

## Preface



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*Guest Editors*

In the decades after the Second World War, the future of medicine seemed bright, almost without limits. Infectious diseases could be treated effectively, life-sustaining support for the acutely ill or accident victim allowed lives to be saved, and even organ failure could be counteracted by machines and later transplantation. Even though the body of medical knowledge increased steadily and still continues to grow, culminating in endeavors such as the Human Genome Project, the quality of care is far less glorious. Current care can even be dangerous, and the gap between the medical knowledge and the care provided produces situations in which patients do not get what they need. This problem has been explicitly stated in two recent reports of the Committee on Quality of Health Care of the United States Institute of Medicine, “To Err is Human: Building a Safer Health System” and “Crossing the Quality Chasm: a New Health System for the 21st Century” [1,2]. These reports have been complemented by a series of publications on complexity and clinical care in the *British Medical Journal* underlining the need for a change within medical care [3,4].

Health care systems in developed countries share a common feature, which has been accentuated over the last decade. These health care systems

are fragmented because of medical subspecialization, by the split between general health care and mental health care, and by the rupture between primary and secondary health care settings. Such fragmented health care systems often are not able to deliver what patients need and what standards of care recommend. An important subgroup of patients who specifically suffer from these splits in current health care systems—resulting in either its underuse or excess use—are the frail elderly, the chronically ill who have multiple morbidities (including psychiatric morbidity), those who abuse substances, and patients who have persisting functional complaints. In the following articles these patients are designated as the “complex medically ill.” The report “Crossing the Quality Chasm: a New Health System for the 21st Century” is relevant to the care of these patients. It states, “Quality problems occur typically not because of failure of goodwill, knowledge, effort or resources devoted to health care, but because of fundamental shortcomings in the ways care is organized. Trying harder will not work; changing systems of care will.” The report mentions six aims of quality health care. Care should be safe, effective, timely, patient-centered, efficient, and equitable. Ten new rules for achieving these aims are mentioned and contrasted with old rules (Box 1).

Complex medically ill patients are the most vulnerable to the deficiencies of a fragmented health care system and most in need of these new rules. This book is devoted to them and focuses on issues such as who these complex patients are, what kind of problems they have, how they can be conceptualized, and how new models of service delivery—including early identification, assessment, treatment planning, interdisciplinary communication, and coordination of care—can improve their situation.

George Engel called in *Science* more than 40 years ago for a biopsychosocial model of disease, which integrates somatic, psychologic, and social aspects of disease, as opposed to the medical model [5]. The relevance of the biopsychosocial model is acknowledged and supported by an impressive body of evidence; it also is reflected in the previously mentioned series of articles on complexity science in the *British Medical Journal* [3,4]:

Human beings can be viewed as composed of and operating within multiple interacting and self adjusting systems (including biochemical, cellular, physiological, psychological and social systems). Their illness arises from dynamic interaction within and between these systems not from failure of a single component [3].

Psychiatric and somatic morbidity often coexist, and functional limitations, psychologic state, social support, and health care use are interrelated. In addition, confounding variables, such as depression or socioeconomic status, have been proven to influence morbidity and mortality of somatic diseases. Engel’s vision influenced the care of patients who have chronic and life-threatening diseases and resulted in disease-management programs that integrate psychologists, social workers, and paramedics in the

**Box 1. Rules determining patient care***Old rules*

1. Care is based on visits.
2. Professional autonomy drives variability.
3. Professionals control care.
4. Information is a record.
5. Decisions are based on training and experience.
6. "Do not harm" is the responsibility of an individual clinician.
7. Secrecy is necessary.
8. The system reacts to the needs.
9. Cost reduction is sought.
10. There is preference for professional roles over the system.

*New rules*

1. Care is based upon a continuous healing relationship.
2. Care is customized to patient needs and values.
3. The patient is the source of control.
4. Knowledge is shared and information flows freely.
5. Decision making is evidence based.
6. Safety is a system responsibility.
7. Transparency is necessary.
8. Needs are anticipated.
9. Waste is continuously decreased.
10. Cooperation among clinicians is a priority.

treatment of patients suffering from diabetes, Parkinson's disease, organ failure, or cancer. Disease management, however, lacks a specific patient-tailored approach, and complex medically ill patients do not fit these programs.

In contrast to the classic disease-oriented approach, this issue focuses on a generic approach based on the concepts of case complexity and care complexity. After presenting epidemiologic, conceptual, clinical, scientific, and health care delivery aspects of the complex medical patient, different models of integrated care and ways of operationalizing complexity in clinical practice are discussed; a method for early identification and an action-oriented assessment, leading to decision support and management, as well as enhanced interdisciplinary communication, is introduced. This clinically driven but empirically based approach for the care of the complex patient has been integrated successfully in different settings.

The book addresses professionals, such as medical doctors and nurses, paramedical professionals, psychiatrists and psychologists working in the general hospital, hospital information specialists and managers, health

plans/insurance companies, health care policy makers, epidemiologists, and politicians.

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