munodeficiency virus infection, all too often HBV screening and vaccination are not done, in part because of the cost involved, as reflected in a recent report of the experience of 14 Boston community health centers. In these centers only 2 (1.1 percent) of 178 such susceptible patients received vaccine.⁶ Gjerdingen has shown that a practice-based community intervention can make a real difference. I hope that others in similar settings will take the leadership to do the same.

Larry Culpepper, MD, MPH Boston University Medical Center

References

- 1. Hollinger FB. Comprehensive control (or elimination) of hepatitis B virus transmission in the United States. Gut 1996;38(Suppl 2):S24-30.
- 2. Gjerdingen D, Lor V. Hepatitis B status of Hmong patients. J Am Board Fam Pract 1997;10:322-8.
- 3. Lemon SM, Thomas DL. Vaccines to prevent viral hepatitis. N Engl J Med 1997;336:196-204.
- 4. Dienstag JL, Perrillo RP, Schiff ER, Bartholomew M, Vicary C, Rubin M. A preliminary trial of lamivudine for chronic hepatitis B infection. N Eng J Med 1995;333:1657-61.
- Hoofnagle JH, di Bisceglie AM. The treatment of chronic viral hepatitis. N Eng J Med 1997;336:347-56.
- Sharfstein J, Wise PH. Inadequate hepatitis B vaccination of adolescents and adults at an urban community health center. J Natl Med Assoc 1997;89:86-92.

The Case for Hospitalists: Effectiveness or Expediency?

Consumer demand for lower cost and higher quality care is rapidly transforming the health care system and profoundly changing physician practice. Managed care, in which providers, payors, and purchasers agree to provide health services within a fixed budget, places a premium on coordinating care efficiently and cost effectively

Submitted 16 June 1997.

From the AvMed Health Plan, Miami, and the Center for the Health Professions at the University of California, San Francisco. Address reprint request to Marc L. Rivo, MD, MPH, AvMed Health Plan, 9400 South Dadeland Blvd, Suite 420, Miami, FL 33156.

while improving health outcomes and patient satisfaction. In general, managed care has increased substantially the value of primary care physicians because of their ability not only to diagnose and treat the vast majority of common health problems but also to coordinate patient care.

At the same time, managed care has brought changes in the delivery of services traditionally managed by primary care physicians alone. For example, treatment of mental health problems, diabetes, cancer, and other chronic conditions is now either directed by health teams coordinated by primary care physicians or managed entirely by specialty physicians.² Some argue these health care delivery changes represent genuine efforts to improve efficiency and health outcomes in the current managed care environment. Others contend that these changes simply reflect turf battles among generalists, specialists, and other health professionals, with decisions about the division of labor based on political expediency.

The question of effectiveness versus expediency can also be posed regarding the recent emergence of the full-time "hospitalist," physicians whose only responsibility is caring for inpatients.³ Today, an estimated 1500 physicians are full-time hospitalists in the United States.⁴ Managed care is, in part, fueling this division of hospital and outpatient care. As a strategy to manage inpatient care and costs more efficiently, some health maintenance organizations (HMOs) are paying for hospital-admitting panels of physicians to care for their members who become hospitalized. These HMOs employ hospitalists, typically internal medicine generalists and specialists, as well as family physicians, who are usually paid a set fee per patient. Some of these hospitalists work full time, although most probably split their time between their own office and the hospital. The primary care physicians can visit their patients in the hospital, although they may not receive additional reimbursement beyond their regular capitation payment. The hospital admitting physician is responsible for communicating with the patient's primary care physician upon the patient's discharge.

Three years ago Humana Health Plan started such a program, called their Hospital Inpatient Management System, which now serves more than 2 million plan members. A growing number of large multispecialty groups, group-staff model HMOs, and other integrated care systems have full-time hospitalist intensivists, including Park Nicollet Medical Group, Scripps Clinic, and Kaiser Permanente. Most recently, hospitalbased physicians have formed the National Association of Inpatient Physicians, published its first newsletter, called The Hospitalist, and held its first organizational meeting, which reportedly drew more than 100 physicians, mostly general internists and a handful of family physicians.⁵ The American Board of Internal Medicine has been asked to create a new hospitalist subspecialty, which, if approved, would almost certainly be accompanied by residency-training criteria.

What impact does the emergence of the hospitalist appear to be having on family physician involvement in hospital practice? Some believe the current impact is minimal. Survey data by the American Academy of Family Physicians indicate that 87 percent of all family physicians have inpatient privileges, and only 1 percent who joined a managed care system gave up their hospital privileges.6 In an important study published in this issue, Stadler and colleagues randomly sampled 415 practicing family physicians to assess the extent of and factors determining their involvement in hospital practice. Of the 55 percent who responded, the degree of hospital practice correlated most closely with the family physicians' personal enjoyment of inpatient medicine, their age, and the extent of outside responsibilities. The authors concluded that inpatient care is still largely determined by individual family physician choice rather than the health care delivery system.

The authors' cautious interpretation of the study findings, however, is appropriate for several reasons. First, the respondents represented a cohort of family physicians who were actively involved in the hospital; that is, 36 percent of the respondents reported practicing obstetrics, and 100 percent of the respondents reported having hospital privileges compared with 25 percent and 87 percent, respectively, in the general family physician population. Second, the sample size might not have been large enough to analyze the effect of different demographic or health care financing and delivery system variables, which could account for varying inpatient involvement by family physicians in different areas of the country. For example, survey data from the American Academy of Family Physicians indicate that urban family

physicians make an average of 12 hospital visits a week compared with 20 visits a week for their rural counterparts. Similarly, family physicians in the Pacific region make only 6.5 visits a week compared with 22 visits from counterparts in the East South Central region.⁸ These data suggest that external factors could be influencing decisions to practice inpatient medicine.

It is likely today that a combination of internal and external factors is influencing family physician involvement in hospital practice. In rural communities the relative lack of physicians, the predominantly solo or small-group practice arrangements, the close proximity of office and hospital, and the lack of financial disincentives provide both a supportive and more efficient environment for hospital practice. In urban communities family physicians who work in largegroup practices, use multiple hospitals for admission, and face a longer commute between office and hospital might not find hospital care to be efficient. Financial arrangements could be an independent variable. With capitation or salary replacing fee-for-service reimbursement, an increasing number of family physicians are receiving no additional pay for seeing their patients in the hospital. Despite these external influences, family physicians do have choices. For example, in urban communities, group practice can enable family physicians to continue to provide inpatient care by rotating call for the group's patients on a weekly, biweekly, or monthly basis.

Regardless of whether family physicians continue hospital practice, several fundamental questions remain. First, which model of office and hospital care leads to improved health outcomes, cost effectiveness, efficiency, and patient satisfaction? Proponents of the traditional model suggest that family physicians who follow their patients through the hospital can improve continuity and patient satisfaction while achieving similar health and cost outcomes. Proponents of the hospitalist model suggest that patient outcomes will be improved at considerable cost savings while continuity can be maintained through good communication and coordination between the admitting and primary care physicians. Of interest, although family physicians engage in office practice, provide emergency care, and make house calls in all countries that have family physicians, less than one third in countries other than the United States report caring for their patients in the hospital. There is precious little published research to back the assertions of either model's proponents.

Second, what should programs teach family practice residents about hospital care? In managed care systems today, family physicians are valued for their high-quality office-based care, whereas their time in the hospital is considered to be far less relevant. Proficiency in skilled nursing, acute rehabilitation, and home care might be of more value than inpatient competency to the family physician in managed care practice. Family practice residency programs need to prepare family physicians for high-quality office practice who are able to apply such core skills as populationbased health assessment, computer and medical informatics, preventive services, chronic disease care, quality improvement, and improved health outcomes in their community practice. Today these essential core components are not well delineated in the recently revised Program Requirements for Residency Education in Family Practice. 10 Yet all residencies are still required to provide at least one third of the core training time in a hospital setting. Such an emphasis on inpatient training might be necessary for family physicians preparing for rural practice or interested in pursuing hospital practice yet would be extraneous to most family physicians preparing for managed care practice.

Whether the emergence of the hospitalist and the division of labor between the office and hospital represent true efficiency and effectiveness or simple expediency remains to be determined. What appears certain is that more family physicians might have to decide explicitly whether to continue hospital practice.

Marc L. Rivo, MD, MPH Miami, Fla

References

- Rivo ML, Mays HL, Katzoff J, Kindig DA. Managed health care. Implications for the physician workforce and medical education. Council on Graduate Medical Education. JAMA 1995;274:712-5.
- 2. Spaulding J. Taking the lead in disease state management. Fam Pract Manage 1996;4:50-7.
- 3. Wachter R, Goldman L. The emerging role of "hospitalists" in the American health care system. N Engl J Med 1996;335:514-7.
- 4. Miller SR. The hospitalist will see you now. South Florida Business J. 30 May 1997.
- 5. Boschert S. Internists form hospital-based "specialty." Intern Med News, May 15, 1997.
- 6. Hospital Privileges Survey. Kansas City, Mo: American Academy of Family Physicians, 1995.
- Stadler DS, Zyzanski SJ, Stange KC, Langa DM. Family physicians and current inpatient practice. J Am Board Fam Pract 1997;10:357-62.
- 8. Facts about family practice, 1996. Kansas City, Mo: American Academy of Family Physicians, 1996.
- 9. Making medical practice and education more relevant to people's needs: the contribution of the family doctor. Geneva: World Health Organization, 1995.
- Accreditation Council for Graduate Medical Education (ACGME). Program requirements for residency education in family practice. Chicago: ACGME, 1997.