COMMUNITY, MARKET, AND HIERACHY IN THE EVOLVING ORGANIZATION OF PROFESSIONAL WORK: THE CASE OF MEDICINE

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DRAFT chapter for Daniel Muzio, Stephen Ackroyd and Jean-Francois Chanlat, eds., Redirections in the Study of Expert Labour

Version: April 8, 2007

Acknowledgements:

Our thinking has been shaped by our research collaboration with Patricia Riley, Jordana Signer, Ben Lee and Ram Satrasala, and from discussions with Charles Heckscher, Paul Kurtin, Bill Mason, Don Berwick. Larry Prusak, Roy Greenwood, Steve Shortell, Jody Gittell, and David Smith. We thank the Packard Foundation and the Institute for Knowledge Management (now known as the Institute for Knowledge-

Based Organizations) for generous financial support. They bear no responsibilities for the opinions expressed here.

Professionals constitute an increasingly important occupational category. They are key actors in an increasingly knowledge-intensive economy (Bell, 1973; Quinn *et al.,* 1996) and they play a central role in the accelerating generation and diffusion of innovations (Scott, 1995; Swan and Newell, 1995). Much of the scholarly interest in professionals in the US and UK has focused on the relative independence of professionals in those countries from market and hierarchical pressures. A rich tradition of research has debated whether this independence is destined to erode — as happened to the traditional petite bourgeoisie — or whether, on the contrary, it is more likely to generalize across the growing number of knowledge workers and expert occupations (Giddens, 1991; Reed, 1996; Sullivan and Hazlet, 1995).

In this chapter, we discuss the case of medicine, with side glances at law and other professional categories. We first review the central role traditionally played by community in structuring professional work; we then document the growing influence of market and hierarchy principles in the progressive restructuring of professional work over recent decades; and finally, we discuss current trends suggesting that new forms of community are emerging, creating new combinations of market, hierarchy, and community principles.

We focus on medicine in the US. This partly for parochial reasons -- the mounting crisis of the US healthcare system will have momentous effects -- and partly because medicine is an emblematic case that can illuminate the general debate on professions. Medicine is emblematic for three reasons. First, medicine (along with law) is among the most highly professionalized occupations -- in the conventional sense that access requires advanced training and some form of certification, and that practitioners assume responsibility for the outcomes of the services they offer. Second, one of medicine's key institutions, the hospital, is a *locus classicus* of research on professional organizations (Flood and Fennell, 1995; Freidson, 1963; Scott, 1982; Strauss *et al.*, 1963). And third, medicine has been subject to intensified performance pressure from both outside and within the industry (Scott *et al.,* 2000), and the resulting changes, while in some ways unique to medicine, are surprisingly similar to those experienced in other professions such a law (Nelson and Trubek, 1992), consulting and accounting (Hinings *et al.*, 1999), and teaching (Porter, 1989; Rosenholtz, 1987) (see also chapter 2 by Muzio and Ackroyd and chapter 3 by Flood in this volume).

THREE ORGANIZING PRINCIPLES

Our analysis is framed by the contrast between three coordinating principles and their corresponding mechanisms: (a) the hierarchy principle, which relies on the authority mechanism, (b) the market principle, which relies on price, and (c) the community principle, which relies on trust. (Some authors replace community with "networks" in this tripartite structure: networks, however, is less precise, because markets and hierarchies are also networks. We opt for community over Ouchi's (1980) clans because of the specific, traditionalistic connotations of the latter.) Professional work, we will argue below, relies primarily on community — trust relations between professional peers and between professionals and their clients — and only secondarily on market or hierarchy (see also Freidson, 1994, chap. 11; Freidson, 2001; Goode, 1957; Parsons, 1971; Sharma, 1997; Hanlon, 2004). However, in the empirical structuring of real institutions, all three principles and their corresponding mechanisms are typically at work simultaneously albeit in varying proportions. In medical groups for example, even though collegial decision-making and work practices (i.e., community) are typically dominant, we also observe remuneration based on billings and profit sharing as well as some measure of hierarchical control over the assignment of tasks.

These three organizing principles have different strengths and weaknesses. As many scholars have argued, the community form is particularly effective at knowledge generation and diffusion (Adler, 2001; Dore, 1983; Eccles and White, 1988; Ouchi, 1980; Powell, 1990). The market principle does not

handle well the public goods aspects of codified knowledge, and the hierarchy principle does not handle well tacit knowledge's embeddedness in practice. The market affords more flexibility, and hierarchy affords more control; but community is typically prominent in collectivities — like professions — where knowledge creation and diffusion are critical. Community's main weakness is the risk of closure and insularity.

This three-dimensional representation helps reframe a key debate surrounding medicine and other professions. Given that professionals increasingly work in organizations rather than in solo practices, and given too that these organizations increasingly take a hierarchical form and have come under increasing market pressure, there has been considerable debate over the future organizational form of professional work. We acknowledge that the ascendancy of market and hierarchical principles in the structuring of knowledge-work is pervasive; but we also argue that community remains critical.

THE KEY ROLE OF COMMUNITY

The distinctiveness of the professions has been characterized in terms of (a) their tasks and expertise, (b) the social relations of coordination and control of that govern their activity, and (c) the values that shape their normative orientations and subjective identity. In analyzing the distinguishing features of professional work, there is considerable debate over the direction of the causal arrows linking these three sets of attributes. Some (e.g. Parsons, 1939; Savage, 1994) see specialized expertise as the key distinguishing feature of professions and see the other characteristics of professions — their distinctive values and structure — as flowing from that expertise as a matter of functional necessity. Others (Larson, 1977) focus on structure, and in particular on the professions' monopoly power and social closure. Here, professionalization is seen as "an attempt to translate one order of scarce resources — specialized knowledge and skills — into another — social and economic rewards" (Larson, 1997, p. xvii). The structural power perspective views the difference between professional expertise and the skills used in other occupations as the result of jurisdictional battles waged between competing social groups and as a matter of perception shaped by interested actors. The power theorists thus criticize the expertise perspective for accepting — and thus unwittingly legitimating — the arguments that professionals use to justify their efforts at upward social mobility (Johnson, 1972; Roth, 1974). A third perspective, often expressed by professionals themselves, emphasizes their distinctive values: a service orientation, a sense of calling, and a shared professional identity.

Our reading of this literature suggests that there is merit to all these points of view. In integrating them, we highlight the centrality of the community principle in the organization and experience of professional work. Professionals' tasks and expertise requirements make community an efficient organizational form. The collegial structure of professions gives professionals both the power to assert their jurisdiction over such tasks and the structural means by which to govern themselves in the performance of these tasks. Values constitute the normative dimension of the professional community and are a key mechanism for assuring its capacity to guide work. Together, these three features make community the distinctive feature of the organization of professional work. The following paragraphs develop this argument and use it to make sense of the case of medicine.

Task and expertise.

Physicians' tasks, like those of other professionals, are often highly uncertain, both variable and ambiguous. Such tasks are difficult to pre-specify or codify into rules. More accurately, even if much of the requisite working knowledge can sometimes be captured in detailed, formalized procedures, both mastery of these procedures and skill in dealing with the remaining uncertainties remain critical. (Surgeons for example rely on detailed procedural checklists.) It is at least in part due to these task characteristics that professionals are granted discretion — the right to exercise their own judgment. Whether due to their relative variability or to their ambiguity, professionals' tasks are not very amenable to the process controls that characterize hierarchy nor to the output controls that characterize markets. Professions rely mainly on input controls in the form of lengthy standardized training (Mintzberg, 1979).

While nonprofessional work also may require the mastery of certain skills, the distinguishing feature of professionals' skill is an underlying "body of theory" (Abbott, 1988; Greenwood, 1957). The importance to professional status of abstract theory helps explain the differentiation we observe within medicine and many other professions of specialized researcher-theoretician roles dedicated to the creation of new knowledge — and explains too the high status accorded to such roles.

While a theoretical knowledge-base appears to be an essential prerequisite for an occupation's claim to professional status, we should not, however, overlook the role played by practical, experience-based, know-how. According to Morris (1999), only 10% to 20% of the diagnosis and treatment decisions made by the typical physician are based on theory — notwithstanding the fact that contemporary medicine has a theoretical base that is relatively elaborate compared to most other professions. The much larger proportion of medical decisions is informed by practical experience rather than by scientific knowledge. Law, too, relies to a considerable extent on a "craft" type of knowledge (Scharffs, 2001). Status and power accrue to physicians and other professionals not only in proportion to the theoretical elaboration of their knowledge but also in proportion to their experience-based knowledge (for a discussion of knowledge in new forms of expertise, refer to chapter nine by Fincham *et al.*). In either form, the professional's expertise is esoteric relative to the layman. Power theorists argue that professionals deliberately create an aura of "indetermination" about their activities so as to deny outsiders the possibility of rationalizing or codifying professional expertise (Boreham, 1983); this indetermination can be associated with either form of knowledge.

Consistent with the importance of both theoretical and practical knowledge, professions typically require both extended, university-based formal training and lengthy apprenticeships. (Power theorists point out that these as anti-competitive barriers to entry.) Together these two forms of learning inculcate both skills and identities. Prototypical in this regard are the combination of medical school and residencies, and the combination of graduate school and the obligatory period as a non-partner "associate" in law, accounting, and consulting firms (Middlehurst and Kennie, 1997).

The rapid evolution of the knowledge base of medicine and other professions makes continuing education important. Medicine, for example, evolves with science; law evolves with legal rulings and regulations. Requirements for continuing education are part of the institutional *quid pro quo* between profession and government. These requirements are one way of assuring the institutional sources of the trust that professionals enjoy (Zucker, 1986).

The structures of professional work.

The structuring of medical work, like that of other professions, is characterized by considerable autonomy from both market and hierarchy pressures. This freedom from external control characterizes both the governance of the profession as a whole ("occupational control" in Child and Fulk, 1982) and the individual professional's daily conduct (task, or technical, control). These two aspects are distinct but related features of the community principle as it has shaped professional work.

At the level of the profession as a whole, medicine like other "liberal" professions maintains autonomy in the ability to establish, monitor, and enforce its own membership criteria and work standards. This "closure" (Larson, 1977) takes the form of licensing and accreditation of training institutions, credentialing of professional practitioners, and administrative arrangements that leave the control of professional work to other professionals (see chapter two by Muzio and Ackroyf for an analogous discussion in the legal profession). This collective autonomy requires special legal privileges — in effect, a state-sanctioned monopoly, expressed in a license or charter. Whence the critical role of the state in the constitution of the liberal professions (Freidson, 2001; Macdonald, 1995). As a result of this autonomy, and in contradistinction to the model of pure and perfect competition, the market for professional services is characterized by high, institutionalized barriers to entry and by professions' regulation of their members' behavior.

Autonomy at the individual, task level involves the right to decide what kind of work is to be done and how, without hierarchical or commercial interference. In the case of medicine, this is codified in

the legal doctrine banning the "corporate practice of medicine" — now honored more in the breach (Freiman, 1998; Robinson, 1999). Notwithstanding considerable variation along this dimension, professionals, even when they are employees rather than self-employed, typically enjoy more autonomy than other employees of hierarchical and business organizations (Wallace, 1995). The resulting intra-organizational tensions have given rise to a large body of research which we discuss below.

These two levels of autonomy are related. In exchange for their individual autonomy — in lieu of both hierarchical control by outsiders and market control by the force of competition — professionals submit to the discipline of peer control as part of a "regulative bargain" (Baer, 1986; Cooper *et al.*, 1994). This displacement of hierarchical and market controls is justified by professionals' claim that most professional services cannot be effectively evaluated by clients or other lay people, and that the people best qualified to judge the work of a professional are fellow professionals. This claim is more credible where clients and administrators are less sophisticated (see Galanter, 1983, on the differences in this regard between law firms serving individuals versus large corporate clients). (See also chapter four by Pinnington and Suseno in this volume). In practice, however, professionals have historically resisted both output controls and process controls even when these controls are exercised by peers. The traditional autonomy of the professional is much more compatible with input controls, such as restricting access to the profession to graduates of accredited institutions (Mintzberg, 1979).

Commensurate these features of professionalism, physicians, like other practitioners in the most professionalized occupations, have not traditionally worked as employees subject to hierarchical organizational controls. Physicians and lawyers have traditionally worked as solo practitioners or as members of small partnerships. Moreover, when they do work within larger organizations -- medical groups or hospitals for example -- order is typically negotiated rather than imposed, and the role of hierarchical superiors is advisory rather than decisional (Goss, 1961). The resulting structure is typically complex — 'the most elaborate and intricate organizational arrangements yet devised' (Scott, 1991, p.253). The basic reason for this complexity is that the administration of a professional organization is usually partitioned to reflect the differences in autonomy of its constituent groups. This complexity is further increased by the structures put into place to coordinate the pervasive input, process, and output interdependencies with other professional specialties and non- or less-professionalized occupations.

Hospitals represent an extreme case. The most common structural configuration of U.S. hospitals today (indeed, one that has prevailed for most of the past century) is bifurcated (Freidson, 1975). On one side, the hospital directly employs an administrative and support staff who are managed under traditional hierarchical authority as well as staff from semi-professional groups such as nursing which function under several layers of authority exercised by practitioner-managers (Davis, 1966). And on the other side, the medical side, the hospital does not employ most of its physicians, but only offers independent practitioners "privileges" — the right to use hospital facilities and personnel. (The main exceptions are the "hospital based" specialties of pathology, radiology, anesthesiology, the new specialty of "hospitalist".) Moreover, physicians often have privileges at several hospitals. Notwithstanding their formal independence from the hospital, the medical staff is collectively responsible through its committees for clinical policies and practices in the hospital. Forms of "hospital-physician integration" have proliferated in recent years; but this traditional form remains dominant (Budetti *et al*., 2002; Burns and Wholey, 2000). In an increasingly popular alternative, the medical staff of a hospital is organized as a self-governing partnership which enters into a service contract with a hospital; but here too, the medical staff retains collective control over clinical practices in the hospital.

Professional values.

Community as a coordination principle is weak if it relies exclusively on peer surveillance: a robust community also requires that its members internalize a common set of values. The values prototypically associated with professionals are distinctive in the commitment to service, the devotion to a higher "calling," and in creating a shared identity for the professional community. The American Board of Internal Medicine, for example, in its "Project Professionalism" report (American Board of Internal

Medicine, 1998), focuses on altruism, duty, excellence, honor and integrity, accountability, and respect for others as features that define physicians as true professionals (see chapter eleven by Hodgeson for an interesting contrast with new professionalization projects). These values are reproduced by professional socialization (Becker, *et al.,* 1961) and, more fundamentally, by the structural conditions of professionalism which reinforce the power of community, which keep hierarchical authority at arm's length, and which limit the corrosive effects of market competition.

The dominance (and variability) of community

Occupations differ in the relative salience of the community principle. Reed (1996) differentiates three groups of "expert" occupations: independent professions (doctors, architects, lawyers), organizational professions (managers, salaried engineers, technicians), and "knowledge workers" who function as experts-for-hire (consultants, project engineers, computer analysts). He notes that coordination among the first group relies primarily on collegial relations; the second group relies more on hierarchy; and the third group relies more on a network of market relations. The second and third of these groups encounter difficulties in asserting the claims to professional status precisely to the extent that their work is organized by principles other than community.

We should note in passing that it was only in the U.K. and U.S.A. that some expert occupations took on the structural autonomy and ideology we think of as the differentiating features of the professions. In continental Europe, government's role was stronger and more direct: a higher proportion of professionals are employed by the state; many are educated at prestigious, state-controlled institutions of higher education; and it is with these institutions rather than a corporate professional body that they identify (Freidson, 1994, Ch. 1).

THE GROWING INFLUENCE OF MARKET AND HIERARCHY

Over the preceding decades, the advanced capitalist world has witnessed the expansion of both market and hierarchy principles into new domains. Both of these trends in turn require growing bodies of expertise: the market throws up needs for new technologies and related technical expertise, and growing organizational complexity in both government and industry creates needs for administrative and legal expertise. The expansion of government hierarchies facilitates the growth of health and cultural professions. And all of these drivers combined encourage the growth of teaching professions (Giddens, 1991; Reed, 1996). Simultaneously however, market and hierarchy have encroached upon community in the organization of these expanding categories of professionals. Medicine embodies this simultaneous expansion and mutation of professionalism.

Changing tasks and expertise.

Recent years have seen medicine, like other professions, split horizontally into subspecialties (see chapter six by Domagalski). The number of American Medical Board specialties has tripled since the mid-1960s. Specialization among nurses has also proliferated. In the US, licensure for health occupations occurs primarily at the state rather than the federal level, and in California for example, the number of licensed health care occupations grew from 16 in 1969 to over 40 in the 1990s (Scott *et al.*, 2000).

A key consequence is greater task interdependence. Physicians today are far more likely that 50 or 100 years ago to work in interdependent teams with other specialists — others practitioners from within their specialty, professionals from other specialties, and non-professionals. Consider the replacement of the general practitioner and the generalist surgeon by the host of specialist doctors, nurses, technicians and administrators in medicine today. Specialization and the resulting task interdependence in turn give rise to growing pressure to strengthen one or more the three coordination mechanisms — and to a loss of professionals' technical autonomy

Like many other professionals, physicians find that their expertise is becoming less esoteric -- there is a narrowing competence gap with clients, a trend interpreted by Haug (1975) and Wilensky (1964) as deprofessionalization. As clients become better-educated, they become more assertive in their relations with professionals and they become more willing to "shop around" (Marquand, 1997). Middle-

class patients now take a more active role in managing their medical conditions. They demand more information from their physicians, and they are more likely to research their conditions on their own. (Exploiting and reinforcing this trend, pharmaceutical companies have begun advertising to patients, encouraging patients to demand their products from the physician.)

Standardization and formalization. As with other professions, the practice of medicine is increasingly shaped by written guidelines and policies. Over the past decade, interest in clinic practice guidelines (CPGs) in health care organizations has exploded (a point also made by Dent in chapter five). In pulmonary medicine for example, the number of journal articles discussing guidelines increased from 1 in the 1974-1978 period, to 10 in the 1979-1983 period, to 182 in the 1994-1998 period (Hackner *et al.*, 1990).

Proponents have argued that CPGs give physicians access to the most up-to-date approaches best supported by the available evidence; they thus enable physicians to reduce unnecessary variation and improve cost and quality simultaneously. Critics warn that CPGs could lead to "cookbook medicine" and reduce clinical autonomy (Ingelfinger, 1973; Kassirer and Kopelman, 1990). Panush (1995) for example denounces, "Algorithmic medicine. Minimalist medicine. Survivalist medicine. Cookbook medicine. Mechanistic medicine. Nonthinking medicine. Noncognitive medicine." Rigid adherence to CPGs may prevent physicians from recognizing patients as individuals (May, 1985). CPGs are sometimes used to control costs at the expense of quality (Lohr, 1995).

New technologies. The accelerating pace of knowledge growth has made information technology and its mastery increasingly important for physicians and many other professionals. Governmental and private organizations are responding by using information technology to support new information diffusion mechanisms. In 1997, U.S. National Library of Medicine made MEDLINE (its database of medical research abstracts) available free of charge via the Internet.

A second set of innovations brings information technology closer to practice in the form of computer-based decision support systems. Such systems have been shown to significantly improve the accuracy of physicians' diagnoses and prescriptions (Friedman *et al.*, 1999). As hospitals adopt continuous quality improvement methods, many find that they need to redesign their information systems to integrate technical and administrative databases, and to provide up-to-date, credible data for accelerating learning cycles (Bradley *et al.*, 2001).

Innovations in information and communication technology have also given clients more access to information that was previously restricted to professionals. Surveys have found that 50% to 75% of people with access to the World Wide Web have used it to access health information, and that those who do will seek such information more than three times a month (Powell and Clarke, 2002). This directly affects the power relationship between professionals and those they serve.

Aside from the challenges of professional learning and more knowledgeable clients, new developments in information and communication technology often affect the industrial and occupational division of labor. Within hospitals, technological innovations also affect relationships between occupations (Barley, 1990; Child and Fulk, 1982; Edmondson *et al.,* 1999).

New Skills. Faced with all these changes, physicians are under pressure to acquire new skills. They have always had an obligation to keep up with technical knowledge in their field through continuing education. However, the new professional environment demands that they also acquire new learning skills. Physicians are learning how to critique and challenge the assumptions and processes underpinning professional practice in order to accelerate practice improvement (Middlehurst and Kennie, 1997). Evidence-based medicine is one example.

With hospitals' and medical groups' growing size, complexity, and competitive pressure, a growing numbers of physicians are developing management and business skills (Maister, 1993; also see chapter six by Dogamalski). These skills are interpersonal (e.g., leadership, team-building, and negotiating), technical (e.g., marketing, budgeting, and accounting), and administrative (e.g., project management) (Hutchins, 1999; Middlehurst and Kennie, 1997; Simpson, 1994).

Changing structures

Intensifying competition. Physicians, like professionals of all kinds, have come under increasing pressure from market competition. These pressures come from various directions and take various forms, often reinforcing each other. First, we see growing competitive pressures bearing in from outside. Insurance companies, themselves under competitive pressure, are demanding cost reductions from hospitals and medical groups in their competition for the rents associated with health care (Zwanziger *et al.*, 2000). Second, physicians have come under economic competition from other, rival professions, for example nurse practitioners (Lin *et al.*, 2002; see also chapter five by Dent in this volume). Finally, and partly as a result of these external pressures, we observe growing market competition among colleagues within professional specialties. Originally almost taboo, advertising has become commonplace. Price competition appears to be increasing.

This intensification of market rivalry has complex roots. It is arguably at least in part the result of the colonization and commodification of the life-world characteristic of capitalist, market-based societies (Habermas, 1975). But it is also a result of the recent political-ideological conjuncture: as neo-liberal ideologies replace welfare-state ideologies, all special charters are attacked as "restrictive practices" that impede the invisible hand of the market. In the case of medicine, competition among physicians intensified as a result of federal programs in the 1970s designed to expand medical school enrollments. The federal government also passed the Health Maintenance Organization Act in 1973 with the explicit goal of inducing competition in the health care market (Patel and Rushefsky, 1995). The US Supreme Court held in *Goldfarb v. Virginia State Bar* in 1975 that professional associations could not set fee schedules, and in *Bates v. State Bar of Arizona* in 1977 found that restrictions on advertising unfairly penalized new entrants to the legal profession.

The effects of intensifying competition are manifold. First, professional associations split, as the subspecialties form their own professional associations to compete more effectively for legitimacy and for a monopoly over desirable problems or solutions. The new specialties must negotiate their legitimacy with the more powerful, more central segments of the profession for jurisdiction over the new innovations (Abbott, 1988; Bucher, 1988; Halpern, 1992).

Intensifying competition also affects the technical organization of work (Causer, 1999; Dent, 1993; Kitchener, 2000). Deprofessionalization and proletarianization theorists see a trend towards an intensification of professional work and a reduction of the symbolic and material advantages of professional status. While the median real net income of physicians grew on average 2.1% per year between 1981 and 1990, it grew only 0.2% between 1990 and 2000.

Market competition has both encouraged and been encouraged by a trend toward greater centralization — the increase in the largest organizations' share of the industry — and concentration — the increase in the average size of professional organizations (see Muzio and Ackroyd and Kirkpatrick and Kipping for analogous tendencies in law and management consultancy). Between 1983 and 2001, the proportion of physicians in solo practices fell from 40% to 23%. The proportion self-employed in group practices grew slightly from 35% to 36.7%. The proportion practicing as employees rose from 24% to 35.1% (Center for Health Policy Research, 2003). At the other end of the spectrum, we have witnessed a massive shift from stand-alone hospitals and clinics to multi-hospital systems. According to American Hospital Association statistics, between 1990 and 2002, the total number of community hospitals in the United States fell from 5,842 to 3,025 while the number of those that were part of multi-hospital systems rose from 1,877 (32% of the total) to 3,604 (73%) (American Hospital Association, 2004). (See Burns and Wholey, 2000; Robinson, 1999 on the broader process of consolidation in health care and the evolution of physician organizations.)

Accountability. As a result of the various changes reviewed in the preceding paragraphs, physicians, like other professionals, have come under great accountability pressure. Peer review is traditional mechanism of professional accountability, reflecting the dominance of the community principle (see chapter ten by McKenna for a discussion of the relevance of this for the professionalization

of management consultancy). However, in practice, physicians traditionally refrained from criticizing colleagues' competence or ethics. Disciplinary boards seldom censured their colleagues, and they revoked licenses even less frequently (Freidson, 1984). The community form of accountability often degenerated into "the conspiracy of silence as well as the conspiracy of tolerance" (Freidson, 1984).While physicians have been granted the privilege of working as a self-regulating company of equals, all too often that self-regulation degenerated into complacency and "delinquent community" (Freidson, 1975).

Over the last decade or so, numerous stakeholders have demanded greater accountability for the quality and cost of medical (as other professional) services. All three organizing principles are increasingly deployed in these efforts to render physicians more accountable. Each of the three principles works through both external and internal mechanisms. Let us review them in turn.

* External *market* mechanisms of accountability rely on market competition. Rankings of cost-effectiveness and quality of American hospitals have been published for some time in magazines like *U.S. News and World Report*. Insurers put hospitals, medical groups, and solo practitioners in competition with each other for healthcare contracts.

* Within organizations, the market form of accountability is strengthened as doctors are held increasingly accountable for the costs of care by hospital and medical group executives. "Economic profiling" is now common, reflecting a broader trend towards the adoption of an "accounting logic" in many professions that previously had shunned such discourse (Broadbent and Laughlin, 1997; Cooper *et al.*, 1996; on museums, see Oakes *et al.*, 1998)

* *Hierarchical* accountability has also intensified, first in the form of both external legal-regulatory controls. Notwithstanding the wave of deregulation begun under the Reagan administration, healthcare has been subject to a growing number of regulatory bodies and texts (Scott *et al.*, 2000). The courts are also more often involved, as physicians become the object of a growing number of malpractice suits.

* Within organizations, physicians find themselves under increasing hierarchical control exercised by nonprofessionals, by other professionals from outside their fields, and by a growing hybrid category of professional-managers such as physician-executives (Hoff, 1999b) (on clinical directors in the U.K., see Ashburner, 1996; Bloomfield and Coombs, 1992; Doolin, 2002; Fitzgerald and Ferlie, 2000; on the U.S., see Hoff, 1999a). Physicians' decisions are now regularly subject to utilization reviews by medical groups, hospitals, and insurance companies (Geist and Hardesty, 1992). Physicians find themselves held to account for deviations from CPGs.

* *Community* mechanisms of accountability have been intensifying through changes in the nature of patient relationships. By proclaiming their ethical commitments to patients, the medical community subjects its legitimacy to the court of patient opinion — and ultimately, public opinion — which in turn creates a form of accountability. This patient-based form of accountability has arguably become more demanding as trust based on "professional mystique" is replaced by trust built on transparency of professional performance and by a generalized expectation of accountability (Child and Fulk, 1982; Middlehurst and Kennie, 1997).

* Finally, the environmental changes we have reviewed encourage the strengthening of collegial accountability through peer review within professional organizations. Some hospitals use regular meetings of department members as a forum for sharing practice knowledge, for reviewing physician practice profiles, and for monitoring the progress of performance-improvement project teams. In some hospitals, the Medical Staff's committees — such as those that review procedures, drugs, therapies, and medical records — serve not only the traditional function of assuring a floor of minimal acceptable quality, but also a new function as a forum for collective learning.

These changes, Freidson (1994) argues, are portentous. They bring medicine closer to the school-teacher model: teachers have lost autonomy and status to a stratum of specialized administrators who exercise increasingly hierarchical control, and to stratum of experts who promulgate guidelines and standards. These latter strata experience pressures, opportunities, outlooks, and interests that differ from

those of the rank-and-file professional. As the conflicts between these strata multiply, the risk of fragmentation of the profession grows, along with a concomitant loss of autonomy, power, and status.

Changing values.

Many observers argue that physicians, like other professionals, are losing their status as "trustees" of socially important knowledge and becoming merely expert labor for hire (e.g. Brint, 1994). Physicians, like other professionals, are often sharply critical of accountability mechanisms that rely on financial incentives, seeing them as violations of the true professional's service orientation. They are critical too of hierarchical mechanisms, arguing that they undermine professionalism by overemphasizing cost and ignoring quality. Faced with the market and hierarchical pressures we have described and with the resulting transformation of the terms, conditions, and content of their work, professionals' values have been destabilized. Responses have varied across the spectrum from corporatist, guild-like defense of the *status quo ante* to active embrace (regarding physicians, see Castel and Merle, 2002 on France; Dent in this volume, on the U.K.; Domagalski in this volume, on the U.S; Levay and Waks, 2005 on Sweden; see also Muzio and Ackroyd in this volume for a discussion of defence mechanisms in the legal profession).

On the defensive end of the spectrum, many professions have resisted the new pressures, with varying degrees of success. In one of the more remarkable manifestations of resistance, the American Medical Association house of delegates recently endorsed unionization of physicians in order to oppose managed care companies' pressures on fees and working conditions (Thompson, 2000). The American Bar Association has also recently endorsed unionization of lawyers facing similar pressures.

At the other end of the spectrum, some physicians are "winners" in the changes we have described, and embrace them whole-hearted if not always disinterestedly. Physician-owned facilities multiply, turning physicians into capitalist investors. In medicine, physician-executives are increasingly directing the professional practices of rank-and-file doctors through practice guidelines and utilization reviews. Freidson (1984) predicts the break-up of professional community into élites on the one hand and rank-and-file practitioners on the other.

In the middle, many rank-and-file professionals are still struggling to make sense of these recent changes (see, e.g., Hafferty and Light, 1995). Traditional professional values of autonomy are being challenged by the demands for collaboration in service delivery and collective process improvement (Carlson, 2002); but when these programs are seen as opportunities to improve quality of care, they are sometimes embraced. A survey of physicians by Tunis *et al.* (1994) found that 65% of respondents thought CPGs could improve quality of care -- but a similar percentage (68%) said they thought CPGs would be used to discipline physicians. Doctors, who previously saw their only ethical commitment being to the health of the individual patient, are now being asked (more precisely, told) to also consider costs. Some see this new demand as turning physicians into "double agents," trapping them in an impossible ethical dilemma (Angell, 1993; Lammers and Geist, 1997). Others see it as an opportunity to move medical ethics to a more realistic basis (Bloche, 1999; Mechanic, 2000), and are responding more "proactively" to the current challenges, seeking ways to leverage them to improve the effectiveness of professional work (see e.g. interviews in Castellani and Wear, 2000)

THE EMERGENCE OF NEW FORMS OF COMMUNITY

There is considerable debate over the extent to which professionalism and its distinctive reliance on the value-rationality of professional community is compatible with advanced capitalism and its characteristic emphasis on the formal rationality embodied in both markets and hierarchy (Ritzer and Walczak, 1988). In this debate, several broad positions can be discerned (on the corresponding positions in debates on the evolution of medicine, see Hafferty and Light, 1995; Hafferty and Wolinsky, 1991; Light and Levine, 1988; Light, 1993; Special issue of the Milbank Quarterly, 1988; Wolinsky, 1993). First, with Bell (1973), some advance a *professionalization* thesis according to which professions will gradually supercede corporations as the dominant organizing principle in society — a view whose antecedents go back to Durkheim and whose contemporary descendents are numerous in the literature on

the "knowledge economy." Second, against the professionalization thesis, some observers highlight the shift from the more autonomous form towards the more heteronomous form of professional organization. Some, such as Haug (1973) and Rothman (1984), interpret this as *deprofessionalization*, attributing the trend to exacerbated rivalry between professions, diffusion of expertise, and rising levels of public education and skepticism. Others (e.g. Derber *et al.* , 1990; McKinlay and Stoeckle, 1988) advance a *proletarianization* interpretation that highlights professionals' progressive subordination to hierarchical and market rationality. Finally, there are those who see the central vector of change not in the displacement of community, but rather in its *mutation*. Freidson (1984), for example, argues that there is little empirical support for the idea that professionalism's distinctive features have eroded, but much evidence that regulation within professions has become more rationalized and formalized.

We submit that the professionalization, deprofessionalization, and proletarianization theses all miss key considerations. The previous section presented data that makes the professionalization implausible, at least on the conventional understanding of professionalism. In this section, we argue that the deprofessionalization and proletarianization accounts miss the factors within a capitalist society that constantly reproduce and indeed magnify the need for the knowledge-creating power of professional community.

On our reading, much of the research in this field is vitiated by an assumption that professionals would cease to be professionals if their governance ceased being exclusively under the community principle and if market and/or hierarchy principles were to come into play. Krause (1996) states this assumption baldly: "Visualize a triangle, with the state, capitalism, and the professions at the corners." His analysis is that the professions are losing out to a combination of state and capitalist market forces. Savage (1994; 2004) makes a similar assumption in arguing the opposite thesis: seeing markets, hierarchies, and networks as mutually exclusive forms of organization, she argues that the technical uncertainty of medical professionals' work explains and ensures the persistence of the liberal professional model over corporatized forms of practice that would give market and hierarchy more influence (see previous chapter by Domagalski for a discussion of these trends in contemporary US medicine). Puxty et al. (1987) draw a triangle whose apexes are Market, State, and Community, and locate forms of professional regulation within this space. We argue that such analyses fall prey to a fallacy of misplaced concreteness: they treat their three components as mutually exclusive ideal types, and as a result they truncate the space of possible combinations by making it impossible to imagine that two or three of the organizing principles could be simultaneously at work in structuring concrete collectivities such as professions.

As we showed in the previous section, market and hierarchical pressures are profoundly reshaping medicine along with other professions medicine. The traditional fee-for-service model is now less common than capitation or nonproductivity-based salary; a growing number of hospitals no longer function on the traditional Medical Staff model but instead employ physicians directly and/or contract with medical groups (Casalino and Robinson, 2003; Robinson, 1999); physicians are losing their autonomy, increasingly accountable for the cost and quality of their services (see also chapter five by Dent).

On the other hand, however, we should not ignore a second powerful force that works to give community continuing, indeed growing, influence: the growing knowledge-intensity of medical and other professional work. Scientific medical knowledge continues to grow at an ever-accelerating rate. Moreover, more practical forms of knowledge are becoming more important: accountability pressures for greater efficiency and quality call for innovation that is more closely grounded in daily practice. Medicine has long relied on upstream, off-line R&D in universities or the medical device and pharmaceutical industries; but now pressures for cost-effectiveness, safety, and quality stimulate the emergence of performance-improvement practices that engage the rank-and-file practitioner (Audet *et al.*, 2005; Swan *et al.*, 2002). In this, medicine reflects broader trends: capitalist development is increasingly knowledge-intensive. And here is the rub: in medicine as elsewhere, effective knowledge-work needs community.

Knowledge-workers need community within which to learn the craft elements of their skill-sets and within which they can continually advance knowledge, both theoretical and practical. Neither market nor hierarchy nor any combination of the two is as effective as community in supporting knowledge generation and diffusion (Adler, 2001). The market is weak at capturing the yield of knowledge development activities, since knowledge leaks to competitors. Hierarchical mechanisms too are intrinsically weak in assuring high quality outcomes in knowledge-intensive processes, since the knowledge-work process and its outputs are difficult to evaluate. Empirical research on knowledge-intensive organizations underlines the importance of community in the guise of the "communities of practice" (Adler, 2006; Davenport and Prosak, 1998; Davenport and Prusak, 2005; Fulmer, 2001; Leonard and Kiron, 2002; O'Dell *et al.*, 1998; Wenger *et al.,* 2002; Wenger and Snyder, 2000).

The conclusion we draw from the research discussed below is that the future of professions lies not in the demise of community, but primarily in new combinations of market, hierarchy, and community principles and the emergence of new forms of community – forms no longer rooted in the autonomy of professionals, but in the quality of their organized collaboration (cf. Davis, 1983; see also Rothman, 1987; Scott *et al.*, 2000).

The emergence of new forms of community.

Consider the portrait painted by the Institute of Medicine of "a new health system for the 21st century" (Institute of Medicine, 2001). Where the traditional care delivery model is one in which "Individual physicians craft solutions for individual patients," in the model advocated by the IOM:

> 'The delivery of services is coordinated across practices, settings, and patient conditions over time. Information technology is used as the basic building block for making systems work, tracking performance, and increasing learning. Practices use measures and information about outcomes and information technology to continually refine advanced engineering principles and to improve their care processes. The health workforce is used efficiently and flexibly to implement change.'

Robinson (1999) describes the mutation underway in these terms:

> 'The now passing guild of autonomous physician practices and informal referral networks offered only a cost-increasing form of service competition and impeded clinical cooperation among fragmented community caregivers. The joining of physicians in medical groups, either multispecialty clinics or IPAs, opens possibilities for informal consultation, evidence-based accountability, and a new professional culture of peer review' (p. 234)

The leitmotif of the new form of professionalism is "collaborative interdependence" (see Silversin and Kornacki, 2000a; Silversin and Kornacki, 2000b). A growing number of hospitals are drawing physicians into collaboration with nurses and other hospital staff to improve cost-effectiveness and quality, often bringing together previously siloed departments in the process. A recent report describes the creation at Riverside Methodist hospital in Ohio of "clinical operating councils" that brought such groups together to examine improvement opportunities in broad "service lines" such as primary care, heart, women's health (Hagen and Epestin, 2005). Other hospitals have found that such committees are the ideal vehicle for developing and tracking the implementation of clinical pathways (Adler *et al.*, 2003). Here, guidelines are not imposed on physicians by insurance companies, but developed collaboratively by teams of doctors, nurses, technical and administrative staff — in the process, drawing physicians out of their fiefdoms. Intermountain Health Care is one such system, a case that also shows the importance of new support functions that can facilitate efforts to generate practice-based knowledge (Bohmer *et al.*, 2002).

Some of the larger medical groups too have been developing new organizational forms to support the collaborative learning needed in the new competitive environment. Governing boards are evolving away from simple partnership meetings towards more complex, articulated structures capable of exercising effective leadership (Epstein *et al.*, 2004). At organizations as different as the Mayo Clinic and Permanente Medical Group, an ethic of collaborative interdependence has emerged as critical to performance and improvement (Olsen and Brown, 2001; Pitts, 2003). New organizational structures and

processes link previously autonomous physicians and departments in improvement efforts (Norton *et al.*, 2002). Communities of practice are being used in lieu of conventional Continuing Medical Education to accelerate learnng and diffusion (Endsley *et al.,* 2005; Frankford *et al.*, 2000; Parboosingh, 2002).“Quality improvement collaboratives” have attracted considerable attention as a way to bring together a broader community around specific improvement goals (for an overview Massound et al. 2006; for example Mills and Weeks 2004). The most ambitious of these bring together a variety of stakeholders from different hospitals, medical groups, health plans, and employers to learn from each other (Solberg 2005).

Alongside these cases in healthcare, other professions also provide examples of new forms of community. Numerous professional service firms are working towards what Maister (1985) called the “one-firm firm” (see also McKenna and Maister 2002 for an update.). Here, the emphasis is on teamwork rather than the “eat what you kill” ethos that still prevails in the vast majority of U.S. law firms (Poll 2003). As Cooper et al. (1996, p. 631) note:

> “The meaning of the term ‘partner’ has also changed. In the MPB, a partner is a team player, one who trusts the leadership and works for the common good, for example by transferring work to the person in the firm who is most competent or short of work.”

A growing number of professional firms in law and accounting are now seeking performance improvement through collaborative approaches to “practice management” (Lambreth 2005; Lambreth 2001; Yanuklis 2005). Some in-house legal departments are using participative approaches to Six Sigma (Sager and Winkelman 2001).

The concentration and centralization of the industry seems to facilitate the emergence of these new forms of community. “Best practices” such as disease management programs, quality-oriented practice pattern information, and financial bonuses for quality are far more common in large, integrated medical groups such as Permanente than in the “cottage industry” of private practitioners in small offices (Rittenhouse *et al.*, 2004).

A DIFFICULT EVOLUTION

Our analysis suggests that notwithstanding the growing salience of market and hierarchy pressures, community is reasserting itself in the organization of medical work, albeit in a new form. The evidence also suggests that the emergence of this new form of community is a difficult one.

Robinson (1999) dissects the multiple economic, legal/regulatory, and organizational challenges facing medical groups and other forms of “corporate” — i.e. organized — medical practice. The petty-bourgeois ideal of autonomy remains strong -- and not only as an expression of resistance towards subordination to market and hierarchy:

> ‘Many physicians, however, are individualistic in orientation and do not necessarily enter group arrangements very easily or comfortably. …[B]uilding physician groups is a difficult process. Most of the groups visited [in this study] are not well organized — they are groups in name only. Whatever group culture does exist is often oriented to preserving this loose-knit affiliation rather than developing a stronger organization. This culture of ‘autonomy,’ however, is not conducive to building an organization that encourages the development of physician-system integration or care management practices’ (Gillies *et al.*, 2001).

In American medicine as in some other professions, the pain associated with this evolution is acute. Managed-care companies attempt to influence treatment decisions through denials of payment authorization and drug formularies restrict the range of medications physicians can prescribe (Himmelstein *et al.*, 2001). A wave of hospital conversions to for-profit status have increased profits, but also led to reduced staffing and salary rates and to increased mortality rates (Picone *et al.*, 2002). A wave of resistance by physicians and public revulsion at some of the denials of treatment imposed by insurance companies seem recently to have slowed down the trend to corporatization that had accelerated during the 1985-2000 period (Cunningham, 2004). However, there is little doubt that the healthcare system, like

other professional complexes, will come under increasing pressure to dramatically improve cost-effectiveness and quality, and all the evidence points to the need for medicine to transcend the limits of the traditional liberal/independent profession form.

For those who see value in professionalism's distinctive features, there is a silver lining to these clouds: community is not so much disappearing as mutating, and mutating in what is arguably a progressive direction. Professional community seems to be moving away from the insular, elitist model and towards greater interdependence with a broader range of stakeholders. Some professionals will experience this move as a stressful destruction of their traditional independence, and there is little doubt that the shift is propelled by baser rather than nobler motives (e.g., Swan *et al*., 2002). But history, Marx noted, often progresses by its bad side (Marx, 1995/1847).

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