes as consistently as seniors. This fact alone makes their issues—Social Security and Medicare—high on any politician’s agenda. This year is no different; Medicare will get much attention. The President focused on Medicare reform and on adding prescription drug coverage to Medicare as he originally did in his campaign. More recently, in the 2003 budget he sent to Congress, he proposed spending $190 billion over ten years to reform Medicare and add drug coverage.

For more than five years, some say for decades, Congress itself has been working to find a path that enough can agree on to reform Medicare. Four years ago, the National Bipartisan Commission on the Future of Medicare recommended reforming Medicare along the lines of the Federal Employees Health Benefits Program. Congress has considered several bills to enact proposals that include similar proposals every year. Because Republicans are more supportive of reform that expands beneficiary choice among

Steve Cole is Director, Public Policy & Government Relations for the Permanente Federation. In this role, Mr Cole is one of three Kaiser Permanente representatives at the federal level. In addition to advocating on behalf of Kaiser Permanente on a broad range of issues, Mr Cole focuses on issues of particular interest to Permanente Medical Group physicians. He also serves as the Permanente Federation’s principal liaison to the Washington-based professional and industry associations. E-mail: Steve.Cole@kp.org.
private-sector health plans, the GOP-controlled House has passed bills to do this each of the last several years. This year, the House will up the ante on the President to the tune of $550 billion over ten years.

In the Democrat-controlled Senate, the majority is relatively content with the Medicare program. They would like to see benefit improvements, including a prescription drug benefit, but the basic government-administered pricing system is a model with which they are comfortable. Last week, the Senate Budget Committee reported out a budget that includes $500 billion for health care, including Medicare reform, a drug benefit, and other health spending.

While there is big talk about reforming Medicare, across Washington there are hundreds of small conversations about ensuring that current Medicare provider and health plan payments are adequate. Fee-for-service physicians received a cut of 5.4% this year, and the same will occur for the next two years unless Congress acts. Not surprisingly, physicians are up in arms. Health plans, many of which have been limited to annual increases of 2%-3% for the last five years, argue that increases of this magnitude simply cannot keep pace with annual cost increases of 10%, more or less.

And, hospitals, nursing homes, and home health agencies ... all claim they need more.

So where does this leave us? The American Association of Retired Persons (AARP) wrote to Congress saying that it would be unconscionable to increase payments to current providers (which would not result in any new benefits or increased access) before it ensures that Medicare provides coverage for prescription drugs. The AARP expresses wonder that Congress could, in good conscience, increase provider payments while not ensuring drug coverage, given the importance of drugs in modern medicine. In the end, the stalemate on reform and drug coverage will not be broken.

Payments to providers and health plans are likely to increase, however, if only modestly.

**Legislative Potpourri**

Medicare, especially Medicare+Choice payments that more closely reflect cost, may be the most important legislative issue, this year, but it is not the only issue of interest to Kaiser Permanente (KP). We are interested in at least half a dozen other issues.

**Patients Bill of Rights**

Patient protection legislation has been such a hot front burner issue for five years, it’s surprising that it has not been enacted. After years of debate, both Houses of Congress last year passed their own versions. Then came September 11, and the issue seems to have disappeared. September 11 is not the only and perhaps not the major reason. Patients rights legislation may no longer be necessary—many health plans have voluntarily or in response to state laws come into compliance with most elements of the federal legislation. Rising health care costs have made Congress a little wary of legislation may no longer be necessary. Many health plans have voluntarily or in response to state laws come into compliance with most elements of the federal legislation. Rising health care costs have made Congress a little wary of legislation that would contribute to even more expensive coverage. Still, largely private conversations go on between the White House and the sponsors, principally with Senator Kennedy (D-MA) and both parties would like to use the issue in the Fall campaign. The ultimate outcome may depend on whether either party sees victory in compromise.

**Bioterrorism**

Major legislation to prepare the country to respond to future terror attacks is working its way to completion. Both the Senate and House passed bills last fall. The conference committee that is charged with working out differences is meeting daily and should report out an agreement within the month. The legislation will provide funds to states, local governments, and hospitals for preparedness and will expand stockpiles of pharmaceuticals used to respond to attacks as well as fund research on new medicines. For KP, the principal issue of interest is a provision that makes it easier for physicians licensed in one state to practice in another where a public health emergency has occurred. The mechanism in the House bill is a national registry that would allow physicians to submit their credentials and licensing information so that, during an emergency, state officials could turn to the registry to verify credentials.

**Patient Safety**

Congress is interested in legislation that might reduce medical errors and near misses. The most commonly discussed design would establish a national patient safety database, to which providers could submit reports. Patient safety organizations, private-sector entities, would be authorized to collect the reports, transfer the data to the national database, and analyze provider-level, regional, or other aggregations of patient safety data to uncover patterns and recommend potential responses to reduce errors and near misses. This legislation is in the drafting stage in the Senate Health, Education, Labor and Pensions Committee. Senators Kennedy (D-MA), Frist (R-TN), Jeffords (I-VT), and Gregg (R-NH) are most interested. On the House side, the Ways and Means and the Energy and Commerce Committees will consider legislation in this area as well. There is only a 50/50 chance for action this year.

**Mental Health Parity**

Last year, Congress acted to extend for one-year legislation requiring that annual and lifetime limits on mental health coverage be identical to coverage for physical conditions. The Senate also passed a bill that would have required parity with respect to all treatment and financial aspects, but the House did not agree to it. This year, Congress has already acted to extend the penalties through the IRS code, which effectively extends current law for one more year. A broader parity bill may be considered later in the year.

**Other Legislation of Interest**

Other things on which we are working include a proposal to change the way that Medicaid pays for prescription drugs—which would probably increase costs to Kaiser Permanente significantly; and reauthorization of the Prescription Drug User Fee Act, which finances FDA’s review of new drug applications and which we would like to see provide significant funds for postmarket surveillance.

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**In the end, the stalemate on reform and drug coverage will not be broken.**

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The Permanente Journal/ Summer 2002/ Volume 6 No. 3
announcements

**Autumn Primary Care 2002:**
National Primary Care Conference

**Special Keynote Session**
“Information Technology: Transition to CIS”

October 10-13, 2002
Disney’s Grand Californian Hotel, Anaheim, CA

For more information visit:
www.kpprimarycareconference.org
or call 510-625-6374

**2002 National CME Activities**

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<th>Hours</th>
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| August 23-24 | **Emergency Medicine Conference**<sup>a</sup>  
Chairs: Ward Flad, MD and Paula Pearlman, MD | Joyce L Boyd  
626-564-5346 | Shutters  
Santa Monica, CA | 12     |
| September 12-13 | **Hospital Medicine Conference**<sup>a</sup>  
Chair: Diane Craig, MD | Kathy Cheetham  
510-527-9500 | Paradise Point  
San Diego, CA | 9.5    |
| September 19-20 | **Culturally Competent Care: Treating Members with Disabilities**  
Chair: Elizabeth Sandel, MD | Cristine Richards  
707-651-4097 | Marriott  
Oakland, CA | 12     |
| October 10-13 | **Primary Care Autumn Conference**<sup>a</sup>  
Chair: Ferdy Massimino, MD | Dina P Grieve  
510-625-3966 | Anaheim, CA | 20     |
| October 11-12 | **HIV Symposium**<sup>a</sup>  
Chair: Luke Beno, MD | Sandra Gauthier  
404-364-7046 | Swissôtel  
Atlanta, GA | 15     |
| October 11-12 | **Chronic Pain Management Symposium**<sup>a</sup>  
Chair: Andre Bertagnolli, PhD | Yolanda Dorsey  
626-564-3024 | Union Square  
San Francisco, CA | 10.75  |

<sup>a</sup> This educational activity will be funded, in part, by commercial support.

The Kaiser Permanente National CME Program is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. The Kaiser Permanente National CME Program designates this educational activity for a maximum number of hours (see above) in category 1 credit toward the AMA Physician’s Recognition Award. Each physician should claim only those hours of credit that he/she actually spends in the educational activity.

**HELP WANTED:**

Interested and capable book reviewers who enjoy reading and who feel capable of clearly expressing the basis for their opinions on books of all types that have relevance to the broad field of medical practice. Books that meet this criterion may also be suggested for review. Preference for review will be given to, but neither guaranteed nor limited to, books by Permanente authors. Reviewers will receive a gift copy of the book reviewed. If interested, please contact: Vincent.J.Felitti-MD@kp.org.

**Are you an undercover artist?**

Consider uncovering your talent and sharing it with your peers. *The Permanente Journal* is always interested in considering artwork by Kaiser Permanente clinicians and employees. Why not submit a sample of your work today?

Send us a high-quality color photograph of your artwork no smaller than 4”x5” and no larger than 8”x10”. Portrait orientation is preferred. Slides and digital images may also be submitted.

Send artwork samples to: Managing Editor, *The Permanente Journal*, 500 NE Multnomah St, Suite 100, Portland, OR 97232.

E-mail: permjournal@kpnw.org.

**Upcoming Events**

**2002 Ob/Gyn Symposium**
Friday & Saturday  
September 13-14, 2002  
Sheraton Hotel, Anaheim, CA

**2002 Dermatology Symposium**
Saturday, October 19, 2002  
Hyatt, Long Beach, CA

For more information or to receive a brochure, you may contact Physician Education at 626-564-5360, or visit the Physician Education Web site at www.kaiserpermanente.org/locations/california/symposia/
announcements

3rd National KP Conference on HIV
“Many Faces—One Disease”
Swissôtel, Atlanta, Georgia

Thursday, October 10—Preconference tour of CDC
Friday, October 11—All-day conference with evening reception
Saturday, October 12—Morning conference

For more information, contact our meeting planners:
Fagan and Crouse: e-mail lisa@faganandcrouse.com
or call 770-777-1115 or Sandra Gauthier, TSPMG 404-364-7046

the lighter side of medicine

THE HUMERUS ZONE

Don’t worry, just a slight medication reaction.

Cartoon submitted by Don Wissusik, MA, MS, a Clinical Supervisor in the
Department of Addiction Medicine at Cascade Park Medical Center, Vancouver, WA.
I have owned the previous version of DiagnosisPro 4.0 for the past two years, having purchased it after one of its physician-designers gave an enthusiastic presentation of the program at a medical meeting I attended. At the presentation, I was duly impressed by the facility with which the creator of the program whipped through differential diagnosis with rapid expansion of information about the disease—but then the program sat, unused, in my computer for the next two years. With renewed anticipation, I recently loaded version 5.0 of the program for review to see what had been added to the upgrade.

The basic program performs differential diagnosis using signs, symptoms, laboratory reports, x-ray findings, and other related tests and disease attributes: With a click of the mouse, a complete differential diagnosis is displayed on the screen. With another click of the mouse, the differential diagnosis can be narrowed to the most likely diagnosis. Alternatively, each diagnosis can be listed in outline form with synonyms, a general description, clinical description of signs and symptoms, laboratory findings, diagnostic tests, subject pathophysiology, and treatment. In addition, an outlined discussion of each topic in any clinical setting can be opened by a mouse click. The content is linked to the current *Harrison’s Principles of Internal Medicine* and MEDLINE for more complete reading of the topic as well as to MEDLINE for further research into the topic. Individual patient data files may be completed and stored, and sections of the text can be mailed electronically to others.

The newest and best features of the DiagnosisPro 5.0 (MedTech USA Inc, Los Angeles, CA) are disease review and disease comparison, two features which enable quick review of a disease or direct comparison of two different diseases. I found this feature to be both the most useful and the most attractive of the upgraded program.

I think that this program represents a useful advance over the previous version, 4.0. The greatest utility of the program will be to advance the learning curve of neophyte physicians or medical students; however, even an experienced physician contemplating a difficult case can meaningfully use this program. The program is comprehensive; after becoming familiar with it, the user realizes that the program can be used to expand the scope of differential diagnosis for any patient.

The practicality of finding time to use the program and to reflect on the depth and profundity of its information is another issue, however. Limited time is available to see a patient in the office or even during inpatient rounds: Considering the patient’s diagnosis, ordering laboratory tests, prescribing treatment, and discussing these matters with the patient is often done in less than 15 minutes. To use a computer program to review one case and to research the diagnostic possibilities takes considerably longer, although with increased familiarity—especially if quickly viewing the leading differential diagnostic possibilities—the clinician may find this program excellent for the purpose.

Overall, I do recommend DiagnosisPro 5.0 CD-ROM.

References

Arnold N Singer, MD, has been a staff general internist at the Escondido Kaiser Permanente Medical Office Building since November 1999. Before that, he was a staff general internist at KP Panorama City for 23 years. His interests include medical inpatient care delivery and humor. E-mail: arnold.n.singer@kp.org.
As a practicing bariatric surgeon and as part of the team that has redesigned the Kaiser Permanente Northwest (KPNW) program for weight management and severe obesity, I found much of value in this primer on obesity. For those who are interested in a comprehensive review of current thinking on this topic, this compendium of 624 pages is well written and well organized. However, it will not be useful as a guide to developing an obesity treatment program.

The contents of this handbook follow a clear path from etiology of obesity, its consequences, and its prevalence to assessment, treatment, and prevention. For those practitioners who have not had substantial exposure to past and current thinking about obesity management, this book will provide a clear and concise overview. The numerous contributing editors are from varied disciplines, including psychiatry, psychology, medicine, surgery, molecular biology, pediatrics, epidemiology, nutrition, diabetes education, neurobiology, behavioral medicine, and research. Differences in writing style are invisible in this collection.

The chapters on etiology, consequences, and prevalence include exploration of genetic influences, the universal nature of obesity, and the tension between individual and public health views of obesity. The long-term physical health consequences of this disorder are enormous, especially for a health care entity. The psychologic aspects are reviewed extensively and reinforce the current health care financing dilemma that results from not all therapeutic options being covered by insurance. The medical and behavioral health assessment section is complete, though somewhat disappointing because it does not review differences between the overweight population and the morbidly obese population.

The chapters on treatment provide practitioners an excellent review of published experience with exercise, popular diets, medically supervised care, drug treatment, and bariatric surgery. I read with particular interest the surgical chapter and found it to be current but poorly illustrated. Discussed in this chapter is the recent increase of the medical community’s faith in bariatric surgery as the answer for the obesity problem. This chapter deals with the success of surgery but does not explore or analyze the complex psychosocial factors that initially led to the condition. In addition, the book does not mention appropriateness of candidacy; readiness and contraindications for surgery; or elements of the comprehensive program needed for care of patients who have surgery. The authors tie performance failure of gastric restrictive operations to poor surgery, continuous nibbling of food, and lack of exercise. Missing is any discussion of the relation between surgical outcome and the patient’s impaired response to life stressors. Constant eating and lack of exercise are widely recognized as factors that lead to weight regain and thus to “failure of surgery,” but this view of surgical failure is needlessly simplistic and reflects a psychologic form of tunnel vision.

Chapters cover commercial weight-loss programs, maintenance of weight loss, and even a good review of treatment of patients from ethnic minorities; however, this last topic is excluded from the assessment section of the book. The book also discusses body image, eating disorders, and nondieting approaches to weight loss and concludes by focusing on childhood obesity and obesity prevention, with a review of the literature. A public health view is explored through discussion of interesting interventions in microenvironments (eg, worksite, cafeterias and restaurants).

The complex and counterintuitive aspects of obesity management necessitate broad background knowledge. This book covers a substantial breadth of information and is recommended reading for clinicians who wish to explore our newest public health problem. As a surgeon, I would not have been able to find this information without using many texts; however, I found that the sections within my expertise were weak and prejudicial.

David Moiel, MD, is Regional Chief of Surgery at Northwest Permanente and is an active participant in efforts to improve our care of significantly obese patients, many of whom now are referred for bariatric surgery without adequate psychologic preparation or plans for the long-term support necessary for a successful outcome.
The Biggest Job We’ll Ever Have: The Hyde School Program for Character-Based Education and Parenting

by Laura and Malcolm Gauld

In the town of Bath, Maine, a small private school is redefining how we teach children; in the process, a renewed vision of education is being created. The Hyde School requires a commitment not just from students but also from families. This is a school committed to the personal growth and character development of children and their families. At a time when society cries out for “character education” in schools but is unable to define what character means, the Hyde system calls upon families to make a commitment to pursue excellence. At a time when families are in crisis, the Hyde system offers a lesson in being a family—a process that involves developing integrity, family values, and character.

Having practiced and developed this system for the Hyde School, the Gaulds have turned it into the Biggest Job workshops, a national parenting program out of which springs this book. The Biggest Job We’ll Ever Have focuses on parents—a child’s first and foremost teachers—and on families. The book is neither a quick fix nor a popular solution to the challenges families face. The Gaulds’ experience has taught them three things about commitment to excellence: “It is hard; it is doable; it is never too late.” The authors firmly believe that character is more important than innate ability, and their “Ten Priorities” support and build upon that belief.

The hollow statements that were said to us as children—and we, in turn, say to our own children—are debunked: “You’re a bright kid; you just need to apply yourself.” “We don’t care about your grades as long as you try.” “You can do anything you want if you just work hard enough.” “We don’t care what you do as long as you’re happy.” The Gaulds point out that these statements are freely used but are rarely supported by action. Children are aware that even though we tell them to “just do your best,” grades reflect the product of work, not effort. This principle allows children for whom accomplishment comes easily to get good grades without being challenged and without taking risks, whereas children for whom work is difficult become discouraged. The Gaulds also refute what they call the “Cult of Self-Esteem,” the mindset that children must feel good about themselves all the time. The Gaulds declare that self-esteem is something to be worked at, something to be earned; it requires enduring difficulties and overcoming obstacles. The result is tangible and solid—not like the hollow compliments of those who believe that self-esteem can be bestowed.

“The underlying premise of the Ten Priorities is that every individual has a unique potential that defines his or her destiny.” Through a series of exercises and journal questions, this book guides the reader through the Hyde system of developing these Ten Priorities to apply to daily life. These priorities are a framework to guide parents in making daily choices.

The Ten Priorities seem obvious when read. For example, “Attitude over Aptitude” encourages kids to follow their dreams and is accompanied by two examples of successful musicians—Stevie Wonder and Ray Charles—whose dreams might not have materialized had aptitude alone guided their lives: “… Aptitude Culture can cause the dream to get smothered by the disability,” but incorporating these dreams into daily-life requires effort and hard work. This book offers tools with which to undertake that work.

Although this book is written as a guide for parents who want to help their children and to improve their families, the book is a perfect guide for all of us to do the hard work of building our own character and becoming proactive in our own lives. We no longer need to blame our parents for where we are: we can take responsibility for our own lives.

The Gaulds offer two quotes for consideration: “When we do the right thing, we raise ourselves in our own eyes” (Eugene Delacroix) and “Our chief want in life is someone who will make us do what we can” (Ralph Waldo Emerson). Asking our children to give their best effort is nothing short of what we must ask of ourselves. For me, as a parent of a teenaged boy, this book is encouraging reinforcement of the belief that if I am honest and do the work, I can build my own and my son’s character. These principles can guide not only my own life but that of my child.

References
All PMG physicians and those clinicians eligible to do so may earn up to two hours of Category 1 credit for reading and analyzing the four designated CME articles, by selecting the most appropriate answer to the questions below, and by successfully completing the evaluation form. This form must be returned (fax or mail to the address listed on the back of this form) to The Permanente Journal by September 16, 2002 in order to receive credit. You will receive an acknowledgment by October 31, 2002. You must complete all sections to receive credit.

The Kaiser Permanente National Continuing Medical Education Program (KPNCMEP) is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians. The KPNCMEP takes responsibility for the content, quality, and scientific integrity of this CME activity. The KPNCMEP designates this educational activity for up to two hours of Category 1 CME credit for each TPJ issue applicable to the AMA Physician Recognition award and/or physicians award. Each physician should claim credit for only those hours that were actually spent in this educational activity. Author disclaimer forms are on file with any conflicts of interest listed or necessary disclaimers.

Section A.


The most important thing to determine in the diagnosis of ACNES is:

a. The pain history
b. The location of tenderness at the lateral rectus edge
c. The location of tenderness in a neuromuscular foramen
d. The confinement of the pain to one locus

A history most suggestive of ACNES in a young woman is:

a. Right lower quadrant pain
b. Pain in the ovary or bladder
c. Vomiting and diarrhea
d. Blood in the urine

Article 2. Evidence-Based Clinical Vignettes from the Care Management Institute: Diabetes Mellitus

Which of the following is not one of the AABCCS cardiovascular disease prevention strategies recommended in the CMI Diabetes Guideline?

a. Aspirin
b. Beta blockers
c. Calcium channel blockers
d. Smoking cessation

e. All of the above are recommended treatments

A 51-year-old nonsmoking female with diabetes and hypertension has an LDL cholesterol level of 175 mg/dL and an HDL cholesterol level of 31 mg/dL. Her ten-year risk of a cardiovascular event, according to the Framingham tables, is 28%. According to the CMI Diabetes Guideline, all of the following are recommended except:

a. Aspirin
b. ACE-inhibitor
c. Treatment of LDL cholesterol with lovastatin
d. Addition of beta-blockers, even if blood pressure is controlled with ACE-inhibitors
e. All of the above are recommended treatments

(Continued on next page)
Section B.

Referring to the CME articles and the stated objectives, please check the box next to each statement as appropriate.

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<th>Article</th>
<th>The article covered the stated objectives.</th>
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Section C.

What change(s), if any, do you plan to make in your practice as a result of reading these articles?

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Section D. (Please print)

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Date: ________________________________________________

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