Reflections on Modern Doctoring

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ESTERDAY, MEDICAL EDUCATION AND TRAINING were problematic; today, medical practice is. Looking backward to the 1950s, expanding medical schools and teaching hospitals promised to develop more doctors who would provide quality care over their long lives. To deal with increased specialization and technology, a new generation of students, competent in both the technical and humane care of patients, became the focus of attention.

The teaching and training programs of medical schools and hospitals were then closely examined, first by policy groups and medical sociologists as outsiders (American Medical Association 1966; Merton, Reader, and Kendall 1957) and then, somewhat later, by the insiders, the students and residents, who produced their own autobiographical, often alienated, accounts of the experience of becoming a doctor (Stoeckle 1987a). Those initial studies counted importantly in a renewal of education in "comprehensive medicine" for students (Reader and Goss 1967) and of the training of generalists in family medicine, primary care internal medicine, and pediatrics for residents. In this reform of education and training (and of future care), practitioners were seen as a lost cause, organization was largely ignored, and few studies were undertaken (Friedson 1975).

Today, doctoring and the doctor are the focus of attention-not education and training, not the student and resident. The conditions of and assumptions about medical work are now being questioned,

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reexamined, and transformed, but without the benefit of empirical studies. The new conditions are changes in the organization of practice; the new assumptions hold that organization determines physician behavior and the quality of care that once was promised by properly educated physicians alone. For understanding the modern work of the doctor and, in turn, practitioners' thinking and feeling about this job, three organizational changes are selected for illustration from among many others that could also be discussed. These changes are: (1) the rapid, competitive corporatization of practice, (2) an increased use of medical technology, and (3) a new use of information technology. In brief, as practice is corporatized in a more bureaucratic/industrial mode, the doctor becomes an employee and the doctor/patient relationship responds to corporate interests; as clinical work uses more medical technology it becomes not only more technical and specialized but also more divided and "deskilled"; and as information systems monitor the doctor's work, it becomes more standardized and prescribed.

Corporatization

Large numbers of medical practitioners—now approaching 60 percent have moved into group practices of various forms, as corporate group organization becomes the major mode of medical work (McKinlay and Stoeckle 1987; Emmons 1987). The most widely discussed form of practice is the prepaid group or health maintenance organization (HMO), in which the doctor is a salaried employee. This group-practice movement or corporatization is driven by a variety of forces, perhaps the most important of which is a drive for efficiency to reduce the costs of care (or increase profits) through economies of scale, alternative modes of care (outpatient vs. hospital), nonphysician health workers, and programs to reduce the use of medical services. This corporatization/grouppractice trend, of course, is not new, but is only now readily accepted and expanded. The idea and its major goal, efficiency, have been argued ever since the 1900s by early reformers of medical practice.

The Promises

Those early proposals that would reform solo medical practice from "a cottage industry" into salaried group practice were derived from

similar reforms of industrial production, namely "Taylorism" (Zuboff 1983), that was introduced in the Progressive Era of 1900 to 1920. Manufacturing was broken down into "piece work," and specialized workers for separate tasks were coordinated in a production line that increased efficiency and output. This process was also proposed for organized (group) medical practice (Cabot 1907, 1916; Davis and Warner 1918). Medical work, like its industrial counterpart, could be "deskilled" by the transfer of tasks to less highly trained professionals and then reorganized into faster production "teams" for patient care. This organizational efficiency promised additional improvements: (1) the doctors would have more time to care for more people, increasing access; (2) the uncertainty about the doctor's availability for "the sick poor" would be reduced as their work in charity clinics would no longer be "voluntary" but paid for and assigned; (3) the salaried doctor in the community, freed from running a practice, would also have more time to devote to his patients and would no longer charge profitseeking fees at the patient's expense; and (4) the salaried clinicianresearcher in the medical school would not be diverted from laboratory investigation and student instruction by lucrative private practice. Moreover, in that era, the notion was that the doctor's employers (medical schools, hospitals, and groups) would do more social good than the doctor working alone (Stoeckle 1987b), for they were then driven by a religious and civic ethos that promised service to patients, not by business profits of the doctor's "fees for service."

If, in the 1900s, organized practice was under religious and civic ideals that promised more service to patients of all kinds, those conditions do not exist today (Starr 1982). The current "corporatization" of medical practice is driven by efficiency for profit, or, if not for profit, the drive is for the reduction of health care costs for the payers, namely government and industry who view them as a burden on the budget or on production (Peterson 1987).

The Consequences

This old utopian effort to industrialize medicine's cottage industry through group practices was resisted. The doctor, it was argued, would have divided loyalties to the patient and to the organization, posing an ethical dilemma that was inconsistent with the ideal of the professional as the patient's advocate. The patient would also be lost sight of in a shuffle between specialized members of the health care team, resulting in a loss of therapeutic responsibility. The physician, now more distanced from the patient, might also lose his commitment to patient care. Such were the early professional critiques of group work.

Besides this historical resistance to the corporatization of medical practice, later sociological writings critiqued long-stay treatment institutions, though not medical groups or acute hospitals that were the doctor's workshop. These studies noted the impersonality of largescale organizations, namely those early public-service corporations, the tuberculosis sanatoria (Roth 1963) and mental hospitals (Goffman 1961), and how their bureaucratic rules and staff behaviors impaired the care of the individual, and indeed, might become victimizing. While these descriptive/critical writings focused on care in long-stay institutions, the problems which these writings addressed may reappear in today's short-stay hospitals. Now that these institutions are more efficiency-driven internally and are externally regulated by public authorities, they, in turn, may demand behaviors of medical staff e.g., quick discharges of patients—that can impair patient functioning and recovery.

Despite these old critical commentaries, some theorists might argue today that modern corporate competition will prevent victimization in treatment institutions and assure more civil and personal treatment. In theory, patients (or customers) may readily exit from a practice (or practitioner) if their interpersonal and medical needs are not met. Practitioners are then pressured into better doctoring and doctor/patient relations in a competitive search for patients. Witness the "we care" ads of corporate practice itself and the external program of the Health Care Financing Administration to publicize "good and bad" performance of hospitals and doctors (Higgins 1988).

Medical Technology

Technology is a second powerful influence on modern medical work. Today, medical technologies are everywhere—in the patient's home, the doctor's office, the hospital, commercial laboratories, and out-ofhospital free-standing centers of all sorts.

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The Promises

Whether located at hospitals, offices, or multiple sites in the community, medical technologies promise to make the doctor's diagnosis and treatment more accurate, and, even though they are costly, they will be more effective in reducing disease and disability. The technologies also bring specialization to medical work which, in turn, may divide the doctor/patient relationship, or, when technology use is transferred to nonphysician health workers, the doctor/patient relationship may be diminished and, sometimes, even by-passed by use of tests alone. Indeed, the modern patient often has not one but several doctors. along with many nonphysician health workers (Stoeckle and Twaddle, 1974); the doctor, in turn, may function as a technician, attending only to the patient's disease with procedures, rather than as a traditional professional attending to both the patient's disease and illness. Moreover, with more diagnostic testing transferred outside the hospital (Health Industry Manufacturers Association 1988) to multiple, divided, and specialized sites-imaging centers; free-standing surgical, ambulatory, and cancer centers; rehabilitation centers; walk-in units for stroke prevention, mammography, and cancer prevention-testing may even precede the consultation with the doctor. In sum, over the patient's lifetime, each of several interchangeable and complementary specialized practitioners and health care workers provide bits and pieces of medical diagnosis, treatment, and psychological care. The care of the individual has become a more divided task and, under the best of circumstances, a collective collaboration, as has the doctor/patient relationship as well.

The Consequences

There are several consequences of greater and greater technology use. Might the patient be neglected as the doctor pays more attention to machines at the bedside than to the patient (Reiser 1977), or, with the "absentmindedness of specialization," the needs of the patient be ignored in the clinical focus on disease (Cabot 1911)? After such early critiques come more modern ones. As information for diagnosis can be had from tests on patients rather than by talking with them, might the time for learning patients' views then be abbreviated? As more technology moves from the hospital to the medical office, will the encounter with the doctor (and that relationship) be perceived as a mere location for patients to receive some medical commodity—diagnostic tests for "check ups," dialysis "for my kidneys," prescriptions "for my nerves," exercise programs "for my heart," screening tests for "stroke potential"—, forms of packaged care for relief, cure, prevention, and rehabilitation rather than a service between persons: the doctor and the patient? Finally, will the many items for medical testing be "deskilled" to other health workers than the doctor, avoiding the medical encounter altogether? This avoidance has already happened as screening and diagnostic tests, performed by technicians or doctormanaged technicians, are marketed directly to consumers; the negative results are then communicated to the customer, as are the positive results too, but with the advice to "see your doctor" (Fentiman 1988).

Information Technology

Compared to the technologies for diagnosis and treatment, the information technology that supports decision systems has new, distinctive implications. In the language of technology assessment, medical technologies may be assessed to be effective (or not) in diagnosis or treatment; in practice they will then be applied (or misapplied) to the patient, illustrating the traditional themes of the doctor's work the technical (science) and the humane (art). In stark contrast, information technologies may be applied not to patients but to doctors, i.e., to their decision making (Lorch 1988).

The Promises

In effect, decision making about diagnosis and treatment and about medical work may now be prescribed for the doctor. No longer is the individual doctor expected to continue to dispense knowledge and skills learned during his/her socialization in medical school, hospital training, or even practice. Now a well-defined decision/support system can dictate the flow of events, prescribe optimal information, and provide standards for proper clinical decisions (or standards to judge clinical performance as quality assurance) that the practitioner must meet (Goldman, Cook, et al. 1988). While these decision/support systems may appear to exist for meeting the diagnostic and treatment

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needs of the patient via the doctor/patient relationship, they may be more concerned with meeting corporate needs of accountability, profitability, insurability, and bureaucratic standards. Such use of information technology has an impact on the doctor's job.

The Consequences

The doctor's job can be viewed as a large and varied number of decisions that are discretionary, based on the physician's individual judgment. Discretionary decisions have been a hallmark of professional autonomy that traditionally doctors have highly valued. Of the multitude of discretionary decisions in medical practice, those concerning choices in clinical diagnosis and treatment are the most studied—e.g., the diagnostic algorithm for chest pain with its decision trees defining the nature and scope of the patient's work-up and treatment. In contrast, management efforts (and their information systems) for controlling the costs of care—e.g., by reducing operations and tests—have an impact on, in turn, not only the clinical decisions of doctors but the doctor/patient relationship and the requests of patients.

Not only for monitoring clinical decisions, information systems can also be used to specify them so that professional actions may be increasingly standardized and routinized, leaving fewer discretionary judgments. Besides diagnostic and treatment decisions, many other categories of decisions impinge on the doctor/patient relationship and on the work of practice. In comparison to decisions on diagnosis and treatment, those about the work of practice have been infrequently studied, being largely taken for granted because the doctor traditionally made them when "running" his/her own practice. Such work decisions are now made in corporate practices and concern the following issues: (1) accountability; (2) defensive medicine; (3) patient and family requests; (4) hospital admission/discharges; (5) preventive medicine practices; (6) organizational arrangements (the hours to work, the availability of practice sessions, the degree and mode of personal access to the doctor, fees for services, etc.); (7) interprofessional practice (referral, consultation, transfer, and consultant care decisions); and (8) patient communication, education, and information transmittal decisions. These caretaking discretionary decisions can now be subject to monitoring, if not control, in corporate practices.

In sum, medical practice is now more commercial, competitive,

and corporatized, with physicians hired as employees to provide services, a trend fostered by a larger supply of physicians than in the past; more technology is being used with more physicians' work becoming only technical in nature, "deskilled," and no longer a mix of science and art; and, finally, more of the doctor's decision making is being standardized and monitored, and is no longer discretionary and personal.

The Professional Responses: Thoughts, Feelings and Actions

What then is happening to medical practitioners and how do they think and feel about practice? Of course, professional opinions in these changing times may differ widely depending on such variables as the practitioner's generation, specialty, and practice location, to mention but a few. Despite the limited, specific survey research (Colombotos and Kirchner 1986; Rubin 1988; Derber 1984), some common views can be identified from a wide variety of sources.

Today's literature on the work and experience of the practitioner, however, is largely anecdotal. Unlike those old empirical studies on education and training, the new sources are the medical throwaways (such as "Private Practice"); the bulletins and newsletters of professional societies (such as the American College of Physicians, Family Medicine, and American Society of Internal Medicine); newspaper accounts; the gossip about professional life at reunions, medical conventions, and staff meetings; and interviews with students, residents, and fellows, along with the experience of practice itself. Such glimpses into modern practice gave a hint of the feelings and thinking of practitioners in their adaptation, accommodation, or resistance to changes in organization, technology use, and information systems.

Professional Thoughts and Feelings

The modern themes of medical work concern job satisfaction. While variable, overall, it seems less and different. The elements of satisfaction are power, control, pay, status, mission, and rewards that are institutional, intraprofessional, and interpersonal.

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Power

Older clinicians complain about the external bureaucratic regulations of practice that promote short hospital stays and limit admissions, preventing them from meeting the needs of patients. Physicians in preferred provider organizations (PPOs) complain about approvals (and paperwork) for referrals and admissions, explicit restrictions that are part of cost controls in competitive health care plans. These restrict their usual discretionary decisions. In turn, they see themselves as externally regulated, having less power in the control of their practice (Lachine 1988).

Pay

Practitioners in primary care specialties—such as internal medicine, pediatrics, and family practice—complain about pay. Their financial rewards (fees from third parties) are diminished as compared to those of their specialty colleagues (Burdell 1987). Physicians, in general, have also seen their income as measured against purchasing power decline. In response, many are increasing their work load (visits per doctor per hour) to maintain income, which can conflict with professional standards. The doctor is prevented from having enough time with the patient to do good clinical work. Pay may not only be less, but jobs—or ideal ones—are harder to find. To the extent that income confers status in the public's view, the practitioners' perception is that their status has declined as, indeed, surveys have also reported (Blendon 1988).

Control

In the matter of job satisfaction, the control or management of practice itself was a traditional reward as physicians "ran their own practice" (Mechanic 1977). But as employees, physicians today may have little participation in or control of practice management. Medical staff complain of "being told what to do" by institutional administrators who may reach decisions that impinge on professional life (for example, practice fees) without discussion or consultation (Sheldon 1986).

The Mission

Besides the professional complaints about bureaucratic and institutional controls that limit discretionary decisions and participation, some sense of loss has come to the mission of practice itself. The older mission of medical institutions and practices has changed from service to individuals and communities to one of marketing technologies and medical commodities to targeted consumers. The rhetoric and advertising are here (Field 1988), and many are comfortable with it. Yet, many other practitioners feel a loss of their passion for professional work so defined, wondering if they can keep their old idea of "commitment to service" that had, if only in their mythical belief about their work, unexpressed religious roots. The older view that provision of care in society was a civic and religious service seems out of tune with the newer, secular image of medical work as a corporate job for the distribution of medical products.

Institutional Rewards

Besides diminished financial rewards, the quality-assurance reviews of hospitals make physicians feel constantly and publicly observed, not for the steady quality of their performance but for errors, which, in turn, sets them up for criticism and shame, possible loss of jobs and license, and malpractice charges. Even failure to attest records can result in loss of privileges and reports to medical registration boards. Medical staffs are presumably like other workers, producing more and better care with recognition and praise; unfortunately, such communication and notification of quality are not items addressed by quality-assurance management committees in their search for clinical error. The reward of institutional approval for clinical performance has been diminished by management tactics that search for "clinical errors" (Weinstein 1988).

Interprofessional Rewards

Still other features of practice lessen satisfaction, namely, interprofessional work that has become more controlled and uncertain. In the first instance, for example, payers try to limit consultations as being too costly (except when requiring second opinions for surgery); in the second, emerging health professions stake out therapeutic domains that avoid "working under (or with) the doctor"—for example, independent nursing practices, physical therapy, and pharmacy. Despite assertions of team work, modern conditions of competition may promote less cooperative work, and less interprofessional interaction, than came from patient exchanges among colleagues in the past (*Medical World News* 1987).

Interpersonal Rewards

Regardless of outside (regulations) or inside (management) control of professional life in institutions, the experience of the doctor/patient encounter seems altered. Practitioners complain that the relationship, too, brings diminished rewards, many of which were interpersonal. Historically, the relation has been cherished because it is essential to the tasks of doctoring—diagnosis, treatment, communication, support, and prevention—and because it also inspired, gratified, developed and rewarded the doctor.

In the Hippocratic theory of illness, the relationship was essential for the medical tasks and for personal care of the person seeking help (Osler 1952). Since illness arises out of a unique, individual life, knowing the patient through the relationship was a necessity for accurate diagnosis and appropriate medical action. The relationship also inspired the doctor with those religious and ethical ideals about the rights and duties that define human caring in society (Percival 1803). It gratified the practitioners, as their autobiographies testify, with the exercise of clinical skill and the therapeutic attachment (Hertzler 1938), if not the cure or improvement, of the patient. After medical training, the relationship also fostered the development of the doctor on the job, continuing the practitioner's life-long learning from experience in the healing science. It could also develop the practitioner's humane qualities as the doctor confronted the suffering of the sick. W. Somerset Maugham (1938), as medical student, and William Carlos Williams (1954), as practitioner, praised the relationship for the privilege it gave for learning about how others live and sufferabout human nature. Finally, the relationship paid off; it was the nexus of the fee-for-service, that monetary exchange for the treatment provided the patient. Paid or not, practice was seen to be altruistic since medical aid always contained a promise that the relief of bodily

and mental ills would better the individual—and so benefit society as well. A healthy body and mind made a productive citizen. Moreover, this socially valued work of professional expertise and the recompense for it became a public reward of another kind—status, especially in a society that esteemed financial success.

Given these rewards and interactions, doctors and patients alike have, until recently, celebrated the relationship regardless of its public health outcomes on morbidity and mortality—whether or not diseases were always prevented or cured. After all, doctors enabled patients to cope with their disease, disability, and dying. Praise of the relationship also continued even though critics and social science scholars, concerned with the asymmetry in power between doctor and patient, decried doctors' social control of the patient (Zola 1972; Illich 1976) and their dominance in decision making.

Today, however, the relationship and the practitioner's feelings about its rewards have changed. The modern experience of doctoring has affected the doctor. Thus, the relationship seems, on the one hand, less celebrated and cherished, on the other, more alienated and criticized. For example, the patient's communication of information about illness may seem less essential for diagnosis when tests can provide more information on symptomatic and asymptomatic disorders than talking with patients. Doctors report diminished gratification from the encounter as patients are sometimes more adversarial, critical of doctors, and less inclined to long-term attachments. The relationship is less promising as a life-long phenomenon for learning by doing in one's own practice when new technologies demand study courses and certification outside of one's practice. Praise for professional altruism is gone, with everyone—or nearly everyone—a paying (or paid for) patient.

Professional Actions

Despite the many changes in organization, technology, and management of practice, the profession has taken few new directions on its own. The mission of practice has not been reinterpreted. Rather, in some instances, the profession has joined hospitals in joint ventures to assure an economic base, or developed competitive, alternative, free-standing physician-run sites for diagnostic testing. National unions have not been formed. Amidst greater regulation and management control, new forms of professional participation and organization have not been invented nor has work been reconsidered and redesigned. Some renewed interest in the views, preferences, and requests of patients is evident in courses on decision making, ethics, and interviewing, if only for "loss-control prevention" in malpractice. As the regulatory and administrative bureaucracy within and outside treatment institutions expands, more professionals seek careers in management that take them away from direct patient care.

The Future

Despite these organizational and technological changes that induce professional angst, not all the satisfaction in medical practice has been taken away. Moreover, some new adaptations and accommodations are beginning to emerge, and, in this transition, both younger and older established practitioners now count importantly since the changes going on do not wait on another generation of students to be graduated. Among the continual satisfactions is the exercise of technique and skill. The application of technology to relieve suffering still continues to gratify even as its clinical performance is publicly monitored, graded, and criticized. Another gratification is derived from eliciting patients' preferences and values, and evaluating them before making medical choices from the wide range of technical, diagnostic, and treatment options available. That process requires an intimate, knowing interaction of doctor and patient, one that can be as important as traditional questioning for diagnosis, and one that can be inspiring to both as patient and doctor become engaged in more joint decision making. While much of the privacy and attachment of the therapeutic relationship is often diminished, patients now live so long that each relationship becomes an extended one, with husbands, wives, daughters, and sons attending. Even though the interactions are subject to public review, much medical, educational, and psychological work nonetheless still goes on in the dyadic exchange. For example, since most patients seek an improved quality of life even with disability and chronic disease, their "illness experience" and functional assessment need review.

In medical work, the redesign of the hierarchical corporations of the hospital and group practice into more cooperative work places has been considered, even if it is yet to be implemented. Professional values and perceptions of the professional self continue to change as there is more employment and less upward mobility. Practitioners now search for a job and lifestyle, not a "service commitment" of the 1930s, or "calling" of the 1900s. In the mission of practice, patientcare values may also reappear and be restated despite the present efficiency-driven institutions and regulators. Looking ahead, the old passion, romance, power, money, charisma, and status—mythical as they might all have been—are now going out of doctoring. Yet, as it becomes the newest of the white-collar corporate jobs, doctoring can certainly emerge as a "good job"—if not a profession.

References

- American Medical Association. 1966. Report of the Citizens Commission on Graduate Medical Education. Chicago.
- Blendon, R.J. 1988. The Public's View of the Future of Health Care. Journal of American Medical Association 259:3587-89.
- Burdell, G.P. 1987. The Plight of Primary Care Physicians. American College of Physician Observer (March):5.
- Cabot, R.C. 1907. Suggestions for the Reorganization of Hospital Out-patient Departments with Special Reference to the Improvement of Treatment. *Maryland Medical Journal* 1:81-91.
 - ------. 1911. Humanizing the Care of the Sick Poor. City Club Bulletin 4:113-18.
 - ----- 1916. What Dispensary Work Should Stand For. Modern Hospital 7:467-68.
- Colombotos, J., and C. Kirchner. 1986. Physicians and Social Change. New York: Oxford University Press.
- Davis, M.M., and R. Warner. 1918. Dispensaries, Their Management and Development. New York: Macmillan.
- Derber, C. 1984. Physicians and Their Sponsors: The New Medical Relation of Production. In *The Political Economy of Health Care*, ed. J.B. McKinlay, 217-54. New York: Tavistock.
- Emmons, D.N. 1987. Changing Dimensions of Medical Practice Arrangements. Chicago: American Medical Association, Office of Socioeconomic Research.
- Fentiman, I.S. 1988. Pensive Women, Painful Vigils: Consequences of Delay in Assessment of Mammographic Abnormalities. *Lancet* 2:1041-42.
- Field, M.G. 1988. Turf Battles on Medicine Avenue. Society 25:12-17.

Friedson, E. 1975. Doctoring Together. New York: Elsevier.

- Goffman, E. 1961. Asylums: Essays on the Social Situation of Mental Patients and Other Inmates. New York: Doubleday Anchor.
- Goldman, L., E.F. Cook, D.A. Brand, T.H. Lee, G.W. Rouan, M.C. Weisberg, D. Acampora, C. Stasiulewicz, J. Walshon, G. Terranova, L. Gottlieb, M. Kobernick, B. Goldstein-Wayne, D. Copen, K. Daley, A.A. Brandt, D. Jones, J. Mellors, and R. Jakubowski. 1988. A Computer Protocol to Predict Myocardial Infarction in Emergency Department Patients with Chest Pain. New England Journal of Medicine 318:797-808.
- Health Industry Manufacturers Association. 1988. Alternate Site Provider Report: An Update. Washington.
- Hertzler, A.E. 1938. The Horse and Buggy Doctor. New York: Harper and Brothers.
- Higgins, L.C. 1988. Federal Data Bank May Do Harm. Medical World News 29 (11):17-18.
- Illich, I. 1976. Medical Nemesis. New York: Pantheon.
- Lachine, Y.A. 1988. From the Trenches: Strangled by Rules and Regulations. Internal Medicine News 21:52-53.
- Lorch, S. 1989. Technology and the Work of the Doctor outside the Hospital. International Journal of Technology Assessment in Health Care 5:43-52.
- Maugham, W.S. 1938. The Summing Up. London: Heineman.
- McKinlay, J.B., and J.D. Stoeckle. 1987. Corporatization and the Social Transformation of Doctoring. *Finnish Journal of Social Medicine* 24:73-84.
- Mechanic, D. 1977. The Growth of Medical Technology and Bureaucracy: Implications for Medical Care. Milbank Memorial Fund Quarterly/Health and Society 55:61-79.
- Medical World News. 1987. Physicians' Woes are Pervasive. 28 (7):14.
- Merton, R.K., G.G. Reader, and P.L. Kendall. 1957. The Student-Physician. Cambridge: Harvard University Press.
- Osler, W. 1952. Aequaminitas. Philadelphia: Blakiston.
- Percival, T. 1803. Medical Ethics. London: J. Johnson and J. Bickerstaff.
- Peterson, P.G. 1987. The Morning After. Atlantic 260:43-69.
- Reader, G.G., and M.E.W. Goss. 1967. Comprehensive Medical Care and Teaching. Ithaca: Cornell University Press.
- Reiser, S.J. 1977. Medicine and the Reign of Technology. Cambridge: Cambridge University Press.
- Roth, J.A. 1963. Timetables. New York: Bobbs-Merrill.
- Rubin, W. 1988. Survey Shows Increasing Unhappiness of Internists. Internal Medicine News 21:1, 11, 19, 28.

- Sheldon, A. 1986. Managing Doctors. Homewood, Ill.: Dow Jones-Irwin.
- Starr, P. 1982. Social Transformation of Medicine. New York: Basic Books.
- Stoeckle, J.D. 1987a. Physicians Train and Tell. Harvard Medical Alumni Bulletin 61:9-11.
 - ——. 1987b. Working on the Factory Floor. Annals of Internal Medicine 107:250-51.
- Stoeckle, J.D., and A. Twaddle. 1974. Non-physician Health Workers. Social Science and Medicine 8:71-76.
- Weinstein, M. 1988. Policing the Profession. American College of Physician Oberver 1:10-11.
- Williams, W.C. 1954. The Doctor Stories. New York: New Directions Books.
- Zola, I.K. 1972. Medicine as an Institution of Social Control. Sociological Review 20:487-504.
- Zuboff, S. 1983. The Work Ethic and Work Organization in Work Ethic: An Analytical View. Madison, Wisconsin: The Industrial Relations Research Association.

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