

EPIDEMIOLOGY AS A TOOL TO EVALUATE QUALITY OF CARE

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The Institute of Medicine defines quality as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (Institute of Medicine, 2001). Quality of care is technically an abstract term and cannot be measured directly. Quality control represents the management processes selected to enable compliance with standards of performance and the methods to routinely reassess the level of compliance. The improvement philosophy of quality management targets the implementation of strategies for raising the bar in performance, not focusing on the deficiencies that need correction (Oleske, 2009). In the context of health care quality, epidemiology is utilized to measure performance and performance improvement initiatives in the delivery of health care services across the continuum of care. Epidemiology provides the foundations for the measurement, monitoring, and analysis of the delivery of the quality of health care by a provider, organization, or insurer.

Epidemiology based approaches in CQI contribute by focusing on major issues affecting quality of care today, such as: population growth, aging populations, decreasing resources (nursing shortage, lower reimbursement, etc.), and increasing costs. Because of population based problems classical empirical methods of counting cases and proportions are not capable to depict full picture. Managers look for good evidence that their managerial interventions are successful and beneficial for clients. Epidemiology is a science that is fully focused on quantifying cause – effect relations and as such provides full set of study designs, methods of measuring events, definitions and decision supporting tools, such as statistics. It also provides simple, population based indicators of disease occurrence. Epidemiologists are familiar with multivariate statistical approaches and the use of combination of data from various sources is frequent. New challenges of patient safety are closely related to Health Care Acquired Infections, to Community Acquired Infections, to nosocomial ones and related antibiotic resistance.

Specifically, the health care manager must continuously monitor in the populations served: (1) the service population size, (2) the distribution of health needs, (3) the genesis and consequences of health care problems, (4) how the health care system and organizational characteristics impact health, (5) the appropriates of the structure and performance of the health system, organization, and/or program with epidemiological techniques, (6) the impacts of a changing environment, and (7) response to public policy affecting health care delivery.

We can conclude that one goal of the epidemiologist in health planning is to try to synthesize varied health policy views of politicians, professionals, public health advocates, and consumers for the benefit of population served (Spasoff, 1999).

Institute of Medicine (U.S.). Committee on Quality of Health Care in America, *Crossing the quality chasm : a new health system for the 21st century*. 2001, Washington, D.C.: National Academy Press. xx, 337 p.

Oleske, D.M., *Epidemiology and the Delivery of Health Care Services: Methods and Applications*. 2009: Springer New York Dordrecht Heidelberg London.

Robert A. Spasoff, *Epidemiologic Methods for Health Policy*. 1999: Oxford University Press Inc. 240.