The Structure of Primary Care: Framing a Big Picture

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Primary care is the foundation of health care in the United States as in most of the world. According to the Institute of Medicine, primary care is defined as “the provision of integrated, accessible health care services by clinicians who are accountable for addressing a large majority of personal health care needs, developing a sustained partnership with patients, and practicing in the context of family and community.” Despite the widespread agreement regarding its conceptual definition, however, many questions remain about primary care. For example, which components of primary care are most essential to high-quality care? How can these components be best achieved in practice? Can specialists provide some components of primary care without providing the full spectrum of primary care? Which components of primary care are associated with improved health outcomes? The articles in this issue of Family Medicine address some of these questions. They add to a growing body of literature regarding the components of primary care.

One of the most fundamental components of primary care is continuity of care. It is often assumed that continuity should have positive benefits to health care because of the accumulated knowledge and trust that develops between a patient and provider. In fact, a number of previous studies have found positive benefits from higher continuity of care. This includes studies that have shown continuity to be related to higher immunization rates for children, higher rates of adherence to prescriptions, better recognition of medical problems, higher patient and provider satisfaction, fewer emergency department visits, fewer hospitalizations, and improved control of chronic diseases such as diabetes mellitus. However, other studies have found that continuity does not always have positive benefits. For example, a recent study found that higher continuity was not related to improved monitoring for diabetes.

Several articles in this issue also raise doubts as to whether higher continuity always leads to better care. Mainous et al examined the impact of continuity on early detection and stage of diagnosis for persons diagnosed with breast and colorectal cancer. They found that continuity was associated with a higher likelihood of having had a mammogram for women with breast cancer. However, continuity was not associated with an earlier stage of diagnosis for either type of cancer. Further, having a longer relationship with one’s physician was associated with neither earlier diagnosis nor screening. The article by Parkerton et al raises even further doubts regarding the benefit of continuity. In a group model HMO consisting of 25 practices, continuity of care was not associated with preventive health screening, monitoring for diabetes, satisfaction with care, or ambulatory care costs.

One reason for this apparent contradiction could be that continuity of care is more complex than simply length of time with a regular doctor or concentration of visits with that doctor. A recent article by Saultz helped to clarify these complexities. He described three types of continuity: institutional, longitudinal, and interpersonal. He argued that interpersonal continuity is what is needed to facilitate knowledge and trust and thereby improve care.

Several articles in this issue help to further elucidate the complexities of continuity of care. The article by Parchman and Burge is one of the most sophisticated studies to date to elucidate the mechanism by which continuity works. Using a path analysis to analyze data from the Medicare Current Beneficiary Survey, Parchman and Burge determined that continuity (as defined by a sustained patient-provider relationship over time) predicted a higher level of provider

(Fam Med 2004;36(1):65-8.)

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knowledge about a patient, that better knowledge predicted a higher level of trust, and that higher level of trust predicted higher rates of quality indicators such as preventive care. The association between continuity and trust and the impact of trust and knowledge on quality measures have also been shown in previous studies. The article by Mainous et al adds further evidence to support this mechanism. They found that in a sample of women with breast cancer, having higher continuity of care was associated with trust in one’s physician. Trust was associated with better care, as defined by earlier stage of diagnosis. However, neither having a longer relationship with one’s physician nor concentrating care with the same physician were associated with earlier diagnosis. The association between continuity and trust has also been shown in previous studies. This suggests that the mechanism by which continuity works is by increasing trust in one’s physician; therefore, higher continuity without greater trust may not have positive benefits. This may be one reason why some studies have shown continuity to have positive benefits, but others have not. It could be that continuity has positive benefits primarily when knowledge and trust are critical to medical decision-making. The article by Schers et al demonstrated that physicians also agree that continuity is most important when knowledge and trust are essential components of care. In a survey study of physicians in The Netherlands, physicians felt that continuity was very important when discussing prognosis and treatment options for patients who are seriously ill but much less important for minor problems such as an ankle sprain or the flu.

If continuity can have positive benefits by increasing knowledge and thereby trust, how can continuity be best achieved? The study by Christakis et al suggests that continuity is dependent on a second component of primary care: accessibility. To build a sustained relationship of knowledge and trust by seeing the same provider over time, that provider has to be accessible to the patient. In fact, Christakis et al found that in a residency teaching practice, provider availability was the strongest predictor of continuity. Availability was particularly problematic for resident physicians, who may only be available to see patients 2 or 3 half days per week. However, even physicians in full-time practice are not always available to their patients, especially for acute problems. This suggests one reason why continuity has become more difficult to achieve: since physicians are not always available to see their own patients, they are often seen by partners or in urgent care settings rather than by their primary physician.

Given the practical barriers to achieving continuity, another component becomes particularly important: coordination. If every patient had perfect continuity, their physician would know everything about their health care. But given that most patients see more than one provider, it is the responsibility of their primary provider to coordinate this care. For patients seeing many different providers, coordination of this care by the primary care provider can be difficult and often is not optimal. The article by Low illustrates the potential problems with lack of coordinated care, even in a country such as Great Britain that has a well-developed system of primary care. The article describes the difficulty in coordinating care for patients who are seeing both primary care providers and specialists, both inpatient and outpatient settings. It shows that even for patients with attentive providers and attentive family members, care can be fragmented.

There are certainly methods to improve coordination of care. One way is to assist the primary care provider through the use of care management teams. The article by Nasmith et al describes such a coordinated team approach for patients with diabetes mellitus. Previous studies have found that such systems can improve quality of care for diabetes as well as other chronic diseases such as depression. In many places, however, such systems are either not available or not financially feasible. The article by Lester et al describes the difficulties encountered in mental health care when systems are not in place to coordinate care for patients with chronic mental illness. However, even when formal systems are not in place for care management, coordination can be improved by office systems that facilitate communication. In the study by Parkerton et al, although continuity of care was not associated with improved quality of care, office systems that facilitated coordination were. Specifically, having arrangements where physicians share patients on a team, and agree to communicate about their team patients, is associated with better preventive care and improved monitoring for patients with diabetes. Further, having a team of physicians who has worked together longer was associated with improved quality of care, not only improved prevention and diabetes monitoring but also greater patient satisfaction and ambulatory costs.

Finally, perhaps the most basic hallmark of primary care is comprehensiveness. While comprehensiveness may be the most basic component of primary care and may be the easiest to understand, it is often given little attention when determining what providers provide primary care. In most countries, there is little confusion about what providers provide primary care: general practitioners provide primary care, and specialists provide secondary and tertiary care. But in
the United States, care is often fragmented, and specialists sometimes provide services that would normally come under the auspices of primary care. One example is when gynecologists provide routine cancer screening for women or provide other prevention and treatment to patients without a referral. Other specialists sometimes provide limited primary care services to some of their patients, especially those who visit them regularly for chronic illnesses. In fact, a recent study tried to quantify the amount of primary care services provided by specialists in the United States. They concluded that up to 15% of elderly patients receive primary care services from non-primary care providers and that gynecologists and pulmonologists are the physicians most likely to provide these services. This is sometimes considered the “hidden system” of primary care.

However, while specialists sometimes provide services that are usually considered in the realm of primary care, that does not mean that they are truly providing primary care. By definition, primary care is comprehensive and is not defined by any disease state or organ system. The study by Koopman et al suggests that specialists rarely provide true primary care that is either comprehensive or coordinated. When specialists provide services outside of their specialty area, these services tend to be ad hoc and uncoordinated. So, rather than representing a hidden system of primary care, these services represent the absence of true primary care.

In summary, the articles in this issue of Family Medicine help us to better understand the complexities of primary care. First, continuity of care works through the development of accumulated knowledge and trust between a patient and a provider. Having continuity in and of itself, as defined by a regular provider over time or by concentrating care with that provider, probably does not lead to better care unless it also results in an interpersonal relationship of knowledge and trust. Second, continuity requires accessibility and availability; since providers are not always available, continuity is not always easy to achieve, and coordination becomes more important. In fact, given the practical barriers to continuity, coordination may be a more important factor than continuity in improving health outcomes. Improving coordination requires good communication among health care providers and may be facilitated through the use of care management teams. Finally, true primary care requires a comprehensive approach to the patient that is not limited by disease state or organ system. While specialists may provide some of the services that are usually under the auspices of primary care, it is rare that specialists provide true primary care. There is really no such thing as “primary care of the female reproductive system” or “primary care of the patient’s lung disease.” Primary care requires management of most of the patients’ health care needs and coordination of care that is provided other places. Without the provision of comprehensive and coordinated care in the context of a continuous relationship, there is no primary care.

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