

Working Paper

Bureaucratic Flexibility:

How Organizational Processes Function to Provide Career Flexibility

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Abstract

It is widely accepted that bureaucracies constrain individual worker autonomy. However, this study argues that under certain circumstances those same bureaucracies can also enable greater temporal control and career flexibility. This counter-intuitive relationship arises under conditions where the occupational work itself is so demanding and irregular that workers without a bureaucratic super-structure find themselves unable to exercise control over their schedule or career. This is often the case for physicians, who I studied in both private practice settings and large-scale bureaucratic practice organizations. My research indicated that the greater flexibility of bureaucratic organizations, while recognized by many workers, was not developed deliberately. Rather, it was the unintended consequence of organizational processes formed for the purpose of improving efficiency and service quality. This unintended flexibility was further submerged from view because of an ongoing tension between traditional professional-commitment norms and a growing recognition of workforce demand for greater flexibility. These findings have implications for the survival of the large-scale professional organization as an emergent organizational form.

Introduction

An enduring theme among social scientists studying bureaucracies—large organizations characterized by their extensive use of rules and hierarchical authority structures—is that they constrain individual autonomy (Weber 1946; Merton et al., 1952; Heydebrand 1989; Sewell 1998). This constraining force is viewed as a negative side-effect of the bureaucratic form that is widely experienced in modern working life, and from which workers might find refuge in alternative organizational forms (Child and McGrath 2001). For professionals in particular, the constraints of bureaucracy are believed to sit at odds with an orientation toward autonomous work, giving rise to professional-bureaucratic role conflict (Scott 1965; Hall 1968; Meyer 1995; Wallace 1995).

Yet bureaucratic organizations can influence professionals in other, more positive ways. Bureaucracies can be as a source of personal relationships and collective belonging (Whyte 1956), provide greater job and income security (Baron 1984), and can be intrinsically rewarding when they enable individuals to do their work more efficiently or effectively (Adler and Borys 1996). In the current study, I argue that bureaucracies sometimes serve in an entirely different, positive role for individuals: as enablers of time

management and career flexibility. In particular, under circumstances where work itself is demanding and unpredictable, bureaucratic processes can help

bureaucracy can serve a different role for individuals: to enable time management and career flexibility

professional workers by allowing them to gain control of their schedules and hence access new career options that are otherwise unavailable. Given the increasing importance of flexibility to the modern workforce, we might expect this aspect of bureaucratic organizations to become more salient to professionals and even change the perceived costs and benefits of working in this type of organizational setting.

I examine the relationship between the bureaucratic organizational form and career flexibility in the context of practicing physicians. Physicians represent the archetypal autonomous occupational group, oriented strongly against any constraints on autonomy (Ben-David, 1958; Freidson 1970). They therefore are known to be reluctant bureaucratic employees (Engel 1970; Thompson 2002; Bunderson, Lofstrom and Van de Ven 2000). Yet physician work is also inherently demanding and unpredictable, increasing the potential attraction of organizational arrangements that enable time management and career flexibility. In this context,

large bureaucracies can actually represent an attractive trade-off between the loss of autonomy and the gaining of time and career flexibility. By studying the origins of this trade-off within a medical bureaucracy, I also uncover how it originated as an unintended consequence of extant organizational processes targeted toward efficiency. Implications for the survival of the large-scale professional organization as an emergent organizational form are also developed.

Bureaucracy, Autonomy, and Temporal Flexibility

Discussions of bureaucracy commonly start from the proposition that the proliferation of rules and authority relationships in them have a constraining effect on individuals. The result of this constraint, for professionals who end up working in bureaucracies, is often alienation or a similarly negative individual disposition. This professional-bureaucratic conflict has been found in a range of occupational settings (Ritti 1971; Larson 1977; Bailyn 1985). As Abbott (1988) points out, this source of conflict has served a common explanation for the retarding of bureaucratic advance through the professional occupations when compared with other sectors of society.

Recent examinations of contemporary professional bureaucracies have reconsidered the inevitability of negative bureaucratic constraint. Adler and Borys (1996) argued that for knowledge workers such as professionals, bureaucracy need not be negative in its impact on individuals. In essence, if well executed, the formal control structures and work rules which characterize bureaucratic settings can enable knowledge workers to better accomplish their work (Cardinal 2001), and hence be appreciated in a positive light. In contrast, others have continued to emphasize the negative constraining forces of modern professional bureaucracies, even through sophisticated bureaucratic processes such as teamwork (Barker 1996) and organizational culture (Kunda 1993).

While these and other studies of bureaucracy have emphasized its impact on the *work* of individuals, an increasingly salient issue is how it impacts the *temporal and career dimensions* of workers' lives. The degree to which organizations can offer workers temporal control or career flexibility is of

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central importance given the trend toward dual-earner families and women entering professional occupations. Across medicine, law, academia, accounting, management, and many other

occupations, the percentage of women with professional training is increasing. In response to this trend, the division of household labor in these occupations is shifting from a male breadwinner-female homemaker model toward a greater number of dual-career families (Waite and Nielson, 2001).

This dual-career family structure places a new strain on the schedules and career timing of professionals. This strain is likely to lead to greater interest in career options, including the flexibility to move in and out of full-time work, or to choose work roles at various points in the life-course that allow better scheduling of work and non-work activities. Generally, this greater demographic heterogeneity may increase the diversity of career values and interests in the professional workforce, particularly within younger generations (Hull and Nelson 2000). For professional occupations such as medicine, with extreme scheduling constraints, these pressures are likely to be all the more acute.

An Organizational Work Lens

How then do bureaucratic structures impact temporal control and career flexibility for professionals? This is the central concern of my paper. The literature holds conflicting suggestions as to how this question might be best answered. One approach has been to extend the established logic of bureaucratic constraint of work to constraint of schedules and careers as well, implying that large-scale bureaucracies offer the least flexibility. Following this line of reasoning, workers are more likely to find flexibility in the traditional independent practice model of organization, and new technologies will help independent professionals to fulfill work and non-work demands on their own time (Arthur and Rousseau 1996; see Kunda et al., 2002). This view tacitly assumes that the work itself will not over-run the independent practitioner and ruin their efforts at temporal self-control.

Another approach has been to carefully link the detailed organization of work to bureaucratic impacts on time and career. Perlow (1998, 2001), for example, found systemic linkages between the way work is organized and the schedule and career options faced by individuals. The present study takes a similar approach. I start with the proposition that the organization of work can itself only be understood through a grasp of the inherent features of that work. Then I focus on understanding the nature of medical work and how it affects schedules and careers across both non-bureaucratic and bureaucratic settings.

I find that in the absence of bureaucratic processes, the nature of medical work itself strongly dictates doctors' schedules and careers.

Central to the nature of medical work is a fundamental temporal problem for doctors: having to be available whenever patients require attention.

In the absence of bureaucratic processes, the nature of medical work itself strongly dictates doctors' schedules and careers.

In the traditional private practice, this constraint implies that doctors' schedules are controlled not by their own preferences, but by their patients' unpredictable needs. Further, this reality prevents career options other than full-time patient care from being easily attained, since time to engage in other activities can rarely be protected adequately from the relentless demands of patients. In the large medical practice organization, however, this situation is improved. Processes which were intended to increase efficiency and effectiveness also have the effect of altering individual schedules and thereby generating different career options. These processes allow large medical organizations to actually *increase* schedule flexibility when compared to the alternative of independent practice. The organization can restructure work in ways that provide flexibility and control to individual physicians striving to meet their personal schedule and career needs.

In an effort to diagnose the origins of this flexibility within medical bureaucracies, I adapt a simple analytic framework developed by Thompson (1967) and Blau (1972) that decomposes organizational processes in terms of specialization, coordination, and buffering functions. I use this framework to show that the same elements intended to generate efficiency within the bureaucratic organization also function in unintended ways that transform professional schedules and careers. It is these processes which help solve the doctor's temporal problem, by allowing him or her to no longer be available absolutely whenever a patient requires attention. Instead, organizational processes generate a partial decoupling of physician and patient. To carry out this decoupling, sophisticated coordination mechanisms are required. This type of coordination represents a major challenge in professional settings because it involves the encoding of inherently non-routine information (Sharma 1997). I analyze these organizational processes in order to uncover their intended and unintended functions with respect to schedules and careers.

Methods

I designed this research in order to obtain data on the linkages between the details of medical work, the functions of organizational processes, and the impacts reported by individual workers. This general approach follows a call made by Barley (1996) and others to better incorporate work into studies of organizational processes. It is also consistent with the proposition that medical work lies on the extreme edge of professional occupations, where work is often non-routine and requires the application of specialized knowledge. These characteristics are thought to strongly shape the structure of the occupational and economic sector as well as organizational work processes (Freidson 1970).

The research followed a case method procedure for developing theory (Eisenhardt 1989). My data come from an 18-month field study that included interviews and surveys with physicians and administrators. Because of confidentiality issues, I did not conduct first-hand observations of physician clinical work with patients, nor did I engage patients directly in their observations of the work process. I began with an interest in how organizational form shapes the careers and work lives of physicians, and in how those factors were viewed by physicians in comparing organizational choices. Because of this inductive approach, the study evolved over time from a generative process based on open-ended interviews to a confirmatory process based on structured interviews and quantitative surveys (Strauss 1987). The findings reported here draw on qualitative and quantitative data. This strategy is appropriate for emergent areas of inquiry, where established research constructs may be useful but are unlikely to suffice (Edmondson and McManus 2004).

Occupational setting

The current heterogeneity of organizational form in medicine represents an ideal setting in which to examine the effects of alternative ways of organizing work. The medical occupation, like many other professional occupations where small private practices have been the traditional norm, has experienced an expansion of large-scale organizations (Leicht and Fennell 1997; Brock, Powell and Hinings 1999). In American medicine, virtually all doctors until recently worked in solo practices or very small partnerships (Starr 1982). While such arrangements continue to represent a majority of practicing physicians, it is large medical practice organizations that have grown in number and importance over the past three decades (Robinson 1999).

Organizational context

The primary data for this paper come from within one large-scale medical practice organization. In addition, I also draw on a parallel and linked research effort examining traditional small private practice organizations in medicine. Although I report primarily on internal processes in the large organization, these comparative data allowed me to put these processes in the context of a baseline work-organization common in the traditional practice setting. Data from the large-organization study include interviews and surveys within one large-scale medical organization, referred to here as Health Care Organization (HCO). HCO is a prominent regional Health Maintenance Organization (HMO). During the study period, the organization employed approximately 500 salaried physicians and 4000 other staff, located in a dozen health centers in the region. Primary care teams in each center consisted of approximately six to twelve physicians working with nurses, other medical staff, and office administrative staff. Data from the traditional private practice study similarly include interviews and surveys from solo and small-group physicians identified through the state medical society.

Note that the focus here is on large medical practice organizations as opposed to hospitals. Most U.S. physicians contract with hospitals at arm's length rather than being hospital employees. Typically, physicians gain admitting privileges at a hospital, and may serve in various hospital administrative roles, but enjoy freedom from an employment relationship or direct oversight.

Interview data collection

This section describes interview procedures for the two research projects in sequence. Prior to the launch of both projects, initial interviews with a convenience sample of physicians associated with the state medical society uncovered the importance of schedule and career flexibility in physicians' decisions to join larger practice organizations. These interviews also helped map the regional landscape of medical organizations, pointing me toward HCO as a research site. The choice of organization presented a challenge because all the regional options (and most nationally) had undergone significant structural transitions over the past two decades, whether through acquisitions or mergers or through internal restructuring. From a handful of options, Health Care Organization (HCO) was ultimately selected because of a consensus among

informants that HCO pioneered many of the organizational processes later adopted by others, making it ideal for studying the origins and functions of those processes.

I then proceeded with more in-depth interviews within HCO. During a twelve month period from January 2002 to January 2003, I conducted 32 interviews at HCO with 15 traditional employed physicians and 5 organizational leaders or administrators. First, organizational leaders and administrators were interviewed because they were the best sources for understanding the basic structure of the organization and its processes, and could recount the intended functioning of those processes within the organization.

Second, I interviewed physicians currently practicing in the organization. I targeted primary care physicians in the clinical core of the organization. A pool of potential interviewees was identified using referrals from administrators and existing physician contacts with the organization. From this pool, individuals were selected to ensure representative variation in gender, age and organizational tenure. Among the active HCO participants, 40% were female and average age was 46 with a range from 32 to 73 (see Table 1). No significant differences in age, sex, or organizational tenure were found when compared to organizational human-resource statistics. Only one candidate refused to participate. Interviewees represented a range of common organizational positions and activities. Finally, although not selected on this basis, four of these physicians had extensive experience in traditional private practice before coming to HCO, allowing them to make direct comparisons between the two settings.

All interviews lasted for approximately one hour and were conducted in person in the physician's office. The interviews were guided by a semi-structured protocol that sought to address individuals' organizational careers, as well as their understanding of the organization more broadly. I asked first *why* they came to the organization, and what their priorities were in choosing a place to work. In that section of the interview, I used non-directive prompting to see whether and how schedule and career issues emerged as factors in the organizational decision. Second, I asked what organizational factors currently affected their schedules and careers in the organization, asking them to use concrete examples. In this way, many of the processes described below emerged organically from respondents' descriptions of what enabled or constrained their schedules and careers. Third, I asked directly about what purposes they thought each of these various processes were serving, both for them personally and for the organization in general. Each session was recorded and transcribed.

To investigate the generality and variation in these processes, I interviewed administrators from four other large organizations ranging in size from 50 physicians to over 400 physicians. Each had a somewhat different structure and logic. While all were centered on outpatient care, two were standard large multi-specialty medical groups, the third was a large multi-specialty medical group that also encompassed a hospital, and the fourth was a primary care-only group (with just internists, pediatricians, and gynecologists on staff). Further, two of the organizations were not-for-profit (one associated with a university) while the other two employed physicians who could be shareholders in the professional corporation. While all quotes reported below come from HCO, transcripts from these other organizations were used in both theory construction and as a consistency check for the framework developed.

The second project from which data is drawn for this paper focused on physicians in traditional small private practice arrangements. In order to provide this comparison group, I conducted 17 interviews with physicians in small private practices in the region. These interviews used the same basic protocols outlined above. I included in this project four former HCO employees, who could directly compare their experience across the two types of settings, and 10 from private practices who were contacted through the state medical society. The average age of these private practice interviewees, at 50, was somewhat higher than that of the HCO interviewees, although the same percentage was female (41%; see Table 1). These interviews provided an account of what many private practice schedules and careers were like for purposes of contrast. They also provided an external view of careers at HCO and similar large organization settings.

Analysis of interview data

In order to analyze the physician interviews, I first extracted sequences from over 500 pages of transcripts that fit one of three types: (1) statements directly attributing career flexibility to one organizational process or set of processes; (2) statements about how organizational processes functioned, whether for intended or unintended purposes; and (3) general statements about career activities in the organization. During this extraction process, I was careful to keep separate those statements made by three different groups: HCO organizational leaders, practicing physicians in HCO, and physicians in traditional private practice.

Analysis of these sequences led to a provisional framework relating the organizational processes to both intended functions, generally involving clinical efficiency and quality, and

unintended functions involving physician schedules and career flexibility. This framework contained a set of conventional constructs that are well-established in the literature, such as formal-organization coordination mechanisms, and a set of newer constructs such as the decoupling of physician and patient and the meaning of career flexibility for practicing physicians. Relating these constructs were a set of linking mechanisms that also emerged from studying the transcript excerpts. This framework was altered through iteration between existing literature search, framework development, and transcript analysis. In particular, aspects of the framework were compared with extracted sequences that provided confirmatory or contradictory evidence, and in cases where that evidence suggested a modification to the existing framework it was pursued.

The final framework was validated through discussions and eventual presentation to members of two groups: (1) the clinical leadership team at HCO, which included both practicing physicians (many of whom I had not interviewed) and administrators; and (2) administrators at the four other large medical organizations participating in the study, outlined above. These discussions produced general concurrence with the framework.

Survey and archival data

Both research projects, focusing on the large organization and small private practices, included survey data collection. In this paper, I report quantitative survey findings comparing data from these two surveys as supplementary evidence. The first survey included all primary-care physicians practicing in HCO in 2002. Surveys questions covered schedule and career activities, as well as other aspects of the physician's organizational context and personal characteristics. The HCO survey had a response rate of 62%, and 70 comparable surveys were used to represent the large organization in analyses described below. Shortly following completion of the HCO survey, I conducted a similar survey using a random sampling of small private practice physicians through the state medical society. This survey had a response rate of 45%, and 270 surveys were used to represent the traditional practice setting. Demographic details are presented in Table 2.

Finally, in addition to interviews and surveys, I collected and examined archival documents from HCO stretching for three decades from the time of its founding to the present. These documents included annual reports, special reports, major internal communications to staff, and press coverage of the organization. For example, many of the processes described in

this paper were discussed during their development stages in special reports or special sections of the organization's annual reports. These archival data served as important sources of triangulation (Yin 1994), corroborating the accounts of organizational leaders in the character and intended effects of the organizational processes as they were developed and updated in the organization.

The Perceived Trade-off between Autonomy and Flexibility

An apparent trade-off was reported in the decision to practice in a large-scale medical organization as opposed to a traditional private practice. When asked about why they chose either a large organization or private practice, respondents frequently described the large organization as a place where one lost autonomy but gained career flexibility. Consider the following comment by an HCO physician.

Two and a half years ago I left private practice and started working here [at HCO]. At that time, I just had a child and felt that I needed to decrease my work hours. Although it was difficult to relinquish control of the day to day details of my practice, I've really appreciated the clinical support here and I love working two-thirds time. I feel like I'm truly able to enjoy both my work and my family.

The loss of control over work context, mentioned by this female physician, was the most frequently cited negative factor associated with the large practice. In addition to task discretion, however, respondents also recognized the loss of control over the surrounding non-clinical inputs in the large organization. For most, the ability to practice in a reduced-hours setting or have flexibility to adjust their clinical practice to accommodate other career activities appeared to outweigh the loss of control. For others, particularly those in private practice, the trade-off was judged to not be worthwhile.

Data on autonomy and career flexibility in the two different settings corroborate this qualitative account. Comparisons of HCO physicians and private practice physicians, shown in Table 3, suggest that those in the larger setting worked fewer hours on average (48.25 vs. 54.35 hours), and particularly in the hospital (3.10 vs. 8.77 hours), were more likely to have practiced a reduced-hours clinical schedule at some point in the past decade (40% vs. 18%), and had a decreased on-call burden (2.53 vs. 7.14 nights per month, and 1.27 vs. 2.35 weekends per month). On the other hand, the large-organization physicians also reported having less control over a range of aspects of their work on average, including control over the workload (0.83 vs. 1.66 on a scale of 1 to 5, 5 being greatest), workplace (1.13 vs. 1.76), staff (1.09 vs. 1.78) and

organizational policy (0.84 vs. 1.87). Survey data suggest that while annual income appears to be slightly lower in the large-scale organization, hourly income is almost exactly equal (\$51.77 vs. \$51.74).

Why would a systematic trade-off between flexibility and autonomy exist? I argue that in the case of medical organizations, larger scale carries with it *both* a curtailment of autonomy and an expansion of career flexibility. It is the basic bureaucratic processes—which form the core of any large-scale complex organization, medical or otherwise—that function to both

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attenuate autonomy and generate career flexibility for physicians. These organizational processes reorganize the flow of physician work, as is outlined in the sections that follow.

Baseline for Comparison: Schedules and Careers in Private Practice

Physicians in private practice, who operated either in solo organizations or very small partnerships with up to ten other partners, reported that they enjoyed having more control over their clinical activities and business decisions. Yet their schedules and careers were dramatically limited by the constraints put on them by their patients. Private practice physicians were solely responsible for their patients. The tight coupling of patient and physician generated a particular type of schedule and, as a result, a specific career pattern. The inability to hand off patients to anyone else meant that their schedules and careers had to be organized strongly around the needs of patients. They were on call for patient emergencies as these arose, day or night. Although respondents had some form of cross-coverage arranged with other private practice physicians, these were often difficult to coordinate and offered only limited relief from the need to respond to patients.

Schedule. The consequences of these arrangements in terms of schedules were long hours and a temporal uncertainty, because fluctuations in patient demand were typically unpredictable. Several physicians described this state of affairs with terms like “constant vulnerability” to refer to how their patients could gain frequent access to them. In essence, the physician’s schedule was controlled not by him- or herself, but by the patients. No ready substitutes existed for the physician when the patient had a problem, and the temporal urgency of medical problems usually precluded putting them off to a later time. This image is consonant with other descriptions of traditional private practice life (Lorber 1984; Laster 1996). Further,

the constraints of non-clinical responsibilities involved in administering the organization also shaped the private practitioner's schedule. He or she had to manage all the physical and labor inputs surrounding their core work of seeing patients, such as office and equipment leasing, supplies, staffing, insurer contracting, bookkeeping, legal representation, malpractice insurance and marketing. The demands associated with these tasks often presented themselves at unpredictable times, and delegation and outsourcing only provided partial solutions.

Career. The fact that physicians in private practice were beholden to patients had long-term consequences for their careers. Physicians had little flexibility to change the mix of career activities without major disruption to their patient duties. Attempted career moves meant to take up other activities, or cut back to part-time, usually met with mixed success or were stymied altogether. For example, one physician from a traditional private practice had tried to cut back on her time, only to find that while theoretically she had a day off each week, she never actually was able to take it off. As a result, within two months she gave up the effort because she felt that she was working full-time anyway.

Respondents in private practice repeatedly recounted their own or their colleagues' frustration with attempts at actually carrying out part-time practice. These included concerns with the safety and efficacy of handing off patients from one physician to another, required in order to make the career transition. The difficulties were greatest for solo practitioners, yet even in small groups of a half-dozen physicians these transitions rarely succeeded. The lack of coordination processes inhibited the efficient hand-off of patients to other colleagues in the practice. The smaller scale of the practice also decreased the likelihood that they could find a colleague in the practice with room in their schedules to absorb some of the handed-off patients.

As a result of these process deficiencies, there were no institutionalized methods for handling career transitions. Each attempt at a career transition had to be negotiated with other practice partners on a case by case basis, often producing further problems. Without a tradition of flexibility, both colleagues and patients were less likely to be comfortable with the idea of handing-off patients to another practitioner on either a short-term or long-term basis. Smaller scale also meant fewer physician colleagues to absorb the greater burden of patients dislocated by the transitioning physician. Knowing that reality, and also lacking the infrastructure to assist or manage that burden shift, other physicians in the group often directly resisted these transition attempts. One physician explained what he had observed while working in two private practices:

When someone goes half-time, everyone gets screwed. That's just the job. Usually [that person] has to do more work in terms of call, and on the other side, [the other physicians in the practice] have to spend more time covering that person's patients. So I'm picking up their slack. And that person's patients aren't going away. . . health issues still come up on Fridays when they aren't supposed to be there. So they work on their day off anyway, bringing in their children or whatever. And even then problems come up all the time. It's just better to avoid it.

In the private practice, the inability to effectively protect windows of time from patients tends to prevent an effective shift to part-time clinical practice. As a result, career transitions of all types are difficult to manage and often produce dissatisfaction among everyone involved. With this background on the private practice schedule and career, I now turn to the large organizational setting where conditions allow for the generation of markedly different schedule and career options.

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Schedules and Careers in HCO

In contrast to the private practice, the processes of the large organization provide a quite different schedule and career context. The organizational processes involved in specialization, coordination and buffering each contribute to a level of schedule flexibility, and as a result career flexibility. The key to understanding this relationship lies with the concept of *decoupling*. Specialization partially decoupled the physician from patient, and this opened up new schedule options for physicians in the bureaucratic medical organization. Decoupling also required a degree of sophisticated coordination within the organization in order to avoid an increase in medical mistakes and inefficiencies. Before detailing how it was that this decoupling was achieved, I first document its effects on physician schedules and careers.

Specialization partially decoupled the physician from patient, and this opened up new schedule options for physicians in the bureaucratic medical organization

Schedule. Decoupling reduced the dependence of the organization on any one physician for providing services at the moment when a particular patient required care. The result was not just the potential for a reduced total workload, but also the ability to control those windows of time when the organization relied on each individual physician to provide patient services. In

consequence, other windows of time could be designated for other activities. For the core physician worker, this structure was described in terms of a shift from “vulnerability” toward patients, to “protection” from patients. In practical terms, the change represented a shift from temporal uncertainty to planning capability. A physician's schedule which in the traditional private practice scenario would have been hostage to patients came instead under the physician's own control—subject to negotiated with the organization and other professional staff.

Career. With controllable and predictable schedules, physicians in large organizations could pursue other career or family activities while retaining a patient care practice. Physicians also had the ability to transition between work activities at different points in their career, without having to leave the practice of patient care entirely or exit the organization. In some other occupations, the fact that one organizational setting allows more schedule options than another would not necessarily imply that it also carries the possibility of more career options. However, such is the case for medicine and other domains where work demands on individuals are inherently urgent and irregular. For physicians in particular, schedule control enabled non-clinical career activities and the flexibility to move in and out of them over time.

To understand why this is the case, consider what other career activities physicians commonly pursue. These include research, teaching, further training, and clinical or administrative leadership roles—inside or outside the focal organization. In addition, physicians might seek career involvement in various professional associations or myriad medical or pharmaceutical business roles. An increasingly sought-after option for physicians as much as other professionals was greater involvement with family or in activities lying entirely outside the realm of formal work. Comments from three physicians illustrate this variety:

I started in 1983. I also knew that I wanted to keep teaching. . . . So right from the get-go I served one month a year teaching—which meant that I practiced less out there during that time. But I had the freedom to do it at [HCO].

I worked full-time for the first couple years [at HCO]. Then I had two children in the first five years . . . I was working just part-time and nothing else, but eventually I did a total array of other things they had to offer. I've been a chief of department, I've been on a board committee. In the late '80s, I also did some national activities in quality measurement.

This organization has been very good to me. I've changed my career here from primary care internist, to oncologist, to building and chiefing an oncology department, to working part-time in the new field of cancer genetics.

All of these deviations from a full-time clinical career require access to windows of time that are protected from patients. For any individual physician to be able to take on such a career activity requires them to have dedicated time not involved in seeing patients or associated clinical work. Over time, the physician has to maintain this reduction in patient-related hours, and find a way of scheduling those hours so that they are predictable. In the large organization, individual physicians can do so through the processes outlined below. Respondents also pointed out that even the career of exclusive full-time clinical practice was enabled by the large organization. This option was unavailable in the traditional private practice owing to the many peripheral activities involved in running a practice from which the physician was not buffered.

Bureaucratic organizational processes also enable individuals to negotiate successive career transitions over time. Whenever career changes are sought by physicians, they require a way of altering their existing practice to accommodate the transition. Whether an individual wants to become more involved in an organizational or external activity, or spend more time with family, the adjustment is usually difficult to manage. The specialization and coordination processes in the large medical practice organization greatly facilitated these transitions.

Bureaucratic organizational processes also enable individuals to negotiate successive career transitions over time.

Specialization, Coordination, Buffering

For practicing physicians, career flexibility hinged on the ability to control and predict patient scheduling. Given this, the question arises as to how and why the large bureaucratic organization altered physician schedules. In the following sections, I describe organizational processes within HCO that re-shaped physician schedules and career options, even though they were designed for other purposes entirely. These features are summarized in Table 4, which shows the organizational processes identified at HCO organized in terms of abstract function (task specialization, temporal specialization, coordination, and buffering). The right-hand columns in Table 4 indicate the intended purpose of each process, as well as its impacts on schedule and autonomy, and its relation to the central concept of decoupling.

Task specialization. Specialization processes involved divisions of labor in the organization based either on task, location, or time. Perhaps the most commonly identified division of labor involved the separation of tasks formerly done holistically. One prominent example of this was the transitioning of a subset of tasks which were formerly the responsibility of the physician to nurse practitioners or physician assistants, both of which were used extensively in the organization. These tasks range from taking medical histories to performing simple procedures and even prescribing some therapies and medications.

Even though this constituted a task-based division of labor, it created temporal flexibility for physicians because it generated new options regarding who would treat patients with basic symptoms that could be handled by either physician or nurse practitioner. Because the allocation of tasks and times between physician and nurse practitioner was implemented in a decentralized fashion, this specialization process generated temporal flexibility at the level of the clinical practice team. Put more abstractly, this division of labor shifted the basis for task assignment from “who’s patient is this?” to “who is responsible and available for seeing patients at this time?” One physician described how he recollected his introduction to this process when he started working at HCO:

It was liberation. You had a panel of patients that you were expected to take care of. . . . They said it’s your job to take care of them as a team. Me [sic], two other internists, two nurse practitioners, a receptionist. It’s your job to take care of ‘X’ number of people, and you can organize this however you want to.

For the purposes of the individual physician, this increased the number of scheduling options available since it increased the number of people who could handle a significant portion of patients at any given point in time.

Some organizational physicians also specialized in location-based roles, constituting a type of spatial division of labor. The ‘hospitalist’ service involved physicians who work for the organization but were based in a regional hospital where they attended to the organization’s patients admitted to that hospital. These hospitalists tracked the care given to patients in the hospital, and provided a communication bridge between the patients, their families, the hospital and the primary-care physician back in the main office.

The hospitalist service allowed the primary care staff to maintain more regular schedules because hospital tasks formerly conducted by the primary physician were among the most

unpredictable and time-consuming aspects of patient care. Without hospitalists, primary care physicians have to drive to and from the hospital at various times of the day to see patients (called “rounding”). They also have to try to maintain awareness of their patients’ progress in the hospital, while they are tending to their other activities such as seeing regular office patients. The commuting to the hospital is often time-consuming and inherently unpredictable since hospital patients are the sickest and therefore involve the most uncertainty as to their clinical needs.

The hospitalist service also affected primary care physicians while they were “on call” during nights and weekends. With hospitalists, physicians who were on call had more options for handling hospitalized patients. For example, while being on call a physician may have had responsibility for a patient who was unexpectedly admitted to a hospital through the emergency room in the middle of the night. Without a hospitalist in place, the on call physician was then likely to have to drive to the hospital to look after that patient, disrupting home life and sleep. With a hospitalist in place, on the other hand, most patients could be handled directly by the hospitalist. Even those patients whose care required the input of the primary care physician could more likely be dealt with via a phone call from the hospitalist. One interview respondent explained:

It is a bigger issue when you had to get up in the middle of the night and go somewhere. That’s really being on call. I used to have to get up in [Suburb X] and drive to the hospital in [Suburb Y] in the middle of the night. That was the worst. Here, we have evolved so that it’s not uncommon to get a phone call, but you never have to get up. This is because of the hospitalists.

A similar service was designed to address the geographic dispersion of patients in extended-care facilities (nursing homes and rehabilitation centers), which tracked patients in and among those settings in a way that also eliminated a set of unpredictable demands on the primary care physicians.

Temporal specialization. Other processes created a division of labor that primarily functioned across time. This temporal division of labor involved specialization in terms of different times when individuals conducted the same task. Time is of particular importance because of the sequential nature of client services: one physician and one patient are required to produce a unit of service, and the next unit cannot be produced by that physician until she finishes with one patient and moves to the next.

The urgent care clinic at HCO functioned to generate temporal specialization. This clinic was staffed with physicians and ran during evenings and on weekends. It guaranteed that patients with a certain class of common problems could be seen by someone in the organization during those hours, without involving the primary physician. During nights and weekends, a third process also provided care options for patients via the telephone: the nurse phone hotline. This process involved both task and temporal specialization, with nurses triaging patient calls and directing patients toward further care. Depending on the call, they might dispense limited medical advice, authorize emergency room visits, schedule regular office visits, or contact the physician on call for that patient. The urgent care and nurse triage processes further reduced unexpected demand on physicians, making their schedules more regular and potentially flexible to accommodate other career or non-work activities.

Another temporal division of labor, with less rigid time boundaries, involved a form of physician teamwork at the local office level. A set of physicians—as few as 3, as many as 12 or more—provided care for a collective panel of patients. While the physicians still each had their own patients, there was a degree of decoupling so that a given patient at a given time would not necessarily be seen by his or her own physician but possibly by someone else in that physician’s team. Team doctoring provided flexibility in who would attend a particular patient on several timescales. For instance, in a given week the team has to ensure adequate coverage of physician staff to treat “whatever walks in the door”; but on a longer timescale, the team can plan predictable vacation times and cover each other in the case of physician illnesses. One physician explained:

Basically, [it takes] enough presence so that someone is here every day. Things can happen, family emergencies, and small practice units can’t do that completely like we can. . . . We’ve got a separate coverage for the exceptions – vacations. We have a system in the larger group around school vacations. The more of these arrangements you have, the better it is.

The clinical team shared not just regular daily responsibilities but also night and weekend on-call responsibilities. This means that during those periods of time when a given physician is on call for the team, he or she is responsible for the whole team’s patients. Therefore members of a larger team enjoy a lower frequency of being on call (as was found to be the case in the survey data reported above; see Table 3).

Coordination. Virtually all of the divisions of labor described above generated classic coordination problems of a sort common to most large organizations. Without adequate coordination processes, the chances of a medical mistake were greater given the number of patient hand-offs being conducted under this extensive organizational division of labor. For example, if a patient had used the urgent care clinic, the primary physician may have needed to know about that visit right away. If they encountered that patient the next morning without having information about the earlier visit, this could critically affect the clinical decisions they make. The need for a similar level of information flow arises with the team approach to doctoring, where in the extreme scenario a patient may be seen by one primary-care physician on one day and another the next. Three types of coordination processes were identified that assisted with the transfer of information and patients among individual physicians or staff: information systems, the standardization of services, and client education.

Handing off patients from one physician to another or from one specialized unit to another requires an effective means of transferring of information. The widely accessible computer records system at HCO made patient information available throughout the organization to any practitioner. This stood in contrast to the historical norm of hand-written patient charts, which vary across physicians in style and content. The HCO computer record was standardized and its contents became instantly available throughout the organization whenever updated. As a result, one physician who had to cover another physician's patient has all the relevant information at her fingertips, without delay and without the sometimes formidable challenge of reading another physician's handwriting. In addition, all other specialized units can access the information wherever and whenever they desire (the urgent care clinic, the phone triage nurses, the covering and on call team members, the hospitalist and extended-care physicians, even the pharmacy and authorized medical administrators).

Many respondents linked the computerized medical record to their ability to share call responsibilities effectively:

The medical information is immediately available to anyone, anywhere. . . . I don't leave an afternoon without having finished my charting, labs, messages. It's a unified, full record. It's not hard to cover someone else's patients. . . . Say I have a patient in the morning, and leave here at two p.m., and my patient gets sick that afternoon and has to come in at seven p.m. at night. My colleague is here, he's got my notes [on the computer] to look at, often times the x-ray and blood count results on the system. All of that is immediate. It makes coverage so much

easier. If you were in private practice, you might not even have that paper chart depending on the time of day.

Several respondents compared the perceived danger of handing off patients in the private practice to the safety of doing so in the large organization as a result of these coordination processes. This safety made the decoupling of physician and patient possible, which in turn enabled physicians to pursue career activities other than just full-time direct patient care.

The medical record system was pretty innovative. I really liked it because it's so much better than the paper charts. . . . Everything felt safe, because I could see all the drugs a patient was on in one place, and could read it! It was a safe network for patient care.

A second key coordination process involved standardization of services. If patients were not guaranteed to see the same provider every time they interface with the organization, then consistency and standardization became more important. Patients had to feel that they were receiving high quality care regardless of who is seeing them. Further, patients were often accustomed to their primary care physician's demeanor and style of communication. Interview respondents explained that patients could become disoriented or angry when expecting one set of experiences and then encountering a different physician with an entirely different approach to clinical care.

HCO attempted to standardize physician practice activities in a limited way through the use of internal clinical protocols that pertained to the diagnosis or treatment of various specific clinical conditions. These protocols dictated a sequence or scope of testing to be undertaken, for instance, if a particular set of symptoms was presented by a patient. Another practice was the periodic internal review of physicians' decisions by administrators, examining for example the frequency with which certain tests were ordered. These reviews induced a degree of standardization in clinical activities.

In addition to these formal rules, however, respondents discussed informal norms in medical practice style. If one physician's patient was going to be seen by another physician, they had to have relatively similar approaches to the patient encounter. Without this consistency, problems could arise. For example, if a patient was used to a physician who always keeps a tight schedule, experiencing a long wait could be frustrating; conversely, if a patient is used to a physician who runs over but always spends longer with each patient, experiencing an abrupt end

to the visit could also be frustrating. This issue led to a degree of mutual adjustment within clinical teams in terms of how physicians functioned. The term standardization was rarely used, but the effect described was clearly that.

The fact that patients were seen by different caregivers also gave rise to a need for coordination through patient education. In particular, HCO patients had to be aware that while they still had a personal relationship with one physician who looked after them directly, some of their medical encounters would involve other people in the clinical team. As one physician described it:

People who come here know that we work in teams. I try to explain that to patients when I have a new one. I say when I'm going to be here, so they can time their phone calls to when I'll be here, and say if you call after I'm gone, this is who you're likely to see or talk to, one of my practice partners or one of the two NPs that I work with.

The organization had been experimenting with ways to improve patient education in this regard. For example, their increasingly popular website included a message from the medical director to new patients with these comments: “Your primary care physician, working with a team of nurse practitioners, physician assistants and others, will handle your regular checkups, provide care when you are sick, help coordinate your specialty medical care and look after your overall health.” More broadly, the organization portrayed a brand identity in the community that transcended any of their individual physicians. This image may have helped orient patients toward the system itself relative to their individual physician. In sum, the contribution of these coordination processes to flexibility is therefore primarily through their support and enablement of organizational specialization.

Buffering the core workers. While those examples of specialization recounted above all involved core clinical tasks, I also observed another classic specialization: the separation of non-core activities into a separate operational unit, thereby buffering the core patient-care function. Many business functions, such as budgeting, contracting, billing, malpractice insurance and legal defense, facilities maintenance, staffing, training, and benefits were centralized away from the core physician staff. This centralization resulted in fewer occurrences of a physician being pulled away to take care of business or administrative issues.

Buffering processes also removed other potential temporal constraints and uncertainties, compared with private practice. Since the business or operations-related issues can have a high

level of uncertainty, in terms of occurrence and duration, separating them away from the core physician staff has the effect of improving their potential for schedule control and flexibility. For example, when one physician was reflecting on how it was that she was able to practice part-time at HCO but not in private practice, she enumerated the value of buffering processes:

Private practice is totally different. It would be totally impossible to be mother of 6 and be there. You have to provide your own everything: rent your own space, hire your own staff, worry about all of their benefit issues, have all kinds of insurance for the building, for other things, get your own malpractice coverage. You really are managing all aspects of everything. Here, a lot of that is taken care of. You're provided with an office. You have all these benefits, retirement plan, life insurance. We have a legal department. . . . You don't have to go looking for it.

These specialization, coordination and buffering processes re-shaped schedules and, in turn, career options. Yet they were developed for different reasons related to efficiency and quality improvement in delivering health services.

Career Flexibility as an Unintended Consequence

These processes and their impact on the temporal arrangements of physicians were a consequence—but not a cause—of the large scale medical organization's emergence. This phenomenon represents a 'positive unintended consequence' in Merton's (1936) original conception of the term. Large medical practice organizations were pioneered by leaders interested in improving the quality and efficiency of services by applying industrial models of organization to the health sector (Starr 1982). The goals of these leaders included cost control, quality improvement, and expanded patient access to services. Yet the organizational processes developed in the service of those goals at HCO took on the additional function of accommodating physician careers.

The design and operation of many large bureaucratic medical practice organizations were influenced by the industrial models of Total Quality Management and Continuous Quality Improvement drawn from other sectors of the economy (Laffel and Blumenthal 1989). The impact of these ideas can be seen vividly in early HCO annual reports which justified decisions to invest in several organizational processes using the rationale of providing measurable efficiency and quality advances. One founding HCO physician recounted the influence of industrial models of organization in the medical practice:

We studied the Toyota production system, and just-in-time efficiencies, and quality and empowerment. At the time, we were frustrated that we couldn't see enough patients because there wasn't enough support staff in the organization, and this limited productivity. There was very little coordination. We were out to change that.

The founders believed that the delivery of increasingly complex medical care could benefit from a level of organizational sophistication that went beyond the abilities of the isolated private practitioner. The organizational specialization and coordination resulting from this belief had the unintended consequence of altering physician schedules. Each of the specific organizational processes I documented had originated with a purposeful design unrelated to physician schedules. For example, some processes had their genesis with the goal of treating patients in a more planned fashion rather than having them end up in a hospital emergency room where no one knew their medical history and care would be uncoordinated and expensive. An early HCO annual report explained that the organization was able to control costs by “reducing the amount of costly hospital care our members receive by offering complete coverage for outpatient care, and by making this care convenient to access at our full-service health centers.” This led to the development of the weekend urgent care clinic and triage telephone system, giving patients access to HCO services during all hours.

The hospitalist service was also developed for reasons that are conceptually distant from the issue of physician schedules or careers. The idea was that hospitalists would be able to focus on patients in the hospital, ensuring that they progress medically, that their interests and those of their family members were heard, and that there was greater continuity in tracking patients through their hospital stay. Hospitalists could also provide a liaison between the primary care physician and the hospital medical staff, and would be more specialized and effective in their knowledge and relationships with the hospital medical system when compared to the primary care physician.

Similarly, coordination mechanisms such as the electronic medical record were also developed to improve efficiency, by enabling patient hand-offs as described above. HCO leaders foresaw ways in which the electronic record would allow information to be gathered and used for quality improvement. One annual report explained that HCO “currently uses its computerized medical-record system to remind physicians of patients who require follow-up care for certain specified problems.” The report went on to discuss quality management programs that HCO was

engaged in and which used data from the computer system. Organizational proponents of the electronic medical record believed that they would lead to more accurate records and fewer medical errors. Administrators and physicians all concurred that the rationale for developing the electronic medical record had nothing to do with enabling physician access to greater flexibility in scheduling or careers.

Career Flexibility as a Strategic Organizational Advantage

These positive repercussions stemming from the way work was designed in large practice organizations were subsequently ‘discovered’ by organizational administrators. As understanding of the value of this feature developed over time, it encouraged reflexive adjustments on the part of organizational leaders seeking advantage in the physician labor market. On the simplest level, the notion that flexibility was being received favorably by physicians working in HCO is supported by career satisfaction findings, which showed significantly higher levels in HCO than in traditional practices (13.81 vs. 12.26, significant at the .01 level). The advantages accruing to organizations which offered career flexibility could be significant in terms of the ability to attract and retain desirable physicians, given the changing demographics of the medical occupation outlined earlier. This relationship between large scale and career flexibility may therefore be contributing to the survival and spread of the larger practice organization (Briscoe 2003).

The trend toward greater demand for career flexibility within the physician workforce was viewed as an important development by organizational leaders. As one noted:

Physicians coming out of residency and fellowships now are getting more open about wanting a balance between professional and personal life. And if you don't do a good job of assimilating them, they will just leave. This was not the case for physicians 15 years ago.

Elsewhere as well, large medical organizations recognized the new advantages in their recruitment of physicians by offering flexibility (see Moody 2002). Even physicians running small traditional private practices recognized the importance of trying to provide career flexibility in their recruitment of new physicians to replace retiring clinicians. For instance, one woman who was part of a three-physician private practice commented that, “When we shaped this practice, we viewed it as less committed to be 4 days. But this is not working. This generation – generation X, I guess – aren't buying it. They want 4

days.” This respondent was referring to the need to offer a practice schedule that allowed the option of a shorter work week. There was concern among many such private practice owners that they would have difficulty being able to offer such schedule and career options.

The Submergence of Career Flexibility from Public View

Yet if career flexibility was a decisive feature of the large organization, and yielded benefits in the labor market competition for skilled physicians, why was it largely missing from public discussions on the subject of the large medical practice organization? The public debate focused on the cost and quality dimensions of alternative organizational arrangements (see Robinson 1999). One might suspect that this focus simply stemmed from the newness of demographic changes among physicians driving demand for career flexibility. Yet a different explanation emerged directly from the physicians interviewed. Their explanation centered on a concern for not undermining the public’s belief in physicians’ total commitment to their patients. Consider the comments of one physician in a large organizational setting:

There are advantages and disadvantages to the employment-based practice. The professional and the employee are not mutually exclusive. . . but nitpicking about how many hours you worked begins to sound like a worker, not a professional. Professionals are supposed to be above that, committed to the care of patients. . . Now as a solo practitioner, you’re always committed to the patients. But the unfortunate result was that you could never stop seeing patients, you couldn’t stop to teach, write, and think. Here in the employment setting, it is possible.

This comment reveals the importance of appearing fully committed to the care of patients. Concerns about hours, schedules, or the ability to accommodate alternative career activities outside of patient care were viewed as hazardous to the medical profession, because they directed attention toward physicians’ own self-interest. Any focus on physicians’ self-interest has the potential to undermine the professional logic of medicine, rooted in individuals’ selfless service and neutrality. As has been often noted, the privileged societal position of physicians and other professionals rests on the trust afforded by patients and the general public that patient interests will be pursued wholeheartedly and completely by the practitioner (Merton 1968; Freidson 1970). The issue of physician self-interest exposes a potential conflict between the physician’s own needs and those of her patients, possibly undermining that trust.

Even in private discussions, the conflict between career flexibility and commitment was a problematic topic for physicians. While most HCO physicians interviewed voiced their career goals and issues freely, some explained what they saw as the danger of discussing career issues in any public format. This fact was reflected in the comments of two respondents reflecting on changing physician attitudes:

The biggest threat to American medicine is that there are lots of docs who have adopted an orientation that it's just a job. They set rigid boundaries around what the job is, timewise, and mentally, and where their passion is going to be directed, . . . and reserve their real efforts or enthusiasm for other parts of life. This is a 'tenor of remote disengagement.' It takes away from the concept of 'medicine as a calling.'

The doctor ethos now is all about "me." It doesn't mean that people are not professional, but that they are now balancing that old-school "humanitarian professionalism" with a new-school interest in their own family and lifestyle. You've got people who. . .make choices to limit their activities to benefit their lifestyle.

These physicians portrayed an irreconcilable tension between career flexibility and professional commitment. The impact of this norm across the occupational community appeared strong enough that it had restrained organizational leaders from marketing their organizations as flexible to physicians, despite their interest in doing so. Physician respondents even noted that in discussions within the organization, attempts at raising the issue often met with resistance. This might have been exacerbated by a lack of shared language across the organization (Bechky 2003), tending for example to make "flexibility" an issue for non-physician staff such as nurses, while "lifestyle" was the term often used by physicians to connote their colleagues' interest in flexible careers or scheduling. Yet the over-riding issue appeared to be a physician norm against appearing uncommitted. As a result, career issues remained largely absent from public discussion of large practice organizations and medicine generally.

Discussion

This paper has examined the processes through which a large medical practice organization altered physicians' temporal flexibility and career options. Interviews revealed how organizational processes acted to partially decouple the physician and patient, and to remove many temporally uncertain elements of work from the physician's responsibility. The result was a more controllable and predictable schedule. This in turn generated options for flexibility in

pursuing different career paths, and opened up the ability to more easily transition between career activities over time. Though not intended, the large bureaucratic organization actually enabled a level of career flexibility that was unavailable in the traditional private practice arrangement.

Scale was an important factor in this process. Volume was required in order to ensure that specialized units such as the urgent care clinic were utilized at a high enough capacity to cover their fixed costs. Scale made the large investments in coordination processes financially tenable. Processes such as computerized medical records and clinical protocol development involved large fixed costs that need to be amortized over a large base. The dedicated hospital service and telephone triage system also required sufficient demand volume to operate efficiently. High patient volume helped smooth out uneven demand flow, facilitating planning and resource utilization. When one physician wanted to make adjustments to accommodate schedule or career changes, another physician or providers in the clinical team or the wider organization could take up that slack. However, this type of work transfer depended on the partial decoupling of physician and patient and the effective use of coordination processes. In this sense, organizational scale and processes acted as complements in the facilitation of career flexibility.

Contribution to the study of professional organizations

A principle contribution of this research is a re-conceptualization of bureaucracy's effect on the individual that is not synonymous with constraint. To be sure, as Weber (1946) first noted, the same aspects of large organizations which increase efficiency also tend to curtail work autonomy. Inherent in the task specialization and coordination processes characteristic of the

large organization is a curtailment of individual work discretion. Yet the interesting finding from studying physicians is that with respect to a looming issue in the professional

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workforce—career flexibility—the large bureaucracy actually offers greater latitude than the alternative of independent practice. One implication for the study of bureaucracy is a need to incorporate schedule and career issues more carefully into models of organizational form and function. Further, in doing so, researchers must begin their analytic work by first gaining a deep

understanding of the nature of work in order to uncover the impact of organizational form on the individual. Without such an approach, analysts run the risk of mis-specifying or even inverting relationships among key variables such as bureaucratic intensity and career flexibility.

A second contribution of this research is to show how career flexibility may itself strategically advantage the large-scale organizational form. Scholars have recently shown how career and job design in professional firms can attract preferred workers and affect productivity (e.g., Stern 2000; Teece 2003; von Nordenflycht 2004). More generally, some theories of the

firm suggest that the preferences of employees (professional or non-professional) who possess knowledge and skills valuable to the organization's success should be considered in the design of core

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work processes (Kochan and Rubenstein 2000). Career flexibility could be a key factor in such design considerations; professional workers who value flexibility should be more satisfied where it is offered, adding to productivity and reducing costly turnover and client loss.

Yet career flexibility may produce a strategic labor market advantage for larger bureaucratic organizations *regardless* of organizational leaders' intentions. What is interesting about the unintended consequences aspect of this research is the finding that large medical organizations essentially stumbled into a realization that their internal processes were serving as tools for physicians to gain flexibility. Along these lines, the association of career flexibility with large-scale medical organizations represents a potential survival advantage for the large organizational form that is distinct from traditional arguments about economies of scale or scope, or governance advantages (see Galanter and Palay 1991; Tolbert and Stern 1991).

This survival advantage may represent an interesting force bearing on the emergence of a new organizational form: the larger, more integrated professional organization. Existing analyses of this shift have tended to focus on other environmental forces including economic transaction partners, new technologies, and political actors (Brock et al., 1999; Scott et al., 2000; Abbott 1988). A range of theorists have conceived of organizational form emergence as the product of both common environmental forces and concerted organizational responses (see Lewin and Volberda 1999). Yet the changing labor market preferences among professional workers may represent a driver of organizational-form change that operates differently. Because

of the submergence of career flexibility from public discussion, the impact of this labor market preference is not visible as a collective movement, but rather in the fragmented behaviors of atomistic labor market actors. And although organizational leaders are aware of this pressure, they do little to visibly respond to it because they do not want to appear in violation of professional commitment norms. Despite this fragmentation and invisibility, however, these labor market preferences may in fact be having a selective impact on the survival of an organizational form which can better accommodate them.

Workers inside organizations also played an important role in the organizational generation of career flexibility, by adapting organizational processes to meet their own schedule and career purposes. The organizational implementation of such processes often triggers a range of worker responses, including expressions of resistance (Prasad and Prasad 2000) as well as more organizationally beneficial behaviors. Orlikowski (2000) showed how workers responded to organizational processes involving technology by re-shaping them in ways that helped them accomplish their own work. In this sense, workers were key participants in the ongoing constitution of those processes. In professional contexts, this influence may extend further. Because professionals have wide discretion over the details of their work, and supervision is limited, individual workers may have the capacity to influence the practical development of processes in ways that advance their own personal and career interests, with less sensitivity to the organization's goals.

How might the findings of this research transfer across professional occupations, where bureaucratic processes may also play a role in the generation of career flexibility? The characteristic problem of tight client-practitioner coupling, which gives rise to the bureaucracy-flexibility relationship, is shared by many other professional services such as law, accounting and finance. Client-practitioner coupling was found to lie at the heart of physicians' schedule and career constraints in the private practice, and hence their liberation in the bureaucratic setting. However, exactly which aspects of occupational work, such as temporal urgency or task complexity, generate necessary conditions for the observed link between organizational scale and career flexibility? Careful cross-occupational comparative research could help uncover the common sources of these relationships across professional settings.

Contribution to the study of work-family and careers

This research also makes a distinct contribution to research on careers and work-family conflict. Scholars have focused considerable energy on evaluating the “business case” for companies to offer professional workers with career flexibility and part-time options, as a way of attracting better workers or improving commitment and productivity (Osterman 1995; Glass and Estes 1997; Drago and Hyatt 2003). Overall, professional organizations in industries such as law, finance, accounting and medicine have adjusted relatively slowly to increased demand for flexibility (Ballard et al., 2000; Bailyn 1993; Fuchs Epstein 1998).

Yet my research suggests that flexibility can emerge from organizational innovations that were not developed or spread by companies convinced by the business case for flexibility. Instead, flexibility can emerge inadvertently as a byproduct of existing bureaucratic processes, and then be discovered by workers searching for greater flexibility. In this sense, the labor market demand for flexibility was more important than a conscious organizational strategy. This may represent a more general pattern for the way work-family solutions arise and diffuse in professional industries. For example, organizational efforts to codify client information in “knowledge management systems” (Empson 2001) or rationalize complex work through new team-based divisions of labor (Adler 2004) may also enable decoupling or improve temporal control, thereby unintentionally exposing workers to new options for flexibility. If true, organizational scholars and leaders might be well served to focus not just on the design or use of work-family “benefits,” but also on the organic adaptation of bureaucratic process innovations made by workers themselves.

Conclusion

In this paper, I have argued that models of professional bureaucracy need to better incorporate the structural sources of career flexibility. My research shows how, at the individual level, bureaucratic organizations can function not only to constrain professional workers, but also to enable those workers by providing new schedule and career options. At the organizational level, this ability to provide career flexibility may represent a structural advantage of the bureaucratic form over smaller-scale organizations that is distinct from existing models of scale economies in production or governance. This flexibility advantage is not only *unintended* from the perspective of organizational leaders, but it is also *submerged* from public view by a concern among those leaders that the organization not be associated directly with flexibility-seekers, who are viewed by some professionals as less committed to their work and their patients.

Finally, while this study was designed to advance theory on how bureaucratic processes affect professional career flexibility, it raises a larger issue concerning the potential for organizational theories to be viewed as contingent on labor force characteristics. In particular, macro theories that are built on assumptions about how individuals will experience and react to organizational contexts may need to be reconsidered in light of a shift in workforce preferences. Two key dimensions of that shift in the current era may be greater tolerance for certain forms of bureaucratic constraint (Alder and Borys 1996) and more demand for career flexibility, as demonstrated here.

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Table 1: Characteristics of large medical practice organizations in study

	Size of organization (Physicians)	Size of organization (all staff)	Ownership form	Hospital affiliated?	No. of office locations
HCO	500	4000	Non-profit	No	>10
A	450	4000	Non-profit	Yes	>10
B	75	300	Non-profit (university)	No (infirmary)	2
C	~50	<200	Physician ownership	No	2
D	~50	<100	Physician ownership	No	1

Table 2: Characteristics of interviewee participants and survey respondents

	HCO physicians (interviewed)	Private practice physicians (interviewed)	HCO physicians (surveyed)	Private practice physicians (surveyed)
Number	15	17	121	270
Average age	44	50	48	45
Percent female	40%	41%	42%	39%

In addition, interviews were conducted with 5 non-physician HCO administrators and 6 administrators from other large organizations.

Table 3: Comparisons of survey responses from HCO and small private practices

Variable	Private practice	HCO
Size		
Organization size (no. physician staff)	8.22	500
Office size (no. physician staff)	6.11	20-40
Autonomy and income		
Control of workplace	1.76	1.13***
Control of staff	1.78	1.09***
Control of workload	1.66	0.83***
Control of organizational policy	1.82	0.84***
Hourly income	51.77	51.74 (n.s.)
Schedule and career		
Percent with part-time position in past 10 yrs.	18%	40%***
Weekday nights/month on-call	7.14	2.53***
Weekend days/month on-call	2.35	1.27***
Current total hours/week	54.35	48.25**
Current hospital hours/week	8.77	3.1***
Satisfaction		
Career satisfaction (4-item scale)	12.26	13.81**
Demographic characteristics		
Percent female	39%	46% (n.s.)
Age	44.9	44.3 (n.s.)
n	270	70

Figures use comparable samples (Internal medicine, non-rural, non-hospital, age 30-55)
Significance levels shown using T-tests for continuous and ordinal variables, and Fisher's exact tests for dichotomous variables (shown as percentages in table).

p<.01; *p<.001

Table 4: How bureaucratic processes impact individual schedules and autonomy

Abstract Function	Intended Purpose	Impact on schedule	Relationship to decoupling	Impact on autonomy	Examples
Task specialization	Increase efficiency in use of specialized core expertise	Hive off temporally irregular tasks from portfolio of required tasks, decreasing disruptions during windows of protected time	} Requires decoupling	Limits direct control over a sub-set of tasks	Integrated use of non-physician clinicians; hospitalist service; extended care service
Temporal specialization	Increase temporal efficiency; Increase service availability at irregular times	Regularize timing of responsibilities, increasing ability to predictably schedule windows of protected time		Limits direct control over tasks at particular times	Urgent care clinic; triage telephone system; team doctoring for coverage and call
Coordination mechanisms	Minimize error and cost associated with specialization	Generate capacity for temporal control through the facilitation of specialization	Enables decoupling, with smoother hand-offs	Requires rule and norm adherence	Computerized medical record; clinical protocols; hierarchical review; practice norms; patient communication
Buffering	Minimize disruption to core work	Hive off temporally unpredictable tasks that are unrelated to core professional services, decreasing disruptions and increasing predictability	n/a	Limits control over non-core tasks	Centralized operations and administration