



By Diane Craig, MD

Hospitalist Practice: An Increasingly Popular Model for Inpatient Care

Hospitalist practice is an increasingly popular model for providing inpatient care, and Kaiser Permanente (KP) has been at the forefront of this movement. The Second Annual Kaiser Permanente Hospitalist Conference was held in May 2000 and was attended by representatives from all the Permanente Medical Groups (PMG). The conference focused on key clinical topics for practicing hospitalists and provided an opportunity for physicians practicing in this emerging specialty to share their experience and expertise with others from across the country.

The Second Annual Kaiser Permanente Hospitalist Conference was held on May 12-13, 2000 at the Claremont Hotel in Berkeley, California. More than 120 physicians, representing all KP Regions, came to hear updates in clinical topics related to the field of Hospital Medicine.

National perspective

Robert Wachter, MD, gave our keynote address. President of the National Association of Inpatient Physicians (NAIP) and Associate Chair of the Department of Medicine at the University of California San Francisco (UCSF), Dr Wachter is a leader in the hospitalist movement. Together with Dr Lee Goldman, Dr Wachter coined the term "hospitalist" in a 1996 article¹ published in *The New England Journal of Medicine*; since then, he has been a key proponent of this emerging field by championing research, administrative recognition, and growth for this newest medical specialty candidate. NAIP (the professional organization for hospitalists) is an affiliate of the American College of Physicians. Having grown from 23 members to more than 1500 members in the past three years, NAIP is undoubtedly the fastest-growing professional medical society. An estimated 4000 hospitalists currently

practice in the United States, and a need for 19,000 is likely to develop if hospitalists become the predominant providers of adult inpatient care.

NAIP recently adopted the following as its definition of a hospitalist:

Hospitalists are physicians whose primary professional focus is the general medical care of hospitalized patients. Their activities include patient care, teaching research, and leadership related to hospital care.²

Dr Wachter shared his belief that many forces are driving the hospitalist movement. Chief among these forces are 1) pressure to manage rising inpatient costs, 2) increases in the proportion of sicker patients and complexity of treatment options, 3) the rate of medical errors as a public issue, and 4) demand for the specialty by primary care physicians in their efforts to enhance access to care in their outpatient practices. Research on the hospitalist model has shown that use of hospitalists can reduce hospital costs, either improve or leave unchanged the quality of care, preserve inpatient satisfaction, and possibly increase outpatient satisfaction. Ongoing industry pressures and the positive outcomes from hospitalist

practices in varied settings are fueling the growth of hospitalist programs across the country (Robert Wachter, MD, personal communication, May 2000).^a

Hospitalists and ICU care

A controversial issue regarding hospitalist practice is the role of hospitalists in the Intensive Care Unit (ICU) setting. An informal poll of our audience indicated that almost all The Permanente Medical Group (TPMG) hospitalists who attended our meeting care for ICU patients routinely. We heard from two intensivists: William Kinnard, MD, ICU Co-Director for the PMG of Colorado, and Nazir Habib, MD, ICU Medical Director for TPMG of Northern California at Vallejo. Both physicians shared with the audience their informative clinical "pearls," which included remarks about work done by Dr Kinnard in Colorado on multidisciplinary care facilitated by data-driven protocols. These protocols include the "liberation from ventilation" protocol and automatic potassium replacement with built-in calculation of creatinine clearance (William Kinnard, MD, personal communication, May 2000).^b Dr Habib outlined Systemic Inflammatory Response Syndrome (SIRS) management principles recently published in the TPMG Clinical Practice Statement (for which he was the clinical leader) and illustrated these principles by presenting pertinent clinical scenarios that prompted audience participation (Nazir Habib, MD, personal communication, May 2000).^c

To round out the ICU portion of our conference, Dr Wachter engaged the audience in a challeng-

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Wachter encouraged us to include patients in our decision making process and to remember that patient autonomy is a paramount value in our society.

ing topic: ethics and resource allocation. He discussed the concept of “futile care” and encouraged a patient-specific approach to this determination, sometimes made on the basis of limited evidence. He elaborated by noting that a patient might consider futile a treatment that can’t meet the patient’s important goals—even if the treatment can prolong the patient’s life. Conversely, despite its “futility” from a medical standpoint, an intervention that can keep a patient alive might be an appropriate choice if it allows the patient to participate in an important upcoming family or community event. Dr Wachter encouraged us to include patients in our decision making process and to remember that patient autonomy is a paramount value in our society (Robert Wachter, MD, personal communication, May 2000).^d

Evaluating chest pain

One of our most common activities as hospitalists is to evaluate patients with chest pain. Chris Lang, MD, interventional cardiologist with the PMG in Colorado reviewed with us the latest literature on managing acute coronary syndrome and discussed the wide array of practical treatment modalities now available for this syndrome. He emphasized the need for hospitalists to know not only the appropriate interventions to use for patients with this syndrome but also how to manage bleeding complications that can be caused by a multidrug attack on cardiac thrombosis (Chris Lang, MD, personal communication, May 2000).^e

Quantifying preoperative risk

A challenge for all physicians is to perform a “pre-op clearance”

on patients who need a surgical procedure. Darryl Potyk, MD, Clinical Associate Professor at the University of Washington, shared a strategy to identify high-risk patients and recommended selective use of dipyridamole-thallium imaging in these patients. He also emphasized the importance of β -blocker therapy in high-risk patients undergoing surgical procedures. Dr Potyk finished by noting that he never “clears a patient for surgery”; instead, he attempts to quantify and to minimize perioperative risk as much as possible by using available therapies. It is up to the surgeon in conjunction with the patient and primary care physician (or hospitalist) to weigh the risks and benefits and to decide whether or not to proceed (Darryl Potyk, MD, personal communication, May 2000).^f

Information technology interface

The marketplace is brimming with gadgets and gizmos to put information technology at our fingertips, but what really works for practicing hospitalists? Tom Schaaf, MD, Director of the Hospitalist Program at Group Health Permanente, Spokane, Washington, shared a palmtop-computer-based patient management program that he developed. Dr Schaaf demonstrated some of the features of this program and distributed a helpful reference guide for others to explore strategies that might work for their own practice. The challenge for us all is to interface with the information systems that exist at our hospitals so that we can avoid excessive data entry by physicians. Seeing a system that works—and not just the advertisements on the

Internet—was very useful (Tom Schaaf, MD, personal communication, May 2000).^g

Antibiotic update

To cover key clinical topics in our conference, we asked Greg Moran, MD, Associate Professor of Medicine at the University of California at Los Angeles (UCLA), to give us an antibiotic update. He provided a comprehensive and stimulating presentation of the antibiotics currently at our disposal and suggested empirical regimens for many of the common clinical scenarios we face daily in the hospital (Greg Moran, MD, personal communication, May 2000).^h

CT imaging

We also included a discussion on use of computed tomography (CT) imaging for acutely ill patients. John Muhm, MD, Professor of Radiology at the Mayo Medical School, Scottsdale, Arizona, shared several case examples of spiral CT used to diagnose various clinical conditions. He specifically discussed use of spiral CT in evaluating suspected pulmonary embolism, acute appendicitis, ureteral calculi, cholecystitis, and diverticulitis. These diagnoses characterize the spectrum of patients we see every day, sometimes in conjunction with our surgical colleagues. Dr Muhm’s presentation highlighted the increasing role radiology is playing in both diagnosis and management of many clinical issues (John Muhm, MD, personal communication, May 2000).ⁱ

Blame-free environment

We enjoyed a series of talks on errors in health care. First we heard from Michael Leonard, MD, Director of Surgical Services for



the Colorado PMG. Dr Leonard has been studying lessons learned from aviation to impart that knowledge to the medical field. He discussed how a delay in administering direct-current (DC) countershock to a patient in ventricular fibrillation cardiac arrest led physicians in Denver to study implementation of automatic defibrillators in an inpatient setting. Dr Leonard emphasized the complexity of the hospital setting and how our strong emphasis on personal accountability has formed an environment in which people are often fearful to report errors. Dr Leonard encouraged us to move forward toward a “blame-free environment,” in which we can learn from—and thus correct—the system problems that plague us every day and that threaten our patients’ safety (Michael Leonard, MD, personal communication, May 2000).^j

Patient safety

We also heard from Bernard Lo, MD, Professor of Medicine and Director of the Program in Medical Ethics at UCSF. Dr Lo served on the Institute of Medicine’s committee that reviewed a recent publication on patient safety, *To Err is Human*.³ He shared some of the shortcomings of the publication, including the likely overestimation of errors caused by negligence. However, he acknowledged that numerous errors occur in hospitals across the country, and he focused his discussion on the importance of admitting our mistakes to ourselves and to our patients. Dr Lo emphasized that the decision about whether or not to disclose a mistake should be based on ethical criteria, not on expediency (Bernard Lo, MD, personal communication, May 2000).^k

Disclosing mistakes

We also heard another perspective on why it is important to disclose mistakes. Stephen Pakula, MD, a consultant in health care risk management and recent TPMG retiree from KP Santa Clara (where he was Chief of Medical-Legal and Risk Management for several years), shared many “pearls” from his experience. Dr Pakula emphasized the importance of rapport and open communication between physicians and patients; clarity and objectivity in recordkeeping; and respect for patients—shown by maintaining confidentiality and discretion, especially when working in a busy, inpatient setting. Dr Pakula encouraged use of the “incident” or “unusual occurrence” reporting mechanisms to alert the hospital’s Risk Management and Quality Assurance Departments about potential system problems while keeping these matters separate from the patient’s medical record and beyond the scope of discovery by the patient’s attorney (Stephen Pakula, MD, personal communication, May 2000).^l

Communication skills

To complete the conference, we focused on tools needed to “connect from the start” with the patients we care for in the hospital. We were led through a series of informative exercises by Cynthia Fenton, MD, Associate Chair of Education, UCSF Department of Medicine. Dr Fenton used videotapes produced at UCSF expressly to teach communication skills to hospitalists. By portraying well the difficult situation we find ourselves in when we meet a patient for the first time, the videotapes showed us how to develop better initial connection with the patient by lis-

tening to their concerns and by using that information to build a relationship. Dr Fenton emphasized the useful role of the personal physician in this process. The personal physician may provide “common ground” between the hospitalist and the patient by acting as a key “consultant” assisting the patient to make difficult decisions that arise during the hospital stay (Cynthia Fenton, MD, personal communication, May 2000).^m

KP leadership perspective

Robert Pearl, MD, Executive Director and CEO of TPMG, gave our organizational keynote address. He shared with the group his assessment of where the Permanente Medical Groups stand in this time of fast-paced change. He noted that, in TPMG, he has been emphasizing access and service because this is often how members judge quality. However, he is equally committed to quality and, for this reason, Dr Pearl is very supportive of the hospitalist programs developed in KP Northern California and across the country. He believes that increasing the number of patients with a complex problem a physician treats each year makes it easier to ensure high-quality inpatient care. Moreover, he is committed to improving both quality care and service by implementing new technology (Robert Pearl, MD, personal communication, May 2000).ⁿ

Conclusion

Hospitalist practice is growing across the nation, both within KP and in the community at large. As this emerging field of practice moves forward, several areas will require attention. Communicating well with primary care physicians

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and patients, defining our scope of practice, and enhancing how we interface with other specialties are all issues that hospitalists will need to address as our program matures.

We are now planning the Third Annual Kaiser Permanente Hospital Medicine Conference, which will be held October 8-9, 2001 in San Francisco. If you have any input to give for this year's conference, contact Diane Craig, MD, at diane.craig@kp.org. ❖

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References

1. Wachter RM, Goldman L. The emerging role of "hospitalists" in the American health care system. *N Engl J Med* 1996 Aug 15;335(7):514-7.
2. National Association of Inpatient Physicians. What is a hospitalist? On the World Wide Web (Accessed Oct. 20, 2000): <http://www.naiponline.org/about/hospdef.htm>
3. Kohn LT, Corrigan JM, Donaldson MS. *To err is human: building a safer health system*. Washington, DC: National Academy Press; 2000.

Clinical Picture

What is spoken of as a "clinical picture" is not just a photograph of a man sick in bed; it is an impressionistic painting of the patient surrounded by his home, his work, his relations, his friends, his joys, sorrows, hopes and fears.

Francis Weld Peabody, 1881-1927