A Systems Approach to Patient-Centered Care

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PROVIDING CARE CENTERED ON PATIENTS' NEEDS AND expectations is a key attribute of quality care.[1] Unfortunately, despite the intent and efforts of many to improve patient centeredness, the quality of patient-clinician relationships, patient access, and continuity of care appear to be worsening in the United States[2] and lag behind other Organization for Economic Co-operation and Development (OECD) countries.[3] Clinicians do not consistently address patients' concerns,[4] do not always assess patients' beliefs and understanding of their illness, and often do not share management options with patients.[5] Patients frequently fail to recall basic elements of their care plan.[6] All this is occurring as care becomes increasingly complex and as more costs of care are borne directly by patients.

In this Commentary, we propose 4 specific changes that should help the medical profession meet patients' needs and expectations. These changes involve redesigning the systems of care that both evidence and practice suggest are more likely to succeed rather than relying on clinician rewards, feedback, or training alone. They are (1) improving access to and continuity with clinicians, (2) increasing patients' participation in care by making it easier for patients to express their concerns and involving them more actively in the design of their care, (3) supporting patient self-management through systems that facilitate goal setting and that increase patient and family confidence in self-care, and (4) establishing more efficient and reliable mechanisms for coordinating care among settings.

The evidence for most of these system changes is robust and supported by clinical trials that have demonstrated the desired outcomes. Some interventions have been widely implemented in practice and appear promising but have not been subject to clinical trials and require further evaluation. Consolidating these approaches into a coordinated series of practical system changes is the purpose of this Commentary. The magnitude of their combined effect is unknown but should be intensively studied.

Although the proposed system changes could be applied to all patients, the chronic care model[7] is an example of an evidence-based system approach that includes self-management support and care coordination as key components.

Redesigning Systems

As experienced clinicians know, the strength of their commitment to provide patients with what they need and expect and the quality of the relationships between clinicians and patients is central to patients' experience. What may be less obvious is the extent to which well-designed support and delivery systems are essential if care is going to center, reliably and consistently, on patients' needs and priorities. Current incentives produced by payment systems have focused tremendous responsibility and workload on physicians. However, asking clinicians to work harder or presuming that lack of patient centeredness is due to a lack of knowledge or training will not necessarily produce the results that patients—and clinicians—want and need. In redesigning systems, a primary goal is to delegate to office staff or patients those tasks that do not require direct physician involvement, thus freeing up time for physicians to build the kind of relationships with patients that directly address patients' needs and priorities.

Ensuring Access and Continuity. The redesigned system of patient scheduling referred to as *open access* or *advanced access*[8] helps office practices reduce waiting times and increases continuity by reducing backlog and matching the supply of appointments with demand. The goal is for patients to have access to an appointment when they want or need it and with the clinician they choose; as such, open access is also a tool to help build the relationship between caregiver and patient. Continuity of care with a clinician is known to be a key factor associated with patient satisfaction.[9] In terms of specific clinical outcomes, increased continuity has been associated with better outcomes of diabetes care; improved delivery of preventive care; reduced hospitalizations, emergency department visits, readmissions, and length of stay; and improved clinician satisfaction.[10]

Implementing open access is a substantial challenge, but organizations that have done so have seen substantial im-

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provements in patient satisfaction, better utilization of services, and improved staff and physician satisfaction.[11] Visits scheduled with the desired clinician include more preventive services than those with a clinician who does not know the patient, and open access can improve financial return on clinician time in fee-for-service reimbursement systems. Maintaining open access is also a challenge because office staff must continuously balance demand and supply and plan for contingencies. Open access has typically been implemented in primary care, but specialty practices are increasingly interested in using this approach to improve access to care.

Creating multiple routes of practice access has been observed to increase patient centeredness and safety by enabling multiple contact methods based on patient preferences. Access to nonphysician members of the care team is observed to reduce work for clinicians and increase continuity; contact methods can be by telephone, e-mail, or drop-in visit (either individual or group). When tasks are delegated more widely within a practice, the roles of all members of the care team and methods of patient contact need to be particularly clearly defined. Clinicians often express concern that e-mail will increase their workload. The evidence about the effect of e-mail on workload is mixed, but in some practices evidence shows that it has decreased the number of telephone calls from patients.[12] Telephone care for depression and diabetes has resulted in improved satisfaction and outcomes.[13,14]

Many patients want access to information through electronic medical records (EMRs), and such access is increasingly available. A small study showed that access to the EMR enhanced patient understanding of their conditions and improved communication between physicians and patients.[15] Viewing abnormal laboratory results can be upsetting to some patients and access to such information therefore needs to be carefully planned. However, giving patients the ability to view the results of their laboratory work could improve the safety of care by decreasing the likelihood that abnormalities will "slip through the cracks" unobserved.

Increasing Opportunities for Patients to Participate in the Care Process. Designing office visits specifically to address patients' concerns encourages patients to share in control of their care. Patients often come to their visits with multiple concerns, many of which remain unspoken or unrecognized, resulting in reduced patient satisfaction and poorer outcomes.[16] To date, most efforts to improve the ability of patients to voice concerns have centered on training clinicians. There is reason to believe, however, that strategies to enhance the patient's role in the consultation will be more successful.

Moore and Wasson[17] have advocated the use of technology to help make care increasingly patient centered. More specifically, technology can help with the previsit work of identifying "What's the matter?"—that is, specific condi-

tions or symptoms—and "What matters?"—that is, patients' interests, concerns, and fears about specific conditions or symptoms. Technology can also help in assessing the value of the care provided; determining patient confidence to self-manage and control health problems, as well as barriers to self-care; and learning about patient expectations for visits. Helping patients articulate their concerns and expectations for visits greatly increases active patient participation in a particular consultation and in the care process generally.

Many clinicians may become bothered when patients bring lists of concerns to their appointments, primarily because of the perception that dealing with the list can prolong the visit. However, clinicians can negotiate with patients about which concerns have priority. The use of such lists has been demonstrated to increase patient-centered care by making sure that patients' primary concerns are addressed.[18] It is possible that the time physicians need to address multiple patient concerns can be reduced by relying on nonphysician members of the health care team to handle appropriate items.

Tools to facilitate agenda setting for patients with chronic disease might help patients become more active, especially for those who present without a new complaint. "Agenda cards" developed in the United Kingdom are an example of an application in this area. A deck of cards is created containing statements about issues commonly faced by patients with a particular chronic condition; the cards help patients verbalize the key concerns they want to address during the visit. This innovation is currently undergoing evaluation of its effectiveness. Hospice programs in the United States have used a similar approach. Using a tool (paper-based or in an EMR) that lists both patient and clinician issues and that documents agreed-upon priorities for a given visit could enable a more patient-centered consultation, particularly if the tool specifies how and when other issues will be addressed, including by other members of the care team or in a nonvisit format.

Because families play such a vital role in helping patients manage their medical conditions, particularly chronic illnesses, involving families in the design of care systems improves both the quantity and quality of family involvement and can be instrumental in helping prevent error.[19] An approach in which self-assessment of health status is used could activate patients by identifying specific gaps between their current and ideal health. Self-management skills education could be linked to these self-assessments. Such assessments can be offered at defined intervals to patients who are well and seeking preventive health information or when a new patient enters the care system. The assessments can also be designed for patients with chronic conditions and incorporated into routine care. Gaps in health and functional status are thus identified, and patients can help ensure that these gaps are addressed by being prompted to seek care. Web-based

assessment tools have been developed for this purpose. Most of these ideas have promise, but they will require further testing.

Providing patients with information about the care they should be receiving informs patients and actively involves them in getting the care they need, particularly by providing reminders to the care team.[20] For example, encouraging patients to ask questions that concern them such as "Doctor, shouldn't I be on aspirin?" could help improve the reliability and quality of care. Patient access to EMRs may make this reminder function easier but does not seem to be essential.

Providing Self-management Support. Patients provide themselves with the vast majority of care they receive outside of hospitals, and the importance of organizing, supporting, and planning for that care has been well demonstrated, particularly for patients with chronic disease.[7] Educating patients about their condition is not effective by itself; patients also need to develop skills and confidence to manage their condition. Two key components that support self-management and behavior change are collaborative goal setting and action planning. To be effective, goals and action plans must be specific—agreeing on what, when, where, and how often specific actions are needed—and must detail the barriers.[21] Action planning tools have been observed to increase the likelihood that obstacles to best performance will actually be addressed.

Observation and clinical practice have shown that using tools to guide goal setting and action planning and then identifying other nonphysician members on the care team who can perform these activities helps to incorporate these activities into clinical encounters. Patients who are computer literate and have access to computers can use Web-based tools—for example, the "How's Your Health?" Web site (http://howsyourhealth.org/cgi-bin/pblmslv.py)—to help them develop action plans for health problems. Incorporating action planning as an explicit, purposeful goal of an office visit (for instance, a planned visit to monitor chronic illness) will encourage this to occur more reliably. Collaborative care planning does improve satisfaction with care, although its effects on biomedical outcomes have not been established; the possibility that collaborative planning reduces physician workload makes intuitive sense but also requires testing.[22]

Clear and agreed-upon follow-up plans are essential for effective care and are an important component of the chronic care model. Practice shows that incorporating these plans into a patient-held record ensures understanding by patients and families. Providing patients and their families with a written or printed postvisit summary can support patient understanding, although the level of health literacy can limit the effectiveness of printed materials.

Peer support also improves self-efficacy. This type of support can be achieved by patient-to-patient mentorship, ad-vocacy roles of individuals, and group education in self-management skills led by patients with chronic disease. Acquiring self-management skills through group education has been demonstrated to improve well-being, self-efficacy, behavior change, and health outcomes[21]; it has been particularly helpful for patients with arthritis and diabetes. Such positive peer effects have also been seen in group medical visits.[23]

Coordinating Care Between Settings. Many patients, particularly those with chronic disease, require care from a variety of health care professionals, often at different locations. Poor information flow between care settings is frustrating to patients and clinicians alike and reduces safety margins. Repeated requests to patients for information can be distressing. Identifying a specific care coordinator role within the primary care team can help minimize these communication problems. Such a person, either a clinical or nonclinical staff member, functions as the patient's advocate, helps the individual patient navigate the system, and can ensure that information is in the right place at the right time. Practical measures that have been observed to ensure coordination of care include providing standardized referral and hand-off information, as through the use of templates developed collaboratively by primary care providers and specialists. Involving care managers for patients with depression has been shown to improve outcomes in primary care.[24] Patient-held records help coordinate care, avoid duplication, and ensure that the correct information is always where it needs to be—with the patient.

Conclusions

Most systems that support clinicians would benefit from redesign that aligns care more completely with patients' needs and interests. Redesigning the systems of care to increase the support of clinicians in their work may be more successful in improving patients' experience than relying only on training. Ensuring open access to and continuity with clinicians; improving opportunities for patients and families to participate in the care process; providing active self-management support; and coordinating care between settings are among the basic system redesign components that can result in optimal care from the patient's point of view, as well as the clinician's.

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