# What Are the Sciences of Relationship-Centered Primary Care?

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From a nature watcher's perspective, primary care is best understood as a dynamic health-relevant process involving many interrelated forces, actions, persons, and contexts of meaning. The scientific basis of primary care should take into consideration various and diverse traditions of systematic inquiry, since our understanding of meaning and context is as important as our understanding of cause and effect in the work of primary care.

*Key words.* Primary care, physician-patient relationship.
(*J Fam Pract 1996; 42:171-177*)

One of the first tasks of science is to appreciate the complexity of phenomena. As the Institute of Medicine Committee on the Future of Primary Care deliberates the scientific basis of primary care, I hope this complexity surfaces, commands attention, constitutes a compelling case for affirming the pluralism of sciences relevant to primary care, highlights the major challenge educators face when preparing students for future careers as generalists, and creates greater understanding of the daily achievements of physicians immersed in primary care careers. This complexity has several origins: the manifold and dynamic nature of health, the multiple aims of health care from professional and lay public perspectives, and the importance of embedding health care processes in meaningful relationships that link clinicians and patients/families, clinicians and patients' communities, and colleagues within the clinical community. An exploration of this complex reality may complicate rather than simplify our thinking.

## The Multidimensionality and Dynamism of Health

While health has been defined in various ways,[1] I have come to think of is as a capacity for present and future functional achievement, a capacity founded in various states of well-being, including physical, emotional, social, economic, and spiritual. Use of this construct seems particularly appropriate to the tasks of primary care, since in this setting, clinical talk with patients about specific medical complaints often meanders seamlessly and meaningfully into conversations about work, friendships, hopes, worldviews, and faith.[2] In primary care, it is also apparent that health is a dynamic equilibrium. An individual's state of well-being and functional capacity are subject to short-term fluctuation, for example, on the basis of last night's sleep or this month's expenses. In the longer term, however, the central tendency of these states over time has a cumulative impact and creates a social niche for the individual in his or her personal world. In response, the sciences of primary care should accommodate various constructs of health, including notions of functional ability and well-being in a dynamic equilibrium.

Interventions that affect one element of this health equilibrium will have consequences for other elements, but in this non-Newtonian system, secondary reverbera-

*Submitted, revised, December 1, 1995.*

*The views expressed are those of the author and do not reflect the official policy of the Fetzer Institute, the Pew Charitable Trusts, the Robert Wood Johnson Foundation, and the Harvard Pilgrim Health Care Foundation, who supported this work. Presented at the Institute of Medicine invitational workshop on the Scientific Base of Primary Care, The National Academy of Sciences, Washington, DC, January 24–25, 1995.*

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 ISSN 0094-3509

Table 1. A Conceptual Matrix for Health Dimensions

| Levels | Physical Environment | Social Environment | Health and Social Services | Medical Condition | Functional Status | Lifestyle/ Behavior |
|---|---|---|---|---|---|---|
| Societal | | | | | | |
| International | Climate | Peace | Medicare | Mortality patterns | Active | Voting patterns |
| National | Water quality | Justice | Head Start | | Life expectancy | Opinion polls |
| State | | | | | | |
| Large community | | | | | | |
| Region | Transportation | Education | Ambulance service | Disease outbreaks | Hospital bed census | Citizen participation |
| County | Housing | Employment opportunities | Information centers | | | |
| City | | | | | | |
| Area | | | | | | |
| Small group/ community | | | | | | |
| Neighborhood | Walk trails | Values | Medical care resources | Disease clusters | Family dysfunction profiles | Group behavior patterns |
| Worksite | Access for persons with disabilities | Social support | Self-help groups | | | Volunteer patterns |
| School | | | | | | |
| Church | | | | | | |
| Hospital | | | | | | |
| Jail | | | | | | |
| Residence | | | | | | |
| Family | | | | | | |
| Individual | | | | | | |
| Personal space | Privacy | Leisure time | Medical care access | Symptoms | Disability | Physical activity |
| Body | Prostheses | Spirituality | Self-care | Illness | Emotional function | Safety behavior |

*From the National Center for Chronic Disease Prevention and Health Promotion meeting report. Workshop on quality of life/health status surveillance for states and communities. Atlanta, Ga: Centers for Disease Control and Prevention, 1993.*[4]

tions may not be equal and opposite to the stimulus or even predictable. If sickle cell disease in an African-American adolescent, for example, is perceived as a problem with protein folding due to abnormal hemoglobin in red blood cells, then, in the era of gene therapy, we can conceive of the literal cure of this disorder by means of an intervention on chromosome 11 in an affected individual. However, even when the disease has been eliminated, the *illness* of sickle cell disease would still be present, profoundly conditioning the teenager's functional capacity and state of well-being. Without present or potential hemoglobin tactoids, the social, economic, educational, interpersonal, and other attributes of the illness have a persistent cumulative impact on the affected person, shaping his or her personhood and place in society. The sciences of primary care should accommodate both disease and illness.[3]

## Aims of Health Care

The aims of health care are multiple. Health professionals strive to improve one or more states of well-being through actions. Measuring the effectiveness of our actions is as complex as the interrelated states of well-being referred to earlier. Table 1 is a summary of health measurements that might be carried out from an individual and health population perspective.[4] It is intended to assure systematic measurement strategies for population epidemiology or program evaluation. If school-based clinics are introduced into a metropolitan educational system, for example, would monitoring trends in teen pregnancy (a critical individual-level health outcome) be sufficient? Would assessing the prevalence of risky behaviors among all school-age children (a target population and community-level measure) also be of interest? Beyond medical and lifestyle outcomes, would it not also be important to measure the impact of new school clinics on parents' choices to matriculate their children in public or private schools (a community-wide measure of social impact)? Would subsequent impact on school board elections and school budgets be a relevant outcome measure? All these choices for measurement are appropriate. Adequate measurement clearly incorporates multiple dimensions, including biomedical, symptoms, morbidity and mortality, social functioning, social environment, and physical environment. As health professionals, we develop the aims for our work in this complex fashion because we recognize that it is radically incomplete to focus on any one of these states of nature to the exclusion of others. We also recognize that interventions in one sector of this framework may be ineffective or have only temporary effects if unsupported by change in other sectors.

Health professionals are not alone in affirming the

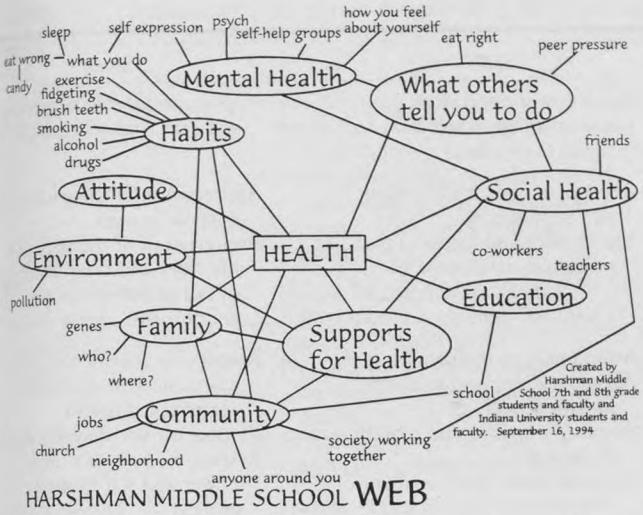


Figure 1. Harshman Middle School students' conceptual framework of health, illustrating the complexity of the interrelationships among health components, influences, and supports.

complexity of health and the aims of health care. The public also understands the interconnectedness of these realities. Figure 1 is a "conceptual web" created by adolescents at the Harshman School in Indianapolis, Indiana, where faculty from the Indiana University School of Nursing served as facilitators for their discussions of health (Personal communication. Flynn BC, project director, "Health in the Inner City: An Academic Challenge," Indiana University School of Nursing, Indianapolis, Ind, 1994). From these adolescents, the same multidimensionality, cross-sector complexity, and interrelatedness of constructs clearly emerge. Remarkably, health professionals have a relatively restricted role in the framework of health as envisioned by these students. All our actions and efforts may be considered to be included in the *supports for health* category of Figure 1. In making such critical decisions as when and under what circumstances to become sexually active, for example, peer pressures, how you feel about yourself, what others tell you to do, circumstances in your neighborhood, family precedents, those features of your life you hold dear (*attitudes*), and situational influences included in *social health* and *habits*, eg, alcohol and drug use, all have major influences. From the minds of middle school students simply asked to think aloud about their lives, we find the same nexus of influences and recognition of the dynamic equilibrium that health professionals portray as "the state of nature." The sciences of primary care should permit us to recognize multiple aims for health care that are applicable to the objectives of both patients and health professions.

## Relationship-Centered Care

In the process of primary care, perspectives of patients and clinicians should merge, establishing a mutual agenda for the activities. The need for establishing such mutuality was the principal discovery and central thesis of the Pew-Fetzer Task Force on Advancing Psychosocial Health Education[5] of the Pew Health Professions Commission. The emphasis on multiple dimensions of well-being, function, disease, *and* illness is evident from this group's outline of the knowledge, skills, and values important to establishing meaningful patient-practitioner relationships (Table 2). To establish significant relationships, the Task Force observed that both parties need to achieve a substantial degree of self-awareness; understand the importance of patient experience of health and illness as well as biomedical constructs of disease; work to develop a caring relationship that can accommodate asymmetries in power, different languages, and the integrity of all parties; and commit themselves to expanded, effective communication.

The elements of Table 2 may "come alive" if we consider the difficulty in providing effective primary care to the patient with alcoholism. Effective communication is clearly fundamental, even necessary, for the recognition of the problem in the first instance. The physician's capacity to approach this problem openly and without adverse judgment may be severely impaired by personal experience, especially if alcohol abuse was part of the clinician's family-of-origin experience. Lack of awareness of self-knowledge in this area can preclude constructive engagement with patients. Beyond recognition and open acknowledgment of alcohol abuse as a problem, how the patient and physician approach this problem may have everything to do with the patient's perception of his life and its meaning. For example, the place of alcohol in Ernest Hemingway's life and work and his strong sense of self-determination and self-reliance would have made it difficult for any clinician to lead him to a life of abstinence. In the more ordinary circumstance, a clinician experienced in the management of alcohol or other substance abuse surely would acknowledge the risk of victim-blaming, the need for sustained relationships, and respect for the patient's capacity for self-healing as fundamental to the recovery process. These elements and more are found in Table 2, emphasizing the centrality and importance of the patient-practitioner relationship.

A second relationship emphasized by the Pew-Fetzer Task Force is that which exists between patients' community of origin and practitioners serving the community. Table 3 presents the knowledge, skills, and values health professionals need in order to establish sound relationships of this type. A practitioner needs to know the history

Table 2. Key Elements of Practitioner-Patient Relationships

| Area | Knowledge | Skills | Values |
|---|---|---|---|
| Self-awareness | Knowledge of self | Reflect on self and work<br>Understanding of self as a resource to others | Importance of self-awareness, self-care, and self-growth |
| Patient experience of health and illness | Role of family culture, community in development<br>Multiple components of health<br>Multiple threats and contributors to health as dimensions of one reality | Recognize patient's life story and its meaning<br>View health and illness as part of human development | Appreciation of the patient as a whole person<br>Appreciation of the patient's life story and the meaning of the health-illness condition |
| Developing and maintaining caring relationships | Understanding of threats to the integrity of the relationship (eg, power inequalities)<br>Understanding of potential for conflict and abuse | Attend fully to the patient<br>Accept and respond to distress in patient and self<br>Respond to moral and ethical challenges<br>Facilitate hope, trust, and faith | Respect for patient's dignity, uniqueness, and integrity (mind-spirit unity)<br>Respect for self-determination<br>Respect for person's own power and self-healing process |
| Effective communication | Elements of effective communication | Listen<br>Impart information<br>Learn<br>Facilitate the learning of others<br>Promote and accept patient's emotions | Importance of being open and nonjudgmental |

*From Tresolini CP and the Pew-Fetzer Task Force. Health professions education and relationship-centered care. San Francisco, Calif: Pew Health Professions Commission, University of California–San Francisco, 1994.*[5] *Reprinted with permission.*

of community development and value the contributions of cultural diversity to this history; to explore the environment of community infrastructures such as public safety, transportation, and education; to understand the relationship of these health determinants to individual and population health; and to enter into sustained communication, agenda setting, and collaboration with community organizations and their leaders toward mutual goals.

Again, the critical ingredients of a successful practitioner-community relationship and the elements of Table 3 may be best illustrated by example. For many clinicians, major personal learning about the importance of such relationships occurred early in the emergence of the epidemic of acquired immunodeficiency syndrome (AIDS) among gays. Effective primary care for individual persons with AIDS required *Pneumocystis carinii* pneumonia prophylaxis, early use of zidovudine (AZT) for the patient with limited $T_4$ cell counts, and vaccination against pneumococcal pneumonia, for example. It also required understanding the location, resources, diversity, media, and traditions of the American gay community, respect for the integrity and history of this community, and reliance on its networks. Community-level advocacy for protective sex practices, such as use of condoms, and timely serologic testing were possible only when clinicians and their organizations had meaningful, ongoing communication and a collaborative relationship with the gay community. Heterosexual providers were radically limited in their ability to understand or discuss risk behaviors or to promote healthy lifestyles without such collaboration, team building, and the development of shared strategies. Effective primary care for individuals and communities at risk is founded on the critical elements of the practitioner-community relationships.

The third relationship of special interest to the Pew-Fetzer Task Force was that which can prevail among members of the community of practitioners themselves. The knowledge, skills, and values required for meaningful practitioner-practitioner relationships are outlined in Table 4. Self-knowledge, a preference for work sharing, dedication to conflict resolution, appreciation of the differences among the healing professions, and openness to each other's ideas, are all fundamentally important in the establishment of meaningful relationships among providers of care.

Examples of key features of the practitioner-practitioner relationship are all around us in primary care. What mature and effective office practice does not rely upon the synergy of clinical, administrative, and support staff? Superb drug-treatment programs, hospices, arthritis programs, and adult day health care staffs begin by emphasizing the need for complementary services derived from differences in healing and caring traditions among various health professions but also include mutual decisions about hiring and firing, salaries, care responsibilities, and leadership that are founded upon their diversity *and*

Table 3. Key Elements of Practitioner-Community Relationships

| Area | Knowledge | Skills | Values |
|---|---|---|---|
| Meaning of community | Various models of community<br>Myths and misperceptions about community<br>Perspectives from the social sciences, humanities, and systems theory<br>Dynamic change—demographic, political, industrial | Learn continuously<br>Participate actively in community development and dialogue | Respect for the integrity of the community |
| Multiple contributors to health within the community | History of community, land use, migration, occupations, and their effect on health<br>Physical, social, and occupational environments and their effects on health<br>External and internal forces influencing community health | Critically assess the relationship of health care providers to community health<br>Assess community and environmental health<br>Assess implications of community policy affecting health | Affirmation of relevance of all determinants of health<br>Affirmation of the value of health policy in community services<br>Recognition of the presence of values that are destructive to health |
| Developing and maintaining community relationships | History of practitioner-community relationships<br>Isolation of the health care community from the community-at-large | Communicate ideas<br>Listen openly<br>Empower others<br>Learn<br>Facilitate the learning of others<br>Participate appropriately in community development and activism | Importance of being open-minded<br>Honesty regarding the limits of health science<br>Responsibility to contribute health expertise |
| Effective community-based care | Various types of care, both formal and informal<br>Effects of institutional scale on care<br>Positive effects of continuity of care | Collaborate with other individuals and organizations<br>Work as member of a team or healing community<br>Implement change strategies | Respect for community leadership<br>Commitment to work for change |

*From Tresolini CP and the Pew-Fetzer Task Force. Health professions education and relationship-centered care. San Francisco, Calif. Pew Health Professions Commission, University of California–San Francisco, 1994.[5] Reprinted with permission.*

desire for effective group action. Members of the team learn to value feedback, share responsibility, and work cooperatively. The functions of such teams are indispensable for the expanded competency of a caregiving group and critical to well-functioning of primary care programs.

The work of primary care is a collaboration—literally, a working together—of all involved parties in these three types of relationships. While we think and speak of personal health care as founded on a clinician-patient relationship, action in all three sectors is clearly needed for effective care. Minimizing human immunodeficiency virus (HIV) risk for a single adolescent, for example, requires attention to the individual, participation in school health curricula, and the concerted action of multiple health professions, such as the school health nurse and the office-based personal physician. Effective care of the child with sickle cell disease may require bridging multiple sectors, such as school, home, hospital, clinic, and social service, simultaneous attention to the fever in the child and the mother's work absenteeism, and partnership with community leadership for development of community daycare facilities for children requiring on-site health care. The sciences of primary care should permit and support a focus on relationships and interactional phenomena over time, since it is within this context that primary care proceeds.

## The Complexity of Primary Care

The complexity of primary care becomes fully evident if we construct a matrix of primary care (Figure 2), revealing the intersections of provider relationships with patient, community, and team members and some of the contexts in which care activities and their outcomes acquire mean-

| | ***Provider Relationships with*** | | |
|---|---|---|---|
| | **Patient** | **Community** | **Team** |
| ***Contexts of Meaning*** | | | |
| **Cultural** | ❑ | ❑ | ❑ |
| **Sociopolitical** | ❑ | ❑ | ❑ |
| **Moral** | ❑ | ❑ | ❑ |
| **Scientific** | ❑ | ❑ | ❑ |

Figure 2. A matrix of primary care, displaying the intersections of primary care relationships and contexts of meaning.

Table 4. Key Elements of Practitioner-Practitioner Relationships

| Area | Knowledge | Skills | Values |
|---|---|---|---|
| Self-awareness | Knowledge of self | Reflect on self and needs<br>Learn continuously | Importance of self-awareness |
| Traditions of knowledge in health professions | Healing approaches of various professions<br>Healing approaches across cultures<br>Historical power inequities across professions | Derive meaning from others' work<br>Learn from experience within healing community | Affirmation and value of diversity |
| Building teams and communities | Perspectives on team-building from the social sciences | Communicate effectively<br>Listen openly<br>Learn cooperatively | Affirmation of mission<br>Affirmation of diversity |
| Working dynamics of teams, groups, and organizations | Perspectives on team dynamics from the social sciences | Share responsibility responsibly<br>Collaborate with others<br>Work cooperatively<br>Resolve conflicts | Openness to others' ideas<br>Humility<br>Mutual trust, empathy, support<br>Capacity for grace |

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ing. The *contexts of meaning* in Figure 2, which include cultural, sociopolitical, moral, and scientific, are derived from our definition of health and represent domains of well-being in which the resources for functionality are found, for example, cultural traditions, status in the social-political order, lifestyle and choices relative to moral values, and normal biomedical and anatomical states (the current dominant paradigm for the scientific context of meaning). At each of the intersections of the hypothetical matrix of primary care, providers collaborate with other persons in activities that are intended to advance personal or population health.

Collaborations that actively acknowledge and are immersed in contexts of meaning are essential to the appropriateness of primary care. Tight control of type 1 diabetes mellitus in an adolescent, for example, would be impossible without such collaboration. The success or failure of any such treatment would involve collaborations between practitioner and family, practitioner and community (eg, with school health or summer diabetes camp), and practitioner and practitioner (eg, for clinical teamwork in handling questions from the patient). All accomplishments in the direction of tighter glycemic control may simultaneously be considered to be actions that reduce the likelihood of end-organ damage (invoking the biomedical scientific context), actions that merit greater or lesser degrees of adolescent independence from parental supervision (a coming-of-age social issue), activities that occasion blame/guilt/reward (the moral context), or activities and restrictions that impede full participation in group expeditions, ie, to fast food restaurants. The conceptualization of problems, identification of interventional strategies, and use of particular indicators for health improvement flow from mutual choice-making, all reflecting the complex nature of health, the diversity of the community, and the shared agenda of the health professions and the lay public they serve. The sciences of primary care should permit examination and evaluation of all these activities.

## Primary Care Sciences

From my point of view, no single scientific tradition, however dominant, can accommodate the complex phenomenology of primary care and its consequences. Instead, we must consider the scope and diversity of *various* traditions of scientific inquiry that are needed to understand the phenomena of primary care. Adopting a point of view that is more European than North American, we should ask what *les sciences* of primary care are. We must admit that history, the study of literature, moral philosophy, and other humanities have the same legitimacy in this scientific domain as do molecular and cellular biology and structural anatomy. If we are to understand the meaning of well-being, the functional capacity of individuals and populations, and how partners collaborate to produce such outcomes, we are likely to need *appreciative* (richly descriptive) as well as *interventional* (experimental and change-oriented) sciences. Whether from the perspective of educators, primary care practitioners, or primary care organizational care leaders, our understanding of the options and consequences of our actions in primary care must include thiis larger domain of discovery processes. It is within this enlarged domain that our choices find their value, shape the life of communities, establish the tradi-

tions of health professions, and confer meaning on the experiences of patients and the work of practitioners in primary care.

## Acknowledgments

This work was supported in part by the Fetzer Institute, the Pew Charitable Trusts, the Robert Wood Johnson Foundation, and the Harvard Pilgrim Health Care Foundation.

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