Primary Care: Questions Raised by a Definition

Gail J. Povar, MD, MPH
Washington, DC

In *Defining Primary Care: An Interim Report*, the Institute of Medicine offers a set of attributes for primary care that raise many unresolved empirical and philosophical questions. For instance, the "integrated nature" of primary care immediately challenges the validity of the content of research in primary care using data such as ICD-9 codes, which, by nature, reduce patients to disaggregated sets of problems rather than coherent wholes. Likewise, considering accessibility as a hallmark of primary care focuses attention on how health care is organized, and whether depending on primary care-trained professionals as the necessary or ideal first point of access might be a deterrent to the delivery of optimal care among some populations. Primary care clinicians should and will be held accountable for achieving the attributes of practice that make primary care unique.

This paper provides a detailed examination of the Institute's definition, and identifies many aspects that require additional thought and research before these attributes can be applied as criteria for the evaluation of primary care practice.

Key words. Primary health care, health services accessibility. (*J Fam Pract 1996; 42:124-128*)

Why define a scientific base for primary care? Isn't primary care merely the aggregate application of the scientific aspects of subspecialty medicine? Isn't it true that the psychosocial concerns and epidemiologic principles considered central to primary care practice characterize subspecialty practice as well? Surely specialists are not exempt from the obligation to detect depression or from the application of Bayes' theorem to clinical decision-making! Is there anything so special about primary care that it can be said to have a scientific foundation and research agenda all its own?

The answer is unequivocally yes! However, the definition offered by the Institute of Medicine (IOM) in *Defining Primary Care: An Interim Report*[1] raises many questions regarding the attributes used to characterize primary care. Specifically, IOM offers the following normative description of primary care: "Primary care is 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."[1] In this paper, each of these attributes are examined for the challenges they pose to primary care research, organization, and practice.

Submitted, revised, October 19, 1995.

Presented at the Institute of Medicine's invitational workshop on the Scientific Base of Primary Care, January 24–25, 1995, Washington, DC.

From the Departments of Medicine and Health Care Sciences, The George Washington University School of Medicine and Health Sciences, Washington, DC. Requests for reprints should be addressed to Gail J. Povar, MD, MPH, 7911 Radnor Rd, Bethesda, MD 10817.

ISSN 0094-3509

Primary Care Is Characterized by Integration

Integration in the Content of Primary Care

Integration captures three concepts: *comprehensiveness, coordination,* and *continuity.*[1] One might reasonably ask why such features characterize primary care. The answer lies in the content of primary care. As Inui[2] has noted, primary care requires appreciation of not only the individual signs and symptoms that suggest a particular diagnosis, but also the context within which they present, ie, the person, family, community, and culture. Comprehensiveness, coordination, and continuity are necessary attributes of the practice of primary care because the focus is on the dynamic interplay of clinical problems over time, as modified by the individual's psychosocial context. Confronted with a patient whose chief complaint is "I have a cold," the clinician must not only verify the presence of a viral upper respiratory tract infection and recommend appropriate treatment but also consider why this person is seek-

ing help from a physician for a cold, when most others would simply have gone to the pharmacy for decongestants and cough syrup.

Consider the patient who arrives for routine follow-up of multiple problems ranging from obesity and degenerative joint disease to angina and asthma, who now also complains of a new problem such as loss of appetite. Rather than referring the patient to a specialist, the family physician must develop a diagnosis with the patient. During this process, the physician may rule out new-onset diabetes and discover that by "loss of appetite," the patient really meant "it hurts to eat." Then the physician must decide how best to manage the patient's asthma while her inhaler-induced oral thrush is treated.

There are many integrated tasks that characterize primary care: gauging the interaction effects of multiple problems, working with the patient to balance treatment for one condition with that for another, and ensuring appropriate focus on the symptoms that trouble the patient and the signs that concern the clinician. How clinicians carry out these aspects of care, how they negotiate priorities with the patient, and how they arrive at an appropriate diagnosis for a symptom that a patient may describe as "my belly is sick" are therefore important phenomena to study.

Unfortunately, research dependent on ICD-9 codes or typical billing lists of diagnoses will not capture much of what characterizes primary care as an integrational activity. Such data sets do not reflect the biopsychosocial context of the diagnoses, their relative emphasis, or the influence of one on the management of another. Instead, more work is needed to develop "maps" of patient visits along the lines of those proposed by Greenlick,[3] Wood,[4] and Lamberts and Hofmans-Okkes.[5] These multidimensional models, while complex, are immediately recognizable to the primary care clinician as more reflective of practice than those that seem to describe primary care as the simple serial management of a list of complaints or diagnoses. In addition, more qualitative work is needed to understand the processes of negotiation and prioritization required of both patient and physician in a primary care encounter. Such work is partially achieved in a characterization of the patient interview,[6] but to facilitate integration of the content of care, both conceptually and practically, further evaluation of the elements of the individual medical interview and of multiple encounters over time is needed.

Integration of the Context of Care

Starfield[7] has suggested that primary care research is research that is carried out in a primary care setting, but what precisely constitutes such a setting? In England, where general practice is confined to outpatient care, the site of primary care is the physician's office or the patient's home. In the United States, however, family physicians, general internists, and pediatricians have hospital privileges and follow their patients throughout inpatient stays, from intensive care to discharge. Family physicians and general internists also frequently manage patients in subacute settings, such as rehabilitation centers, nursing homes, and hospices. These clinicians often approach patient management in demonstrably different ways from those of specialists caring for similar patients in nonprimary care settings. Thus, is it the setting or the approach to care that labels an endeavor as primary care?

Again, the key issues are comprehensiveness, coordination, and continuity of care. To the extent that the primary care clinician's concern is appreciation of the entirety of the patient's experience, the physician's involvement in all aspects of the patient's care is inevitable. Hospitalization is part of the medical history of many patients, particularly the frail elderly and those with chronic diseases. Therefore, research should focus on the interface between the outpatient and the inpatient or long-term care setting, examining how primary care physicians affect patients' experiences relative to both process and outcome in such settings. It would also be helpful to identify differences in the characteristics of care among primary care clinicians, both as individuals and by specialty. For instance, such a study might better illuminate practice distinctions between general internists and family physicians. The focus, however, should not be solely on current practices. It should include an investigation of how primary care might be restructured. We should consider experimenting with different models of primary care integration across and within different care environments, experiments made more feasible with the advent of managed care.

Integration in the Implementation of Care

In almost all ambulatory care, whether in evaluation and management specialties, emergency medicine, or family practice, implementation is a shared responsibility between patient and clinician. In primary care, however, the integrative function requires the clinician to raise issues, such as prevention, that the patient may have overlooked or ignored. The emphasis extends beyond medical regimens that ameliorate symptoms to address problems the patient may neither experience symptomatically nor care about. Irrespective of the health concern to be addressed, the primary care physician must search for a language and strategy that acknowledge the cultural and social framework of the patient, while addressing the biomedical problem.[4] Recognizing the wide range of medical and

social concerns patients may have, the primary care physician must also balance the demands made on the individual patient in recommending either preventive or therapeutic interventions. Integrating individual values and circumstances as well as social and cultural influences is central to implementation of treatment in primary care. While there is extensive literature in the sociology of medicine addressing aspects of these issues, there is certainly room for further research devoted to the role of primary care partnerships between patient and physician as they reflect disease concepts and affect treatment goals and strategies. In particular, we need to better understand how such partnerships are formed and what their impact is on patient outcomes and utilization of care.

Primary Care Is Characterized by Accessibility

Accessibility of Professional Care

Accessibility to a physician is not the sole province of primary care, as misdirected access serves neither efficiency nor the patient's best interests. Accordingly, we need to better understand how to organize care so that access to the appropriate clinician is rapid and simple while comprehensiveness is maintained. This goal is particularly applicable to patients with a dominant medical condition, such as a renal transplant or myelogenous leukemia, for whom a specialist rightly becomes the principal physician. Further research is needed to determine how pairings or arrangements of principal care specialists and primary care clinicians could be used to maintain both the continuity of the relationship with the principal physician and the comprehensiveness and coordination (integration) of primary care.

Such a vision, of course, accepts the usual pattern of practice, in which specialists follow patients more in tandem with, rather than in response to, primary care clinicians as the coordinators and organizers of care. As an alternative, accessibility could be envisioned as occurring exclusively through the primary care clinician, for whom all specialists serve as diagnostic consultants or advisors regarding therapy, but who never really follow patients as the principal physician for a particular condition. For many patients with chronic illnesses, even those currently enrolled in managed care programs, such an unequivocal primary care model would be a novel experience.

Accessibility as Empowerment of Communities and Individuals

Accessibility to knowledge, skills, and even self-care could be viewed as the first step in primary care. In such a model, real access to primary care would depend not on the availability of professional clinicians but perhaps on communities who would define their needs and identify an appropriate means of responding to them.[8,9] In such communities, peer organizations often take responsibility for blood pressure screening and initiation of dietary changes, for prenatal nutrition and behavioral counseling and supervision, or for education and intervention in the spread of sexually transmitted disease. Within this community, another vision of primary care may emerge: individuals empowered to self-diagnose and initiate treatment for a variety of ailments. The primary care physician then serves as a consultant to the actual primary care agent (the community or individual), just as a specialist would be a consultant to the primary care physician. In this scenario, the individual or the community, rather than professionals, integrates and coordinates care and provides first access.

Thus, accessibility does not exclusively connote temporal or geographic availability of a primary care physician. The alternatives discussed above suggest fertile ground for research into a variety of accessible primary care models. Research should focus on determining which models are the most efficient and effective in meeting the primary care needs of diverse populations.

Primary Care Is Delivered by Clinicians

As outlined above, primary care could be delivered by persons or groups other than professional physicians. However, even if one accepts the IOM's adoption of the physician as central to primary care, one could justifiably question the assumption that primary care can be appropriately delivered only by specialties designated as primary care. Especially within managed care, evaluation of primary care will depend ultimately on cost and competency in practice rather than the specifics of prior training.[10] There continues to be substantial debate and lack of good information about the relative cost-effectiveness and quality of care delivered by specialists and primary care physicians with respect to acute and chronic conditions, ranging from acne to tendinitis to diabetes and angina. Whether the concern is preventive care or management of chronic illness, maintaining the effectiveness of the clinician over time remains a significant challenge.[11] Given the evidence that a growing number of physicians work within or are affiliated with large bureaucracies, we need to examine how the structure or incentives in such systems promote or undermine the clinician's capacity to deliver integrated, accessible care.[12]

Primary Care Is Accountable

For what sorts of outcomes should primary care be held accountable? Lawrence has suggested that first attention should go to those conditions that are highly burdensome to the population and for which highly efficacious interventions are available (Lawrence R. Unpublished comments made at the Institute of Medicine's invitational workshop on the Scientific Base of Primary Care, National Academy of Sciences, Washington, DC, January 24–25, 1995). Examples include polio immunization, proper nutrition for pregnant women to reduce infant mortality, and screening mammography for women over age 50 to reduce breast cancer mortality. He has noted that standards could be clearly articulated for such circumstances. The reality is that such phenomena represent a relatively modest proportion of the problems confronting the primary care clinician. How should primary care clinicians be held accountable for care when there is considerable uncertainty as to the best approach? To what extent should economics or the values and the psychological needs of the patient be considered in assessing the quality of care when it is questionable which intervention would be most efficacious? Given the multidimensional nature of people, how should clinical guidelines that typically address only one issue at a time be applied in the primary care environment? For instance, it may be relatively simple to identify the best treatment approach for managing venereal disease in an otherwise healthy 15-year-old, but it is much more complex to meet the guidelines for managing hypertension when the patient also has prostatic enlargement, depression, and debilitating arthritis in his knees. How should guidelines be used appropriately as a standard of care in such a context? How are pediatricians, general internists, and family physicians to respond to the conflicting sets of guidelines produced by different groups, or to recent guidelines that are soon superseded by a newly published and widely publicized study? If guidelines are to serve as a benchmark for accountability, the entire guidelines development and implementation process in this country should be carefully reassessed.

There are other concerns about accountability as well. For instance, there are widespread, burdensome conditions for which little is known to be clearly efficacious, but for which both the community and the clinician feel that something must be done. Teen pregnancy is one such issue. If primary care is to be responsive to community-identified concerns, such as drug abuse, teen pregnancy, child abuse, and obesity, physicians and communities will have to experiment, potentially with limited success, to identify useful local interventions. Should their accountability be assessed by the process undertaken to identify the need, by the effort made to intervene, by compliance with existing models, or by efforts to innovate? If accountability is to be a characteristic of primary care, we should think carefully about the behaviors we seek to encourage and whether compliance with existing "gold standards" is necessarily the best means of accomplishing our goals for primary care.

Primary Care Manages a Majority of Patients' Needs

Since patients usually present with more than one problem, and since the impact of these problems on the patient's life tends to fluctuate, it seems sensible to focus primary care effectiveness research on global outcomes such as functional state, productivity, and extent of long-term disability. Granted, there are many variables contributing to such outcomes. But if the presence or absence of primary care does not substantially affect the general well-being of patients, one might reasonably question its worth. Of course, given global and long-term outcomes, the impact of the various attributes of primary care—integration, continuity, comprehensiveness—remains to be demonstrated.

Comprehensiveness itself begs to be better understood. As noted above, the expanse and appropriate limits of primary care require better characterization. While for some, community-oriented primary care inevitably entails addressing social issues, for others, primary care is more medical in focus.[9] The degree to which different categories of physicians provide primary care depends on whether comprehensiveness reflects the capacity to address a wide range of individuals' needs at given periods of their lives, as is accomplished by pediatricians, internists, and geriatricians, or whether it includes the capacity to address changing needs throughout their lives, as in family practice. Perhaps comprehensiveness can mean either or both. Furthermore, the issues involve not only the capacity of physicians to care for patients over an extended period of life but also the breadth and depth of care that is offered. It is critical that these issues be clarified to prevent the scope of and necessary skills for primary care from being reduced to the treatment of the common cold and preventive interventions, such as blood pressure or cholesterol monitoring.

Primary Care Is Characterized by a Sustained Partnership

Clinician-patient partnerships play an essential role in the implementation of primary care interventions. In this sense, they have value as a means to achieve the desired

goal of improved patient care, but one might question whether the partnership is an end in itself. While continuity may have an impact on compliance, particularly for individuals with chronic illness, could it also foster psychological states that in and of themselves have healing value? As patient satisfaction becomes an increasingly important outcome measure, it would seem imperative to develop a richer understanding of what partnership characteristics foster or undermine patients' confidence in their care. In addition, as clinicians face increasing pressures to conform to organizational expectations of productivity, there is a growing need to know more about organizational and delivery characteristics, such as visit frequency, intensity, length, and intervisit continuity, which may affect both the quality of the partnership and patient satisfaction.[13] As noted previously, sustained partnerships are hardly confined to primary care clinician–patient relationships. How, if at all, does this attribute work differently in primary care than in the evaluation and management specialties, such as cardiology or pulmonary medicine, where continuity of care also plays a role.

Primary Care Takes Place in the Context of Families and Communities

Family systems and community cultures undoubtedly affect an individual's self-perception and capacity to seek and implement care. How, on the other hand, does primary care affect family systems and community cultures? As Brody[14] has pointed out, the medical model and its proponents—primary care clinicians—are inherently very powerful. Acknowledging that these physicians wield significant social and cultural as well as medical power underscores the fact that primary care not only *occurs* in the context of families and communities but also can *influence* families and communities, either for better or worse. In what ways do community-oriented primary care and its use of medical epidemiology to identify and treat illness affect the self-perception and health of communities? How can community-oriented primary care mobilize positive change and avoid generating resentment and hostility? Practicing medicine with an awareness of the context of care carries with it the obligation to carefully assess the potential impact of care on that context as well as the impact of the context on therapeutic goals for the patient.

Conclusions

There are numerous outstanding philosophical issues remaining as we seek to clarify the role of primary care in health care as a whole. Key issues such as accountability require us to articulate the ultimate goals and attributes of primary care. Apparent truths about the distinction between primary care and principal care by specialists or between the roles of clinicians and lay persons, for instance, require closer examination. Attributes of primary care may ultimately apply to systems or organizations of care as well as to the practices of individual clinicians. Research questions must challenge existing assumptions about the structure and process of primary care as it has historically existed in this country if we are to develop a more coherent understanding of how the attributes of primary care can contribute to the well-being of individuals, families, and communities.

References

1. Donaldson M, Yordy K, Vanselow N, eds. Institute of Medicine. Defining primary care: an interim report. Washington, DC: National Academy Press, 1994:16.
2. Inui TS. What are the sciences of relationship-centered primary care? J Fam Pract 1996:42:171–7.
3. Greenlick M. Episodes of care classification. In: Primary care research: theory and methods. AHCPR Conference Proceedings, US Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research, publication No. 91-0011, 1991:83–92.
4. Wood M. International classification of primary care. In: Primary care research: theory and methods. AHCPR Conference Proceedings. US Department of Health and Human Services, Public Health Service, Agency for Health Care Policy and Research, publication No. 91-0011, 1991:93–103.
5. Lamberts H, Hofmans-Okkes I. Values and roles in primary care. J Fam Pract 1996; 42:178–80.
6. Lipkin M, Putnam S, Lazare A, eds. The medical interview. New York: Springer-Verlag, 1995:3–64.
7. Starfield B. A framework for primary care research. J Fam Pract 1996; 42:181–5.
8. Noble J. Patient-centered research: through the looking glass in search of a paradigm. J Gen Intern Med 1989; 4:555–7.
9. Eng E, Salmon ME, Mullan F. Community empowerment: the critical base for primary health care. Comm Health 1992; 15:1–12.
10. Rivo ML, Mays HL, Katzoff J, Kindig DA. Managed health care: implications for the physician workforce and medical education. JAMA 1995; 274:712–5.
11. Davis DA, Thomsom MA, Oxman AD, Haynes RB. Changing physician performance: a systematic review of the effect of continuing medical education strategies. JAMA 1995; 274:700–5.
12. Barr DA. The effects of organizational structure on primary care outcomes under managed care. Ann Intern Med 1995; 122:353–9.
13. Starfield B. Primary care: concept, evaluation, and policy. New York: Oxford University Press, 1992:11.
14. Brody H. The healer's power. New Haven, Conn: Yale University Press, 1992.