Editorials

Communication Problems And Needs In The Consultation And Referral Process

In this issue of *JABFP*, Williams and Peet report and comment on their findings of a timely study in Ohio of the perceptions and values placed on various kinds of clinical information by referring physicians and consulting specialists during the process of consultation and referral.[1] Their paper follows up on a long interest by Williams and his colleagues on the consultation process. A previous paper in 1977[2] described six inherent problems during the consultation process, in large part resulting from one or another type of failure in communication between referring physicians and consultants.

The consultation process, for all its importance, has received inadequate study over the years, and its complexities and outcomes are still not well understood. In an early study on the topic, Williams and his colleagues[3] defined the five key steps in the course of a consultation involving a referring physician and a consulting physician.

1. The referring physician defines the need and purpose of the consultation and referral as mutually understood with the patient.
2. The referring physician communicates these needs to the consulting physician.
3. The consulting physician addresses the problems as requested.
4. The consulting physician communicates findings and recommendations to the referring physician.
5. The referring physician, consulting physician, and the patient come to a clear understanding of responsibilities for continuing care.

As physicians in primary care and consulting specialties are reminded on a daily basis, within these conceptually simple steps lies a potential morass of miscommunication and misunderstanding, which carries potential risks for the patient as well as the involved physicians.

In their study reported here, Williams and Peet find, not surprisingly, that referring physicians and consulting physicians place highest value on effective communication, especially including intellectual discussion of the patient's problems that require consultation. At the same time, misunderstanding or disagreement was often expressed by one or the other group of physicians concerning many specific aspects of the consultation process. Of particular interest was the finding that both referring physicians and consulting physicians placed relatively less value on the definition of roles and responsibilities for further care of the patient, including definition of monitoring criteria.

It is only natural that the viewpoints of primary care physicians and consulting specialists frequently come into tension. The primary care physician assumes the responsibility for ongoing comprehensive care of the patient, often in the context of family and community. The clinical problem requiring consultation is frequently intertwined with other medical problems, and the consultant's recommendations and care need to be integrated within an overall process of care, which is further complicated in the event of multiple consultations in different disciplines. A common problem, for example, is that of adverse drug interactions when conflicting treatment regimens are simultaneously carried out for different clinical problems, often without the full knowledge of all treating physicians. As consulting specialists bring their expertise to the optimal care of a specific disease or organ system, they might well feel some responsibility for continued monitoring and care within their area of expertise, but the respective responsibilities of the referring and consulting physicians are frequently not clarified. This matter is further complicated by many other factors, including the influence of

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patient choice, insurance coverage, information transfer, record keeping, boundary issues of competence, economic and political issues between specialties, and medicolegal factors.[4]

As a result of the above complexities in the consultation and referral process, the quality of patient care can be compromised in various ways. In some instances, adverse outcomes might occur when coordination of care is inadequate between the referring and consulting physician. Perhaps more common is the possibility of adverse outcomes resulting from omission of necessary follow-up monitoring and care when the responsibility for follow-up is unclear. When the roles of the referring physician and consulting physician are not explicit and mutually agreed upon, other potential undesirable outcomes also include unnecessary repetition of laboratory and other diagnostic procedures, increased costs of care, and inconvenience to the patient.[5]

Within the rapidly changing health care environment, there are four positive trends that seem certain to improve the effectiveness of communication, as well as patient outcomes, in the course of consultation and referral. First, advances in computer and telecommunications technology should facilitate more rapid and useful information transfer between the referring and consulting physicians. Second, the growing development of managed care programs and new regional alliances of primary, secondary, and tertiary providers will necessarily require the respective roles of referring physicians and consulting physicians to become more explicit and accountable within systems involving altered incentives. Third, as health care reorganizes around managed care concepts, an increased emphasis on appropriateness of care can be anticipated, including not only the cost-effectiveness and positive outcome of a given service, but also the convenience of the patient; when the necessary care is available within the practice and competence of the referring physician, it will be the preferred locus of care. Fourth, the active development by many health care organizations and agencies of new clinical practice guidelines can also be expected to clarify further the respective roles of referring physicians and consulting physicians in the care of patients with many common clinical problems.

As the health care marketplace undergoes its revolutionary changes, relationships between physicians will also dramatically change. It will become easier for referring physicians and consulting physicians to share care of complicated clinical problems, with most of the patient's care remaining within the aegis of the primary care physician. An example illustrates what is likely to be an increasing trend — the patient with advanced congestive heart failure whose drug therapy is evaluated and recommended by the cardiologist mainly is monitored by the primary care physician, and future visits to the cardiologist are only for the purpose of specialized diagnostic or therapeutic procedures.

Effective communication and collegial interactions between referring physicians and consulting physicians are essential to the patient's welfare and quality of care. Further research is needed of the consultation process as it evolves in a changing environment, particularly concerning changing perceptions of referring physicians and consulting physicians, quality of communication, cost-effectiveness, and outcomes of the process. Many studies of communication problems in the consultation process bear testimony to the need for improvement in this area.[4-9] Current trends provide good reasons for optimism that the public interest will be served by the changes now taking place.

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Computer-Based Medical Records: Time For An Upgrade

Twenty-three years ago, as a family practice resident, I was introduced to computer-based medical records. Larry Weed had spearheaded the development of the PROMIS system at the Medical Center Hospital, University of Vermont. I used it on the gynecology floor, where computer terminals and printouts replaced the hospital chart. Most residents avoided it, preferring to keep the physicians' notes, laboratory results, and needed orders on 3 × 5-inch cards stuffed into shirt pockets. The system was later installed, temporarily, in a few physician offices. It never proved feasible for practice because of high development and hardware costs, the ongoing need for technical support, and despite touch screen technology, time-consuming data entry.

Twenty years later this first generation of computerized medical records used in ambulatory care has four long-term survivors: (1) STOR (Summary Time-Oriented Record)[1] developed and used at the Ambulatory Care Center of the University of California, San Francisco; (2) RMRS (Regenstrief Medical Record System)[2] developed at the University of Indiana, where workstations are currently used both in inpatient and outpatient settings; (3) COSTAR (Computer Stored Ambulatory Record)[3] developed at the Massachusetts General Hospital and used by the ever-expanding Harvard Community Health Plan; and (4) TMR (the Medical Record)[4] developed at Duke University and in use there since 1977. In its current form TMR is installed at Duke's busy family practice center and is well described in this issue of the *Journal*.[5]

By examining the evolution of this technology and seeing what functions have proved viable in practice, we can become wiser about the future of computerized medical records. Yarnall, Michener, and Hammond[5] reassure those considering medical record systems about two often-voiced concerns. First, the reliability of their hardware and software is high, and downtime has been very limited. One doesn't need to fear computer crashes that will destroy data or that there will be periods during which there is no computer system available. I suspect that in part this reliability is because the system's developers and programmers are nearby and highly invested in the system. Second, the authors note that there has been no unauthorized access to patient records. Although they do not describe their security system, systems need to have a balance between insuring patient record privacy and easy access to patient data for providers. TMR seems to have found it.

TMR shares many attributes with the other successful computer-based record systems — both the four noted above and those of more recent design that have been reported in the literature. Such attributes include:

1. Record summaries (patient at a glance) for providers that have demographic data, past visit summaries, problem lists, medication lists, and recent laboratory and radiographic results. Computer-generated flow sheets can help present data over time. The advantages of these record summaries are well described.[3,6-8]
2. Prompts or reminders about needed screening and preventive care. Many reports document that these reminders can greatly improve physician performance.[9-13] TMR, in addition, sends birthday "reminder" letters to patients.
3. Linkage with other computer systems, such as billing, scheduling, hospital, laboratory, and radiology. The TMR either has modules that do these functions or has the ability to interface these systems, which helps keep data-entry costs down.

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