“Chronic disease” is the widely accepted major epidemic of the 21st century. Generally focused on biomedical entities such as coronary artery disease, diabetes, asthma, obesity, and hypertension, the concept of the “chronic disease” is turning health services away from a focus on meeting people’s needs for care of acute health problems (which still constitutes the major reason for visits to physicians everywhere) and towards a disease-by-disease focus in patient care.

Evidence for the validity and utility of this new paradigm comes largely from mortality data that demonstrate increasing rates of death assigned to the presumably underlying causes — “presumably” because it is health professionals who decide what constitutes an “underlying” cause. Is the cause of death appropriately attributed to a chronic heart failure (as is usually the case) when a woman with an osteoporotic hip fracture goes into heart failure — a common occurrence in the elderly? Accumulating evidence of life course influences on vulnerability to illness is not reflected in outmoded conceptualizations of “cause.”

This paper provides the basis for rethinking the concept of “chronicity” as represented by conventional, biomedically oriented “chronic diseases” by showing how a wide range of semi-acute and acute conditions often act as if they were chronic, recurring or reappearing with periodicity in many people. Moreover, people with any given illness are more likely than people without the illness to have other unrelated illnesses, i.e., multimorbidity (more commonly referred to as “comorbidity”). Vulnerability to illness is often a generalized vulnerability — a fact that calls into question a health system
focus on individual diseases rather than on people's health needs in general. The originally genetic concepts of penetrance, pleiotropism, and etiologic heterogeneity define the challenge to identifying people with high burdens of morbidity, NOT whether or not they have a medically-defined chronic illness (Starfield, 1998; Broemeling, Watson, & Black, 2005).

Comorbidity is very common in the population – even more common in the elderly because of the overall high frequency of illness in the elderly. However, the occurrence of comorbidity (greater than statistically expected co-occurrence of diseases) is actually greater in the young (van den Akker, Buntinx, Metsemakers, Roos, & Knottnerus, 1998). That is, the concentration of vulnerability to illness in various segments of the population decreases with increasing age. It does not make sense to focus on the presence of defined illnesses – chronic or not – to define populations at risk of poor outcomes.

Comorbidity is very expensive, in terms of impact on overall health, on costs of care, on hospitalization rates, and on rates of adverse events (Wolff, Starfield, & Anderson, 2002). Because of the high frequency of comorbidity and its attendant demand on health resources, it is not a "chronic disease" model that is required but, rather, a model that is focused on the care of people over time, i.e., a primary care model.

A decade of research has provided a strong basis for primary care as the infrastructure of health systems and has elucidated the characteristics of primary care as well as its characteristics and cardinal functions and the strategies for its assessment and monitoring. Strong primary care has been consistently and robustly demonstrated to provide better outcomes, more equitable care, and lower costs than specialty care, whether primary care is measured as the orientation of health systems, as the ratio of primary care physicians to population, as the benefit of having a primary care practitioner as the regular course of care, or as the primary care experiences of people and their health outcomes (Starfield, Shi, & Macinko, 2005).

In contrast, little is known about the characteristics and functions of specialist care. Apart from the fact that it is more disease-oriented (in contrast to primary care's patient-orientation), there has been no attention to describing or measuring the quality of the functions of specialty care. Evidence from empirical studies in the US indicates that high ratios of specialists to population are not associated with better
health of those populations, but rather with increased costs and often worse health outcomes (Starfield, Shi, Grover, & Macinko, 2005). Areas with higher consultation rates with multiple physicians have worse outcomes (Schoen et al., 2005; Skinner, Staiger, & Fisher, 2006) even when the severity of patients’ conditions is taken into account. Moreover, international comparisons show much higher adverse events rates when patients see larger numbers of physicians. The roles of specialty care need defining, describing, and assessing. Specialty care is best thought of as a resource to enable primary care physicians to manage those needs that are too uncommon for primary care practitioners to maintain competence in dealing with them, or to provide assistance in dealing with uncommon manifestations of common illnesses. It makes much better sense, both from the viewpoint of costs and outcomes, for specialty services to function as a backup to primary care physicians rather than as a resource for patients, except in situations where specialist care is appropriate, according to evidence-based criteria.

Primary care, buttressed by appropriate specialty care, unifies a health system and focuses it on people's problems, not on specific diseases, whether they fit the current conceptualization of “chronic illness” or not.

The current fad for disease-oriented approaches to quality of care assessments, with the attendant enchantment with payment for performance, based largely (at least in the US) on routine care of narrowly defined chronic illnesses, is inimical to high quality patient-oriented care (Boyd et al., 2005; Garber, 2005; Kravitz, Duan, & Braslow, 2004). The current agenda that suits vested interests such as pharmaceutical companies, medical academia (with its specialty focus), and the market-oriented creation of disease (Thorpe, Florence, Howard, & Joski, 2005) and patient demand (rather than patient needs) works against improvement in the health of patients and populations, and will lead to the bankrupting of health systems. A more justifiable approach to quality and payment would focus on equity as the basis for choosing priorities in health systems; alternatives to cost-effectiveness as a basis for choice or priorities (Oliver, 2006); primum non nocerum as a major issue; and the extent to which people's health needs have been adequately recognized and dealt with, and have responded to interventions.
REFERENCES


