

QUALITY OF CARE

Berg MJ. "Non-physician medical care." *Colo Med.* 89(8): 274-5, Aug 1992.

Frary TN. "Perspectives on patient care management." *J Am Acad Physician Assist.* 3(5): 315-6, Jul-Aug 1990.

In an editorial, Mr. Frary reminds practitioners that as patient care managers they must consider the entire person and the person's environment, not just the injured structure or organ. Two methods for involving the patient in medical care are by setting concrete goals for the patient to measure their progress and working towards having the patient take "ownership" of the disease or condition.

Hall JA, Palmer H, Orav EJ, Hargraves JL, Wright EA, Louis TA. "Performance quality, gender, and professional role - a study of physicians and nonphysicians in 16 ambulatory care practices." *Med Care.* 28(6): 489-501, 1990.

Journal abstract: The quality of medical care has rarely been evaluated in relation to practitioner or patient gender. Moreover, comparisons between physicians and nonphysicians typically are confounded by practitioner gender. In this study gender and professional role effects were analyzed separately for 162 male and female staff physicians, 191 male and female residents, and 73 female nonphysicians delivering adult and pediatric primary care in 16 ambulatory care practices. Analyses addressed influences of patient and practitioner gender as well as differences between physicians and nonphysicians. Results showed that female staff physicians performed better than male staff physicians for cancer screening in women by breast examination and Pap smears, but that female residents performed worse than male residents for urinary tract infections in children. Patient gender effects occurred for two tasks; for these, superior care was rendered to the gender with higher prevalence for the condition (girls for urinary tract infections, boys for otitis media). The results are considered in the context of the gender-relevance of particular medical tasks or conditions. Comparisons between physicians and nonphysicians were limited to female practitioners. Comparable or superior performance for nonphysicians was found for all tasks but one (cancer screening in women).

John Snow Public Health Group, Inc., Boston, MA. *Forecasting quality care in community health centers, final report.* Sponsor: Bureau of Health Care Delivery and Assistance, Rockville, MD. 1984. 139p.

Abstract: The purpose of this study was the identification of organizational, administrative, and clinical policies and procedures which exist in community health centers and either positively or negatively impact on the quality of health care services provided. A modified Delphi methodology, the cross-impact analysis was used to elicit and refine the expert opinions of a sample group of participants from CHC sites. Sites were selected for participation in this study based upon their reputation for consistently providing high quality care. There was a general group consensus on factors that most impact on quality. Some of those factors are as follows: (1) qualifications of physician staff is by far the most important factor, (2) project director and medical director provide critical leadership which directly impacts on quality of care provided, (3) board decisions can have an important impact, (4) an active quality assurance program is very important, (5) a problem-oriented medical record is important in assuring quality.

Christensen-Szalanski JJ, Diehr PH, Bushyhead JB, Wood RW. "Two studies of good clinical judgment." *Med Decis Making*. 2(3): 275-283, 1982.

Journal abstract: There is a continuing controversy about the quality of unaided clinical judgment. This paper reports two studies that show that experienced medical providers made accurate probability assessments and applied those assessments to patient care in a manner consistent with principles of optimal decision making. In the first study, experienced clinicians and physician assistants accurately judge the relative frequency of three cough-related diagnoses in an outpatient population, suggesting that their encounter with several "unrelated" diagnostic problems does not interfere with their ability to judge accurately the frequency of any single diagnostic problem. In the second study, a group of clinicians assessed the probability that each patient seen in an outpatient clinic had pneumonia. Physicians were more likely to assign a pneumonia diagnosis and to order a radiograph for patients with a greater assessed probability of pneumonia (p less than 0.05). Most of the physicians appeared to use cutoff probabilities or "thresholds" above which they acted as though the patient had the disease and below which they acted as though the patient did not have the disease, consistent with rational decision-making principles. However, the threshold probabilities being used were quite different from physician to physician, implying that the physicians managed the patient population in a nonuniform manner. Thus it may be desirable to supplement "good" clinical judgment with decision aids to ensure standardized medical care.

Cawley JF. "Quality of care: the evidence is growing." *Physician Assist & Health Practitioner*. 4(1): 11-13, Jan 1980.

Sox H. "Quality of patient care by nurse practitioners and physician's assistant: a ten-year perspective." *Ann Int Med*. 91(3): 459-468, Sep 1979.

Journal summary: A remarkable development in primary care is the recent emergence of a new class of health professionals: nurse practitioners and physician's assistants. These practitioners diagnose and treat a wide variety of medical problems, usually with supervision by physicians. Their clinical competence has been evaluated in over 40 studies. Twenty-one studies in which care given by nurse practitioners or physician's assistants was directly compared with that given by physicians are analyzed. These studies show that nurse practitioners and physician's assistants provide office-based care that is indistinguishable from physician care. Because these studies were limited in scope, there is no experimental basis for extending this conclusion to care given outside the office, care that is unsupervised, or care of the seriously ill patient.

Wood R, Diehr PH, Wolcott B, Slay L, Tompkins R. "Reproducibility of clinical data and decisions in the management of upper respiratory illness—a comparison of physicians and non-physician providers." *Med Care*. 17(7): 767-779, Jul 1979.

Journal abstract: The ability of non-physician providers to collect the data required by an algorithm for upper respiratory illness management, and the appropriateness of resulting key management decisions, were studied by comparing non-physician data and management decisions on 426 patients with those of internists....In both studies, there was significantly more agreement on history data than on physician findings, evaluation, and therapy.

Kane RL, Gardner J, Wright DD, Woolley FR, Snell GF, Sundwall DN, Castle CH. "Differences in the outcomes of acute episodes of care provided by various types of family practitioners." *J Fam Pract.* 6(1): 133-138, Jun 1978.

Journal abstract: This study was designed to compare the outcomes achieved in a series of acute care episodes by different levels of family practice providers working in the clinic setting. The study utilizes a method which depends upon the provider to estimate level of function expected and earliest date of recovery for each episode. When the patients are viewed as a single group, those patients treated by the Medex appear to fare considerably better and those seen by a faculty member do worse; however, when each functional status group is examined separately, only the asymptomatic but clinically ill patients (45 cases) show a statistically significant difference in outcomes among the providers, with the Medex having good results and the faculty poor results.

Simborg D, Starfield B, Horn S. "Physicians and non-physician health practitioners: the characteristics of their practices and their relationships." *Am J Public Health.* 68(1): 44-48, Jan 1978.

Journal abstract: Six primary care practices which utilize both physician and non-physician practitioner types were studied to measure differences between practitioner types in the care of patients. By chart review 1,369 patient-practitioner encounters were examined. Physicians identified less symptoms and signs in their patients and prescribed less non-drug therapies than did non-physicians. Likewise, at follow-up visits, physicians tended to document less follow-up of these types of problems and therapies than non-physicians.... Findings indicate that the skills of physician and non-physician practitioners are potentially complementary. However, this potential is not fully exploited, particularly by physicians.

Rushing W, Miles B. "Physicians, physicians' assistants, and the social characteristics of patients in southern Appalachia." *Med Care.* 15(12): 1004-1013, Dec 1977.

Results of observations made in an economically depressed county in southern Appalachia to determine differences in primary care patterns for patients of varied socioeconomic status. Results suggest that "the higher a patient's socioeconomic status, the more likely (s)he is to be treated by the physician." There is no evidence to support a notion of "second-class"; physician attitudes in delegating patients to a provider or communication skills of middle and upper class persons must be taken into account. Results based on a patient-encounter analysis in three office practices.

Hutter M, Dungey C, Zakus G, Moore V, Ott J, Favret A. "Interviewing skills: a comprehensive approach to teaching and evaluation." *J Med Educ.* 52(4): 328-333, Apr 1977.

Journal abstract: Evaluation procedures utilizing standardized interviews scored by means of a formal objective rating system which make it possible to measure the interviewing skills of health professional students have been developed in recent years. These procedures have been used in the Child Health Associate Program at the University of Colorado Medical School to evaluate the ability of a group of students to achieve the objectives of a practice-oriented interviewing course. Results from the standardized interviews indicate that students taking the course gathered an average of 76 percent of all available data and used 86 percent of the process skills defined as necessary for positive interview interaction. A previous group of child health associate students who did not take the course gathered an average of 47 percent of all available data and used an average of 62 percent of the necessary process skills.

Johnson K, Deuschle K. "Strategies for prevention using allied health professionals." *Preventive Med.* 6: 386-390, 1977.

Journal abstract: Preventive services which are directed at groups and individuals who are at high risk of some unfavorable outcome should be incorporated into the fabric of medical care practice. Allied health professionals have the required skills to provide preventive services with a greater sense of job satisfaction than do physicians. Experiences to date attest to the usefulness of allied health professionals in meeting the gaps in health care which are largely preventive in nature.

Kane R, Olsen D, Castle C. "Medex and their physician preceptors." *JAMA.* 236(22): 2509-2512, Nov 29, 1976.

Study of selected indicators of the process of care provided by a Medex and a physician preceptor in seven rural practices. Patients seen by the Medex fared about as well as those seen by a physician; 71 % of the Medex patients and 74 % of the physicians' patients regained their usual functional status. The Medex seemed more likely to use more appropriate laboratory tests and therapeutic caution—a pattern which corresponds to the teachings of current academic medicine.

Grayson M, Nugent C, Oken S. *Student learning of interpersonal skills.* Delivered at the Fourth Annual Conference of the Association of Physician Assistant Programs. 16p. Apr 12, 1976.

A course on interpersonal skills was administered to a group of health associate students. A control group of physician assistant students did not receive the course. Tests given to both groups before and after the course showed a significant difference in students' scores in overall knowledge of these skills, knowledge in conceptual areas such as interviewing and sensitivity to patients' feelings and ratings of the quality of interviews. The health associate students' mean difference scores from pre- to post-test was significantly greater than for the control group of PA students. Two areas needing further teaching attention were observance of social amenities and attention to environmental factors.

Zakus G, Hutter M, Dungy C, Moore V, Ott J. "Teaching interviewing for pediatrics." *J Med Educ.* 51: 325-331, Apr 1976.

Journal abstract: This paper describes a structured course for teaching interviewing which focuses on the interaction between the patient and the practitioner. Three main areas of learning were selected because of their universal application: relationship, communication, and feelings. Theoretical material is related to positive and negative interactions with patients, and these are described behaviorally in a checklist form. The development of good interviewing techniques consists of increasing the positive interactions and learning to use them as diagnostic and therapeutic tools. Different methods are utilized to help students apply these skills in clinical situations. Although this course was developed for a specific group of pediatric practitioners, it can be utilized by all types of health care professionals.

Sibley J, Spitzer W, Rudnick K, Bell J, Bethune R, Sackett D, Wright K. "Quality of care appraisal in primary care: a quantitative method." *Ann Int Med.* 83(1): 46-52. Jul 1975.

Journal abstract: A reproducible method has been developed for measuring the quality of clinical care provided by physicians and nurse practitioners. The distinctive features of the method are the extended use of the tracer disease concepts, the evaluation of referrals, new procedures for probing the clinical operation of practices, a single blind design, emphasis on the use of the untouched

medical record, the ability to compare results with measurements of concurrent outcome, and a relatively low cost. Three simultaneous approaches ... surveillance of the management of indicator conditions, evaluation of clinical use of drugs, and the assessment of referral decisions. The three approaches gave consistently similar results about the relative performances of the practices compared and were in agreement with concurrent outcome studies. The method was successfully implemented in a health care experiment.

Wilson H, Pharris JL. "The physician assistant, preceptors' and employers' views regarding sphere of activities and clinical judgment." *PA J.* 5(1): 19-25, Spring 1975.

Journal abstract: The appearance of physician assistants and nurse practitioners in the last few years has produced new vital issues in medical care. Chief among these is that of clinical judgment as it pertains to these physician extenders.... A recent feedback survey of 61 physicians who employ physician assistants or have served as their preceptors indicates a strong agreement that these physician extenders should be able to define patients problems as paramount among other kinds of learned abilities.... Included here is an analysis of this capacity as utilized in the physician extender's role Various relationships between physicians and nurse practitioners or physician assistants are identified and explored regarding interdependence and independent judgmental action.... Responsibilities of educators in training students for these new roles are outlined with regard to learning of clinical judgment and its place in data gathering, problem delineation and counseling.

Nuckolls J. "The problem oriented medical record as the focal point for teaching and auditing the health care team." *Physician's Associate.* 2(4): 114-117, Oct 1972.

The problem-oriented approach to record keeping preserves the logic pathways used by the physician to solve medical problems. The structure of the record lends itself to audit, to answering insurance questions, to assessment of care and to the possible eventual computerization. Four phases of handling patient information are: (1) establishing the data base by history, examination and lab tests, (2) assembling a problem list, (3) formulating a treatment plan, and (4) completing progress notes. Problems may be assigned, according to complexity, to physician or non-physician personnel.

Garfield S. "Prevention of dissipation of health services resources." *Am J Public Health.* 6(18): 1499-1506, Aug 1971.

A regulatory health testing system to regulate the flow of patients into the system according to need is described. The regulator of flow separates the patient mix into three categories: the well, the asymptomatic sick and the sick. An adequate service to receive each of those components may be either "Health-Care Service" for the well, a "Preventive-Maintenance Service" for the asymptomatic sick, or a "Sick-Care Service" for the sick. Effective use of paramedical personnel may be made in areas of Health Testing, Health Care and Preventive Medicine if tasks are clearly defined, structured and carried out under physician supervision.

