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Corporatization and the social transformation of doctoring

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Corporatization of health care is dramatically transforming the medical work place and profoundly altering the everyday work of the doctor. This paper discusses recent changes in U.S. health care and their impact on doctoring. Major theoretical explanations of the social transformation of medical work under advanced capitalism are outlined. The adequacy of the prevailing view of professionalism (Freidson's notion of professional dominance) is considered. An alternative view, informed by recent changes, is offered. While the social transformation of doctoring is discussed with reference to recent U.S. experience, no country or health system can be considered immune. Indeed, U.S. experience may be instructive for doctors and health care researchers in other national settings as to what they may expect.

We are witnessing a transformation of the health care systems of developed countries that is without parallel in modern times (Starr 1978; 1982). This dramatic change has implications for patients and, without exception, affects the entire division of labor in health care. What are some of these changes and how are they affecting the work of the doctor?

THE CHANGES

Over the last few years especially, many multi-national corporations, with highly diverse activities, have become involved in the business of medical care (McKinlay 1984; Institute of Medicine 1986). Conglomerates like General Electric, AT&T, and IBM, among many others, now have large medical manufacturing enterprises within their corporate divisions. Aerospace companies are involved in everything from computerized medical information systems to life support systems. Even tobacco companies and transportation enterprises have moved into the medical care arena. In addition to industrial or manufacturing capital, even larger financial capital institutions (e.g. commercial banks, life insurance companies, mutual and pension funds and diversified financial organizations) are also stepping up their involvement in medical care and experiencing phenomenal success (Salmon 1984; Navarro 1986). Besides corporate investments in health care, corporate mergers of treatment organizations and industrial corporations are taking place.

One of the largest corporate mergers in the world, outside the oil industry, was between The Hospital Corporation of America and American Hospital Supply. Privately owned hospitals chains, controlled by larger corporations, continue their rapid growth. Much of this growth comes from buying up local, municipal and voluntary community hospitals, many of which were going under as a result of cutbacks in government programs and regulations on hospital use and payment. By 1990, about 30 percent of general hospital beds will be managed by investor hospital chains (Salmon 1984; Salmon 1985; Kennedy 1985; Eisenberg 1986). Because the purpose of an investor owned organization is to make money, there is understandable concern over the willingness of such organizations to provide care to the 35 million people who lack adequate insurance coverage and who are not eligible for public programs (Robert Wood Johnson 1983; U.S. Bureau of the Census 1985; Farley 1985; Iglehart 1985; Sloan et al. 1986; Himmelstein et al. 1984).

RESPONSES: (1) REGULATIONS

Confronted with an ever deepening fiscal crisis, the state continues to cast around for regulatory solutions — the latest of which is diagnostic-related groupings (DRGs) for Medicare patients which reimburse hospitals by diagnosis with rates determined by government. If the actual cost of treatment is less than the allowable payment, then the hospital makes a profit; if treatment costs are more, then the hospital faces a loss, even bankruptcy. Since an average of 40 % of hospital revenues come from Medicare patients. This probably ineffective measure follows many well documented policy failures (e.g. Professional Standards Review Organization or PSRO-legislation of 1972) and its consequences for the health professions are profound. Besides these regulatory efforts, corporate mergers, investor-owned hospital chains, federally mandated cost containment measures, among many other changes, are transforming the shape, content and even the moral basis of health care (Daniels 1986; Cunnigham 1983; Relman 1980; Eisenberg 1984). How are these institutional changes affecting the everyday work of the doctor?

RESPONSES: (2) NEW MANAGMENT

By all accounts, hospitals are being managed by a new breed of physician administrators (Freedman 1985; Himmelstein and Woolhandler 1986) whom Alford aptly names them "corporate rationalizers" (Alford 1975). While some have medical qualifications, most are trained in the field of hospital administration which emphasizes, among other things, rationalization, productivity, and cost efficiency. Doctors used to occupy a privileged position at the top of the medical hierarchy.

Displaced by administrators, physicians have slipped down to the position of middle management where their prerogatives are also challenged by other health workers. Clearly, managerial imperatives often compete or conflict with physicians' usual mode of practice. Increasingly, it seems, administrators, while permitting medical staff to retain control of technical aspects of care, are organizing the necessary coordination for collaborative work, the work schedules of staff and determining the fiscal rewards.

Some argue that many administrators are medically qualified, so they act so as to protect the traditional professional prerogatives. This view confuses the usual distinction between status and role. When a physician is a fulltime administrator, he is understandably concerned to protect the bottom line, not the prerogatives of the professions. When these interests diverge, as they increasingly must, it becomes clear where the physician/administrator's divided loyalty really resides. One recent survey of doctors shows that a majority do not believe that their medical directors represent the interests of the medical staff. As a result, the AMA has concluded that "as hospital employees..... medical directors may align their loyalty more with hospitals than with medical staff interests" (American Medical Association 1983). To counteract these historic trends, it has been seriously suggested that physicians should be

trained in organization theory... to act as liaisions among all those with an interest in medicine, including patients, health care providers, insurers, politicians, economists, and administrators".

SPECIALIZATION-DESKILLING

Specialization in medicine, while deepening knowledge in a particular area, is also circumscribing the work that doctors may legitimately perform. Specialization can — with task delegation — reduce hospitals' dependence on its highly trained medical staff. Other health workers, e.g. Physicians Assistants (PA) and Nurse Practitioners (NP) with less training, more narrowly skilled, and obviously cheaper can be hired. Doctors, while believing that specialization is invariably a good thing, are being "deskilled" — a term employed by Braverman to describe the transfer of skills from highly trained personnel to more narrowly qualified specialists (Braverman 1974). Many new health occupations (PA's, NP's) have emerged over the last several decades to assume some of the work which doctors used to perform. This process receives support from administrators constantly searching for cheaper labor, quite apart from the controlled trials which revealed that "allied health professionals" can do the same work just as effectively and efficiently. Preference for the term "allied health professional" rather than "physician extender" or "physician assistant" reflects the promotion of this occupational division of labor.

Just over a decade ago, Victor Fuchs (1975) viewed the physicians as "captain of the team". Around that time, doctors (usually males) were the unquestioned masters and other health workers (usually female), especially nurses, worked "under the doctor" to carry out his orders. That subordination is disappearing. Nowadays, physicians are required to work alongside other professionals on the "health care team." The ideology of *team work* is a leveler in the hierarchical division of healthcare labor. Other health workers — for example, physiotherapists, pharmacists, medical social workers, inhalation therapists, podiatrists, and even nurses in general — may have more knowledge of specific fields than physicians, who are increasingly required to defer to other workers, now providing some of the technical and humane tasks of doctoring. While some MD's continue to resist these trends, and others have publicly complained about "the progressive exclusion of doctors from nursing affairs" (Blackwood 1979; Garvey and Rottet 1982; Alspach et al. 1982). Still others have accommodated to the changing scene captured in the title of a recent article: "At This Hospital, the 'Captain of the Ship' is Dead" (Blackwood 1979).

Many commentators have identified the "gatekeeping" function performed by doctors (to determine and legitimate access to generally scarce resources: e.g. certain medications and highly specialized personnel) as a special characteristic that distinguishes them from other health occupations and that reinforces their central position in the division of labor. But even this gatekeeping function appears to be changing. For example, in some 21 states, nurses are now able to prescribe a wide range of medications. Despite opposition from doctors, pharmacists in Florida may now prescribe drugs for many minor ailments (New York Times 1986). Physician organization and resistance has been unable to curtail the introduction and growth of midwifery in some areas of the country.

Specialization has also weakened the political position of doctors because they now tend to affiliate only with disparate professional societies relevant to their own field of practice, rather than the generic and increasingly distant American Medical Association (AMA). AMA membership continues to decline annually and there are estimates that less than half of all doctors now belong. Fragmentation of the profession through subspecialty societies severely curtails the influence of the AMA representing all the profession. One recalls the power of the AMA only a decade ago when it successfully delayed and shaped Medicare and Medicaid legislation. In contrast, the AMA is losing significant battles in the courts over issues which affect the position and status of doc-

tors. Antitrust rulings (permitting doctors to advertise), and decisions prohibiting any charges over and above the federally determined DRG rates, are major examples. Responding to recent proposals to introduce a flat, all inclusive payment for doctors' services associated with each type of hospital case, Dr. Coury (Chairman of the AMA's Board of Trustees) claims doctors are becoming "indentured servants of the government" (New York Times 1984).

DOCTOR OVERSUPPLY

The growing oversupply of doctors in developed countries reinforces these negative trends for physicians by intensifying intraprofessional competition and devalues their position in the job market. During the 1970s, the supply of physicians increased 36 %, while the population grew only 8 %. U.S. medical schools continue to pump 17.000 physicians into the systems annually. One report projects an oversupply of 70 000 physicians in the U.S. by 1990 and an excess of 150 000 by 2000. The ratio of doctors to the general population is expected to reach 1 in 300 by 1990 (Friedman 1981; McKinlay and Arches 1985). This level of intensity, obviously much higher in the northeast and west coast, renders fee for service solo practice economically less feasible. Again, the changes that are occurring are captured in the title of a recent article "Doctor, the Patient Will See You Now" (Friedman 1981). There are reliable reports that doctors are unemployed in a number of countries and increasingly underemployed in quite a few others (Berube 1984). Doctors have apparently received unemployment payments in Scandinavian countries, Canada and Australia. Official recognition of physician oversupply exists in Belgium, which is restricting specialty training, and the Netherlands, which is reducing both medical school intake and specialty training (Schroeder 1984).

The oversupply of doctors is thought to be a major reason for the recent shift to a salaried medical staff, which has been so dramatic as to be termed "the salary revolution" (Friedman 1983). There are estimates that over a half of all U.S. doctors are now in salaried arrangements, either part or full-time (McKinlay and Arches 1985). Young medical graduates are especially affected by the trends described and often prepared to accept a limited job (and role) for a guaranteed fixed income (without heavy initial investment in setting up a practice and obtaining liability protection from astronomical malpractice insurance premiums) with the promise of certain perks (regular hours, paid vacation, retirement plan, etc.). The division of labor in health care is increasingly stratified by age and gender, with females and younger doctors disproportionately in salaried positions. 47 percent of physicians under thirty-six years of age were salaried in 1985, while only 19.4 percent of their colleagues over 55 were employees. The percentage increase for this youngest category of physicians between 1983 and 1985 was significantly larger than for the other age groups, increasing 5.3 percentage points. Female physicians were nearly twice as likely to be employees than their male colleagues. Only 23.5 percent of males were salaried in 1985 versus 45.5 percent of females. Again, the percentage increase for female employed physicians was larger than for males over the years 1983—85. While self-employed physicians consistently earned nearly 38 000 USD more per year than salaried physicians, 118,600 USD versus 80 400 USD respectively for 1985, self-employed doctors worked an average of one and a half weeks more in 1985 (47.4 weeks versus 45.9), spent an average of 6 more hours per week on patient care activities (52.6 hours per week versus 46.6) and saw an average of 19 more patients per week (122.6 visits per week versus 103.9) (American Medical Association 1986). One survey of over 2.000 hospitals found that the trend to a salaried medical staff was most marked in areas with high ratios of doctors to population. Physician oversupply and the associated economic vulnerability may force doctors to accept lower incomes and increasingly alienating work conditions practicing in clinics and hospitals of "today's corporate health factories", just as 19th century craftsmen accepted the factory floor forced on them by their move to the industrial plant (Freidson 1967).

Anecdotal reports from older doctors indicate that medicine today is certainly not like "the good old days." The malpractice crisis, DRGs, the likelihood of fixed fees, and shrinking incomes (projected at 30 % over the next decade) all combine to remove whatever "fun" there was in medical practice. Some wonder aloud whether they would choose medicine if, with the benefit of hindsight, they had to do it all over again (Berrien 1987). While doctors used to want their children to follow in their footsteps, many report that they would not recommend medicine today. Recent graduates have doubts of other kinds. They fear their debts will force them into specialties on the basis of anticipated earnings, rather than intrinsic interest. College advisors may dissuade the highly talented students they counsel from choosing medicine because its job market looks so bleak. These professional concerns are expressed in the urban academic medical centers (where physicians with international reputations presumably enjoy a privileged status) as well as local community hospitals throughout the country.

THEORIES OF CHANGE

Some of the faces transforming medical care and the work of the doctors have been described. How does one explain what is occurring? Why is it happening?

Probably the best account of the stage by stage transformation of the labor process under capitalism is provided by Karl Marx (1977). Although not concerned with health care his thesis is applicable. During the precapitalist period, small scale independent craftsmen (solo practitioners) operated domestic workshops, sold their products on the free market, and controlled the production of goods. Over time, capitalists steered many of these skilled workers into their factories (hospitals) where they were able to continue traditional crafts semiautonomously in exchange for wages. Eventually, the owners of production (investors) began to rationalize the production process in their factories by encouraging specialization, allocating certain tasks to cheaper workers, and enlisting managers to coordinate the increasingly complex division of labor which developed. Rationalization was completed during the final stage when production was largely performed by engineering systems and machines, with the assistance of unskilled human machine minders. The worker's autonomy and control over work and the workplace diminished, while the rate of exploitation increased with each successive stage in the transformation of production.

Max Weber's (1968) account of the same process (bureaucratization) is strikingly similar. According to Weber, bureaucracy is characterized by: a) a hierarchical organization, b) a strict chain of command from top to bottom, c) an elaborate division of labor, d) assigning specialized tasks to qualified individuals, e) detailed rules and regulations governing work, f) personnel are hired based on competence, specialized training and qualifications (as opposed to family ties, political power, or tradition), g) a life-time career from officials is expected (Gerth and Mills 1968). He described how workers were increasingly "separated from ownership of the means of production or administration". Bureaucratic workers became specialists performing circumscribed duties within a hierarchical structure subject to the authority of superiors and to established rules and procedures. According to Weber, bureaucratic employees are "subject to strict and systematic discipline and control in the conduct of the office" they occupy. For Weber, the bureaucratic form of work was present not only in the area of manufacturing but also in churches, schools and government organizations. It is noteworthy that he also included hospitals: "...this type of bureaucracy is found in private clinics, as well as in endowed hospitals or the hospitals maintained by religious orders". While Weber viewed bureaucracy as the most rational and efficient mode of organizing work, he also saw the accompanying degradation of working life as inevitable (Blackwood 1979; Steinwald 1983).

It is argued that the process outlined by Marx and Weber with respect to a different group of workers, during a different historical era, is directly applicable to the changing

situation of doctors today, now that the "industrial revolution has finally caught up with medicine" (Rosen 1947). Whereas, generally speaking, most other workers have been quickly and easily corporatized, physicians have been able to postpone or minimize this process in their own case. Now, primarily as a result of the bureaucratization that has been forced on medical practice, physicians are being severely reduced in function and their formally self-interested activities subordinated to the requirements of the highly profitable production of medical care.

While Marx offers a most complete and theoretically well-grounded explanation of the social transformation of work, (including doctoring), other commentators have described threats to professional autonomy. C. Wright Mills (1953) warned of a "managerial demiurge" suffusing all the professions, including doctoring. In 1951, he wrote:

> "Most professionals are now salaried employees; much professional work has become divided and standardized and fitted into the new hierachical organizations of educated skill and service; intensive and narrow specialization has replaced self cultivation and wide knowledge; assistants and subprofessionals perform routine, although often intricate tasks, while successful professional men become more and more the managerial type. So decisive have such shifts been, in some areas, that it is as if rationality itself had been expropriated from the individual and been located as a new form of brain power in the ingenuous bureaucracy itself." (Mills 1953, 112)

Describing "The Physicians' Changing Hospital Role" over 20 years ago, Wilson (1966) saw the growth of specialization in medicine producing diminished perceptions of doctors' expertise and a routinization of charisma. This theme was developed by Myerhoff and Larson (1958) when they argued that doctors were losing their charisma and becoming culture heroes: a major difference between the charismatic and culture hero is that the former is a force for social change, while the latter is the embodiment of tradition. The culture hero appears to serve as an agent of social control (Zola 1972).

During the 1970s, Haug (1973, 1976) detected a trend towards deprofessionalization which had its origin in the changing relations between professionals and consumers. The unquestioned trust which a client has in professional is often thought to distinguish professionals from other "ordinary" workers. According to Hughes (1971) relations with professionals are embodied in the motto "credat emptor" (let the taker believe in us) rather than "caveat emptor" (let the buyer beware) which exists in most other areas of commerce. According to Haug, (1973, 1976) consumers' unquestioning trust in professionals is diminishing as the knowledge gap between the medical profession and the consumer diminishes. She regarded the modern consumer as better educated and more likely to comprehend medical subjects, which results in a narrowing of the knowledge gap. She also viewed the computerization of knowledge as making it more accessible to all. New specialized occupations have arisen around new bodies of knowledge and skills that physicians themselves are, understandably, no longer competent to employ. These and related trends have, in her view, deprofessionalized medicine, a consequence of which is to reduce physicians to mere specialists dependent on rational, well-informed consumers who approach their service with the same skepticism (caveat emptor) that they bring to other commodity purchases. As a result of deprofessionalization, doctors are becoming just another health occupation.

Magali Larson (Larson 1980) provides a penetrating systematic description of the progressive loss of autonomy and control over work among professionals. She distinguishes three areas in which the loss of autonomy (or alienation) is occurring: economic, organizational, and technical. According to her formulation, doctors experience economic alienation when they become salaried employees of hospitals or when, in common with most other workers, they must place hospital interests above their own. Organizational alienation occurs when cost conscious hospital administrators, or managers, create systems and procedures to increase doctors' productivity and efficiency, and coordinate their work with others in the division of medical labor. Technical aliena-

tion refers to the process of curtailing or removing the actual decisions involved in diagnosing and treating patients. From what has been described above, it appears that doctors are experiencing loss of autonomy on all three of these dimensions, albeit at different rates depending on where they work and what specialty they practice.

IS THE PROFESSION STILL DOMINANT?

During the late 1960s, Freidson developed a view of professionalism (articulated in two influential books published in 1970, *Profession of Medicine* and *Professional Dominance)* which asserted that the medical profession (doctors) dominated other health care occupations in the division of labor. Nearly two decades after his original work and while conceding profound organizational changes and a transitional status (Freidson 1986; Freidson 1985), he still views the medical profession as:

> "Dominant in a division of labor in which other occupations were obligated to work under the supervision of physicians and take orders from with its exclusive license to practice medicine, prescribe controlled drugs, admit patients to hospitals, and perform other critical gatekeeping functions, the medical profession is portrayed as having a monopoly over the provision of health services." (1985, 13).

Attention is focussed on Freidson's view of professional dominance because in some circles it remains the dominant view of professionalism. However, it continues to come under serious challenge (Starr 1982; Larson 1980; McKinlay 1977; Coburn et al. 1983; Oppenheimer 1978). In one of his latest contributions (1985), Freidson tests the adequacy of alternative explanations of the changing position of doctors (especially deprofessionalization and proletarianization) against the "standard" of his own view of professional dominance.

While perhaps an adequate description of the situation of doctors back in the 1960s, much water has passed under the bridge since that time. Indeed, Freidson seems to overlook the period that has elapsed since his original important contributions. Defending his position in 1985 (Freidson 1985), he refers to the position that he "asserted not long ago" (1970). A great deal of change has occurred over the intervening 15 years however, some of which has been described above. There is nothing wrong with modifying or refining a position on the basis of intervening change, or new data and experience (McKinlay 1973).

Quite apart from the fact that it is now necessarily somewhat dated, Freidson's description and approach has additional limitations:

(a) Grounded in the social constructionist perspective (Bucher and Stelling 1969), it raises more questions than it is able to answer. Its ability to accommodate the macrostructural changes that have occurred in health care has been described elsewhere (McKinlay 1977).

(b) The professional dominance perspective is a description of an earlier state of affairs — a snapshot of the position of doctors back in the 1960s — not an explanation or theory which sustains close scrutiny today. Practicing physicians familiar with Freidson's work, view it as an account of an earlier and much preferred golden age (Burnham 1982). Freidson bases his work in the past (1960's) and attempts to explain the present. The thesis of corporatization, as proletarianization, looks towards the future and argues, on the basis of what is presently occurring and has already occurred in other sectors of the economy, what is likely to happen to doctors in the future.

(c) Freidson (1985; 1977) bemoans the absence of evidence to support the rival theories of deprofessionalization and proletarianization. One should note that apart from the observational work reported in Doctoring Together (1975) Freidson has never gathered or reported primary data to support his own viewpoint (only secondary sources are ever used). Moreover, it is extraordinarily difficult to obtain information from say, the AMA, or to gain access to medical institutions. The evidence for professional dominance is no stronger, or weaker, than that used to advance the rival theories of deprofessionalization and proletarianization. The point is we are all groping under the same light, which is often kept deliberately dim. Moreover, it is very

difficult, if not inappropriate, to apply traditional positivistic techniques to the study of change of the order captured by the notion of proletarianization. Imagine asking yeoman farmers and artisans in Elizabethan England, through questionnaires and interviews, if they appreciated the longterm consequences of the enclosure movement! Quite the same limitation is present in the modern study of the historically changing relation of doctors to the means of health care production.

(d) Freidson (1985) has often depicted competing theorists as political visionaries — their work being "too grand and sweeping to have much more than a rhetorical and possibly political value"— "...proletarianization is not a concept as much as a slogan", and "it would be a mistake to regard such literature (proletarianization) as evidence of actual change instead of desire for change" (Freidson 1986). One should note that concern over the changing situation of doctors and the worrisome direction of health care is also coming from some of the most conservative circles — from Harry Schwarz, in the New York Times (1986), who writes that, "Md's are getting a raw deal" to Arnold Relman (1980), editor of the New England Journal of Medicine, who warns of the danger of the medical industrial complex, — a work that bears a resemblande to earlier work on the medical industrial complex in Monthly Review in 1978 (McKinlay 1978).

TOWARDS PROLETARIANIZATION

The healthy debate over the changing position of doctors within the rapidly changing health care system is likely to continue for some time. Along with others in Britain (Armstrong 1976; Parry and Parry 1977); Australia (Willis 1983); Canada (Armstrong 1976; Freidson 1985; Esland 1980; Crichton 1976; Wahn 1985); Scandinavia (Riska 1985); and the U.S. (Braverman 1974; Oppenheimer 1978; Friedman 1981; Crichton 1976; Marx 1977) we have elaborated one viewpoint (proletarianization), and have presented as much data as can be easily mustered. Although Freidson views it as "equivocation", several clarifying caveats have been deliberately introduced in an attempt to minimize misunderstandings associated with the notion of proletarianization. The theory of proletarianization seeks to explain the process by which an occupational catecory is divested of control over certain prerogatives relating to the location, content, and essentiality of its task activities, thereby subordinating it to the broader requirements of production under advanced capitalism. That is admittedly and necessarily a general definition. However, in order to provide operational specificity, and to facilitate the collection of the evidence which everyone desires, seven specific professional prerogatives which are lost or curtailed through the process of proletarianization are identified as follows:

1) The criteria for entrance (e.g. the credentialing system and membership requirements;

2) The content of training (e.g. the scope and content of the medical curriculum);

3) Autonomy regarding the terms and content of work (e.g. the ways in which what must be done is accomplished);

4) The objects of labor (e.g. commodities produced or the clients served);

5) The tools of labor (e.g. machinery, biotechnology, chemical apparatus);

6) The means of labor (e.g. hospital buildings, clinic facilities, lab services); and

7) The amount and rate of remuneration for labor (e.g. wage and salary levels, fee schedules) (McKinlay and Arches 1985).

Which of these prerogatives is lost, or curtailed, through proletarianization is associated with the relative power of any occupation and is a function of the degree of unity or cohesiveness within an occupational group, the stage of production associated with the sector in which the occupation is located, and the extent to which the tasks of the occupation can be technologized.

Figure 1 lists these important prerogatives and contrasts the situation in the U.S. of small scale fee-for-service doctors in the past

(say, around the turn of the 20th century) with the situation of bureaucratically employed doctors today. Every single prerogative listed has changed, many occurring over the last decade. The net affect of the erosion of these prerogatives is the reduction of the members of a professional group to some common level in the service of the broader interests of capital accumulation. One of the difficulties for the proponents of proletarianization is that the process is very difficult to recognize. Indeed, it is occurring at such a level and so slowly in some cases that it may only be amenable to historical analysis some time in the future. It would be a mistake to view this as a cop out.

With regard to doctors who are increasingly subject to it, the process is masked both by their false consciousness concerning the significance of their everyday activities and also by an elitist conception of their role, so that even if recognized, doctors are quite reluctant to admit it.

While experiencing, on a daily basis, what has been described above, many physicians do not comprehend the historical magnitude of the process we have been describing. To capture the level of our analysis of what is occurring, it may be useful to parallel it with early industrial developments in cottage industry based Elizabethan England or changes in American agriculture — in most

Figure 1. Some differences between the working conditions of doctors around 1900 and today.

Key prerogatives of an occupational group	Physicians in small-scale, fee-for-service practice (1900)	Physicians in bureaucratic practice today (1986)
1. Criteria for entrance	Almost exclusively upper and middle-class, white students	Medical schools forced to recruit proportion of minorities and women.
2. Content of training	Largely dictated by the AMA through local medical societies.	Federal government and other "outside" interests affecting the content and scope of curriculum through training programs, student loans, etc.
3. Autonomy over the terms and content of work	Work typically more generalized and controlled by the individual practitioner himself.	Work typically segmentalized and directed by administrators in accordance with organizational constraints (profit) and government regulations.
4. The object of labor	Patients usually regarded as the physician's "own patients."	Patients are technically clients, or members of the organization, who physicians share with other specialists.
5. The tools of labor	Equipment typically owned or leased by the practitioner and employees are hired by the practitioner.	Technology typically owned by the employing organization and operated by other bureaucratic employees.
6. The means of labor	The physical plant is typically owned or rented by physicians themselves.	The physical plant is typically owned by and operated in the interests of the organization.
7. Remuneration for labor	The hours worked, the level of utilization and the fees charged determined by the individual practitioner.	Regular hours of work at an established salary level, service fees established by government, sometimes limitations on "outside practice."

of which situations industrialization and corporatization slowly shunted aside small scale production, eroding the market situation of independent workers. A major affect of the enclosure movement in England was to slowly drive many small growers and grazers off the land into the cities where factories were developing and where they would become wage earners. These factories, in turn, eventually penetrated the countryside, destroying the yeoman based agriculture and cottage industry in much the same way that large scale agricultural interests in the U.S. have been squeezing out small farmers.

It is our argument then that the industrial revolution has fully caught up with medicine. We are beginning to see the same phenomena in this sphere of work. From the preceding description, it is clear that we view the theory of proletarianization as a useful explanation of a process under development, not a state that has been or is about to be achieved. The process described will most likely continue for a considerable period of time. An earlier article (McKinlay and Arches 1985), on the social transformation of doctoring, was entitled, "Towards the Proletarianization of Physicians", not "The Proletarianized Physician". The term "proletarianization" denoted a process. Use of the preposition "towards" was intended to indicate that the process was still continuing. Roemer (1986) has recently offered a critique of the notion of proletarianization. He raises serious points and no doubt the thesis could benefit from some fine tuning (McKinlay and Arches 1986). No one can have the final word on this subject, especially when we are attempting to explain a trend of which we are in the midst. Only time will tell who is most correct in assessing the historical trends discussed. Perhaps, this work should be put aside until the turn of the century. If what occurs in the next years is anything like the dramatic transformation we have witnessed over the last 15 years (since 1970), doctoring then will bear little resemblance to that which is being discussed today.

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SUMMARY

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Corporatization of health care is dramatically transforming the medical work place and profoundly altering the everyday work of the doctor. This paper discusses recent changes in U.S. health care and their impact on doctoring. Major theoretical explanations of the social transformation of medical work under advanced capitalism are outlined. The adequacy of the prevailing view of professionalism (Freidson's notion of professional dominance) is considered. An alternative view, informed by recent changes, is offered. While the social transformation of doctoring is discussed with reference to recent U.S. experience, no country or health system can be considered immune. Indeed, U.S. experience may be instructive for doctors and health care researchers in other national settings as to what they may expect.

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