

Queues and Care: How Medical Residents Organize Their Work in a Busy Clinic*

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How do medical residents organize their work in settings where queue demands are heavy and resources are limited? Under such conditions, a queue theory would predict the delivery of care that is indifferent to clients' needs or that gets rid of clients as quickly as possible. In an exploratory case study of medical residents in a Veterans Administration outpatient clinic, we found instead that the medical residents' work was characterized by a high level of professional commitment: they provided thorough medical examinations and attempted to expedite patient care in other ways. We attribute the residents' professional ethos to opportunities provided in the VA hospital to learn the craft of routine medicine and to be directly responsible for patient care; such opportunities were not available in other settings.

The queue, in sociological terms, is a relationship in which those who seek a good or a service (the clients) must await those who provide the good or service (the servers). This relationship has various dimensions: the wait may be long or short, the servers may be attentive or lackadaisical, the service may be efficient or slow. Recent queue theorists have argued that the server-client relationship is governed first by the extent to which the server is

rewarded for providing effective and efficient service to the client, second by the extent of the status difference between server and client, and third by the extent to which clients have alternative outlets for obtaining the service (Schwartz 1975, 1978; Stinchcombe 1985).

In a setting where the server is not rewarded for speedy service, where the server's status is much higher than the client's, and where the client has no alternative source for the service, it might be expected that the client would be triply vulnerable. In this paper, however, we provide an example of a case—medical residents in an outpatient clinic—in which all three of these conditions prevailed, and yet the servers were not indifferent to their clients' interests or needs.

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Medical residents often are called upon to operate as "street-level bureaucrats," i.e., as people "who represent an organization via face-to-face encounters with its clients" (Protas 1979, p. 2); in such cases they will experience the conflicts inherent in settings where queue demands are heavy. In large outpatient clinics, for example, they may be faced with limited resources, the difficulty of providing individual treatment on a mass basis, and minimal costs for failing to satisfy clients. As professionals in training, however, they hold the expectation that they will serve as advocates for their clients and will secure for them the best attention and care (Lipsky 1980). Lipsky concluded that street-level bureaucrats are likely to resolve these conflicts by rationing services to clients—either by limiting both the range of services and the amount of individual attention provided to clients (the mass-processing option) or by distributing services unequally (the triage option).

We found a setting, however, where residents adopted neither the mass-processing nor the triage option. Instead of limiting their medical examinations to patients' primary problems (i.e., processing patients *en masse*), residents preferred to examine them thoroughly in order to uncover ailments that patients might have overlooked. Instead of giving patients cursory examinations and then dispatching them elsewhere in the hospital for treatment (i.e., triaging patients), they attempted to evaluate and treat problems using the clinic's limited resources. We suggest that this behavior, although inexplicable in terms of queuing theory, can be explained in terms of the central values of medical student and resident culture and the particular characteristics of this setting, where these values could become the basis for action.

Our examination of this special case proceeds in three parts. In the first part we explore the queue demands to which residents were subjected. Next we examine how residents organized their work in response to these demands. Finally, we consider the factors behind the residents' decisions.

THE STUDY

Our exploratory analysis is based on a case study of an outpatient clinic (officially known as the Primary Care Clinic) in a Veterans

Administration (VA) hospital, staffed by internal medicine residents. The residents are attached to an adjacent university hospital/medical school, whose program requires them to serve monthly rotations in the clinics and wards of the VA hospital. The program includes an obligatory rotation in the Primary Care Clinic (PCC), an outpatient/emergency clinic that serves as the sole point of access for veterans seeking medical care in the hospital. The internal medicine program is a typical mainstream residency program within a standard university-dominated medical complex; its affiliation with a VA hospital represents a common arrangement.¹

The PCC rotation has a number of noteworthy features. The clinic itself is cramped and extremely busy; the residents usually are harried and often are frustrated by the pressure of numbers and lack of resources. VA patients are poorer and sicker than the average hospital patient (Randall et al. 1987; Wolinsky et al. 1987); many attend the VA because they lack access to private medical care.² Finally, in the clinic (and in the VA hospital as a whole) second- and third-year residents provide unsupervised patient care, whereas in the university hospital all residents, regardless of year or competence, are supervised by staff physicians, who exercise final responsibility for care. In the PCC, only first-year residents are supervised; their overseers are second- and third-year residents.

The qualitative data that we examine here were collected as part of a larger study of residents' decision making in the PCC. The observations used in this paper came from three sources. First, 21 residents who had served PCC rotations were interviewed by the first author in the summer of 1988. They included six first-year residents (also known as interns), seven second-year residents, and eight third-year residents. The first-year residents (R_1) will be referred to as junior residents; the second- and third-year residents (R_2 and R_3) will be referred to as senior residents. Thirteen of the residents were male, eight were female. The interview schedule was informal; residents were asked to express their attitudes toward VA patients and the VA hospital, to compare working in the university hospital with working in the VA hospital, to outline their procedures for evaluating and treating VA patients, and to explain how they made referral decisions.

The interviews lasted from one-half hour to one hour, and were tape recorded. These are the primary data analyzed in this paper. The interview data were supplemented by conversations with the residents and by observation—one of the authors is the director of the PCC and thus has an extensive knowledge of how residents behave in the clinic.

Second, every resident who worked in the clinic between April 1987 and March 1989 completed two questionnaires, one at the beginning and another at the end of his or her rotation. The first questionnaire solicited background information from residents, including their clinical and nonclinical training and their plans for post residency practice. The second questionnaire asked residents about their PCC experiences, including the clinic workload and the residents' use of referrals.³ One hundred eight residents answered both parts of the survey. Third, we used the daily log sheets maintained in the clinic to compile a record of the number of patients seen by each resident each day he or she worked in the clinic.

QUEUE DEMANDS

Any veteran who wants to be treated in the VA hospital must first be seen in the PCC. Patients who want to see a doctor, patients who need their prescriptions refilled, patients who require hospitalization or who need to see a specialist, even patients who are referred by one specialty clinic to another—all must go through the PCC. The hospital's official policy is to encourage PCC residents to provide as much of the basic medical care as possible, so as to minimize costly admissions and consultations.

The PCC, therefore, is the hospital's bottleneck: it funnels and limits the flow of patients throughout the entire hospital. One result of this arrangement is that the clinic is constantly full of patients, most of whom will spend many hours in the crowded waiting room before they can see a PCC physician. Approximately 40 to 50 patients visit the clinic each day (each patient must be seen on the day he comes to the clinic). The six to nine residents who work in the clinic each month (the number varies from month to month) average 5.6 patients a day each, although on any given day a resident may see as many as 14 patients. To conduct a

thorough history and physical examination of a patient may take from two to three hours (see also Mizrahi 1986, p. 93) because VA patients are likely to have multiple problems and to have allowed them to go untreated for some time. Many have not seen a doctor for some years. This daily average does not include the patients whom senior residents must see when they supervise junior residents. Nearly half of the residents who responded to our questionnaire reported that the workload in the PCC was heavy compared to that of other VA clinics; the other half thought the workload was about the same (48% vs. 49%). Only two residents out of 101 respondents thought the workload was light compared to that in other VA clinics.

Residents who work in the clinic must adjust to the pressure of a continuous flow of patients. For some it means skipping conferences and eating meals on the run. For others it means that the challenge and the satisfaction of a detailed workup of a patient with an unusual or complex problem are tarnished by the backlog that will be created. In the words of one second-year resident:

Somebody with an especially complex, obscure problem may tie up a resident for several hours. . . . That is frustrating because you know that the charts are stacking up and you would like to be able to get people moving and get people out, and you know just when you get them through there is going to be a whole new rush of people. People work very hard down there, and it is frustrating to not see anything happen to the same stack of charts that have been sitting there for the last two hours.

Hospital policy favors the use of the PCC as a bottleneck for two reasons. First, it prevents the specialty clinics from being swamped by patients; indeed, many of those clinics already have a sizable backlog of patients waiting to be seen. For example, the dermatology, cardiology, ophthalmology, and orthopedics clinics are fully booked six months and longer in advance. Second, it costs the VA less if patients are seen and treated in the PCC rather than in the specialty clinics. Consequently, hospital authorities exhort new residents not to regard the clinic as a "triage" center, i.e., a place where doctors make decisions about where to send patients, but instead to view it as a treatment

center. If follow-up care is required, residents are encouraged to schedule return visits to the PCC.

The VA hospital thus evinces two of the factors that have been identified as causing clients delay in obtaining access to a resource. First, it entails "multiple queues" (Stinchcombe 1985) resulting from the organization of patient care into a set of sequential activities. When patients enter the PCC they are seen first by a nurse (one queue) and then by a resident (a second queue). If a consultation is ordered, they join the waiting list for the specialty clinic (a third queue). Second, the hospital has a monopoly over the provision of free medical care (although only veterans are eligible); like other client-serving monopolies, it has "the power to maximize [its] efficiency of operation by minimizing service costs and, in so doing, maximizing client waiting" (Schwartz 1975, p. 25). One sign of the attempt to minimize service costs was the small number of specialists serving the specialty clinics; as a consequence, these clinics saw patients only once or twice a week. Residents also complained about a shortage of radiologists and technical staff, which resulted in long delays when patients were sent for X-rays. In the PCC, residents may find themselves drawing blood and taking blood pressure—tasks that in the university hospital would be performed only by ancillary staff. Finally, equipment is in short supply—even such basic items as test tubes, gowns, and sheets.

How do residents organize their work in a clinic where patient loads are heavy, the patients themselves are disproportionately poor and chronically ill, and shortages of staff and equipment hamper effective provision of care? At the very least we might expect them to disdain outpatient work, a reaction Mumford (1970) reported in her study of interns and residents. Residents might develop a strong dislike for their patients, seeing them as partly to blame for their medical problems (Roth 1975). It would not be surprising if residents elected to triage patients, despite hospital policy, or developed other strategies to speed up patient care (Nathanson 1971). An even stronger response is suggested by Mizrahi's (1986) analysis of a similar setting. She found that residents working in a busy VA hospital sought to "get rid of patients" by passing them to lower-level medical staff, sending them elsewhere in the hospital for

treatment, discharging them prematurely, or refusing to receive them.

Any of these responses would be understandable when we consider that residents in the PCC are not rewarded formally for conscientious and effective patient care, that they receive little guidance or supervision while working in the clinic, and that PCC work has a low priority within the resident training program. Yet we found, contrary to expectations, that the majority of residents did not disdain outpatient care, did not triage patients, did not speed up their work, and did not dislike and try to get rid of patients. Rather they relished the opportunities that the clinic provided, made every effort to treat their patients within the PCC rather than sending them to specialty clinics, and gave patients more comprehensive examinations than were required. In general, they were extremely concerned with the quality of care. This behavior is demonstrated in their organization of their work.

THE ORGANIZATION OF WORK

Evaluating and Treating Patients

One piece of advice residents said they had received from the chief of the medical service in the VA was to restrict patients to one problem per visit. In the words of one second-year resident, "We sort of have a rule that we jokingly talk about, which is that a vet can only complain about one thing when he comes in to [the] primary care clinic." Veterans typically suffer from more than one medical problem (an average of 1.67 per patient); the one-complaint-per-visit policy, if adopted, would reduce the amount of time that residents spend with patients. Some residents did follow the rule of one problem per visit. One third-year resident, for example, declared:

I don't encourage bringing out a lot of problems . . . it's just that the population is one that has a lot of chronic problems and I think it's difficult to work up everything, so I'm more prone to treat the ones that are significant problems. . . . I don't go looking for a lot of problems unless I think it's related to their known illness.

Others acknowledged doing the same, but were more apologetic for their behavior. One

resident argued that limiting himself to one problem per patient was the fairest way of making sure every patient received the same care. Another insisted that the limited resources of the hospital made it essential to resist patients who "tend to want to get as much as they can out of the system."

Of the 21 residents interviewed, however, only three admitted to following the one-problem-per-patient procedure. Twelve of the residents distanced themselves from it explicitly, often mentioning it without prompting during the interview and then disavowing that they followed it. These residents emphasized repeatedly that the patients were elderly, had multiple problems, and often relied on the VA for all of their medical care; all of these considerations warranted giving them thorough medical examinations. One third-year resident explained her approach as follows:

A lot of times when people call me in I tend to do a more complete physical on them. Like even if they come in with just an orthopedic problem, a lot of times I still do heart and lungs and I ask them about other medical problems as well instead of just dealing with that, just because I know a lot of these people don't have doctors that they see on a regular basis or . . . it's been years since they've had a complete physical exam. And since now I think I've gotten to the point where I . . . can do a physical exam a lot faster, I go ahead and do that, and it may be that I find things and then refer them on.

This resident referred to "several" cases in which she had discovered cancers as a result of doing complete examinations. Another senior resident said that she gave her patients a "head-to-toe exam," noting that this "slows the clinic down a lot but a lot of them haven't seen a doctor for ten years." A third senior resident declared that for him, treating all of a patient's problems was a matter of conscience: "If I found out about something that seemed like it needed to be addressed, I couldn't in good conscience ignore it."

These comments are striking because they reveal how determinedly residents have rejected the one-problem-per-patient prescription, although it is the most obvious and perhaps the most rational response to the problem of long patient queues. If implemented, that prescription would be an effective way of spreading the clinic's limited

resources widely and quickly. Certainly we would have expected the residents to do this, assuming that they had not given up in the face of an overwhelming patient load and had decided to slow down their work (cf. Schwartz 1975). Yet we saw no evidence that residents had given up. Instead they were simply unwilling to engage in mass processing of patients, even though their attention to their patients' complete needs increased queue pressures.

If residents were eager to lessen queue demands, another strategy was available. They could triage patients—that is, identify their problems and refer them to the appropriate specialty clinics rather than treating them in the PCC. Some residents favored this approach despite hospital policy. One resident, for example, said that he had written more referrals in his third year than in his first, a change which reflected his growing perception of primary care "as a triage area, not as a problem-solving area." He summarized his approach by saying, "You simply find some slot for the patient to be plugged into." Yet, as with the one-problem-per-visit strategy, this approach appealed only to a small minority of residents. Most residents referred fewer patients in their senior years than in their junior year: first-year residents referred about 32.5 percent of their patients, compared to 28.4 percent and 29.9 percent for second- and third-year residents respectively.⁴ Residents prefer not to triage their patients, not because it is contrary to hospital policy, but because they have serious qualms about the timeliness and comprehensiveness of the medical care that the specialty clinics provide.

From the residents' perspective these clinics have two drawbacks. First, they are heavily backlogged; thus a patient may have to wait many months to be seen in the clinic. Second, the clinics tend to ignore medical problems outside the domain of the specialty; therefore a patient with multiple problems either may have to undergo multiple consultations or may have some problems left unattended.

The delays in getting patients seen in the specialty clinics were cited by 13 of the 21 residents as the primary reason for avoiding such consultations. The following comments were typical:

For example, dermatology has a clinic one afternoon a week . . . and there's no way I

can get a patient seen unless it's truly an emergency, so I might be more inclined to try to handle a dermatological problem. Cardiology, last time I was over there, had perhaps a nine-month waiting period for new patients, which means if I've got somebody who's having chest pains, there's no way I'm simply going to write a consultation and say, follow up with them. I'm going to take care of them (R₃).

The narrow focus of the specialty clinics also was cited, although less often, as a motive for avoiding consultations. (Six residents raised this issue.) One senior resident declared, "I also know how the other clinics run because I've been on the consult service and I know that the patients don't get great general medicine care in cardiology clinic or diabetes clinic."

Consequently, instead of triaging patients, most of the residents have adopted an ethic that emphasizes the provision of medical care within the PCC.

I don't like to get consults unless I feel I have to or I don't feel comfortable with the problem or I feel the patient would be better served by a consultant or subspecialty. Otherwise I would prefer not to, actually. I think it's better to try and handle everything you can on your own as long as it's appropriate (R₂).

As one indication of the importance of this ethic, it is accepted that each resident will work at his or her own pace despite the heavy patient volume. The interviews revealed no evidence that residents felt pressured to keep up with the pace set by quicker colleagues; on the contrary, they emphasized the "camaraderie" among residents working in the clinic and the willingness of faster-working residents to pick up the slack, so that every resident would be able to perform as extensive an analysis as he or she chose and at the pace with which he or she was comfortable. Working at one's own pace, like providing comprehensive examinations, shows that residents refuse to be dictated to by queue pressures; rather, their behavior is governed by norms of professional responsibility.

The obligation that most of the residents feel toward their patients supports the argument made by Bosk (1979) in a study of surgeons: "Normative, that is, moral, standards are the organizing principle of a

professional community" (1979, p. 172). For these residents, as for Bosk's surgeons, individual conscience is a primary mechanism of control. In a subsequent section we will consider some of the factors that produced this particular expression of professional commitment.

We turn next to another area of medical care in which residents must organize their work in the face of heavy queue demands—the ordering of consultations.

Obtaining a Consultation

On the average, residents refer 30 percent of their patients to specialty clinics. Patients are referred for a number of reasons. One reason is that the PCC simply is not equipped to handle certain problems: a patient with a fracture must go to the orthopedics clinic, a patient with a hernia must go to general surgery, and one with cataracts must go to ophthalmology. These problems usually can be diagnosed instantly, and the patients are referred immediately. In other cases, the PCC resident may perform much of the initial workup, reach a decision, and then decide whether a patient would benefit from a consultation. Patients with pulmonary, cardiology, or renal problems would fall into this category. Here the resident must assess the seriousness and the probable course of the disease, taking into consideration the patient's age and general health, and must consider both his or her own familiarity with the problem and whether the case warrants a procedure or treatment that the specialty clinic can provide and the PCC cannot. A number of residents also said that if the patient needed long-term care, as elderly patients often do, they would refer him to make sure he received continuing care. Finally, as we saw earlier, some residents (albeit fewer than 20% of those interviewed) prefer in principle to refer patients rather than to treat them in the PCC.

Routine consultations present no difficulty for residents. The patient is seen in the PCC and then receives the first available appointment in the specialty clinic to which he has been referred. The PCC resident's task becomes more complicated, however, when he or she decides that the patient should be seen in the specialty clinic sooner than the date of the first available appointment, which

may be up to six months away. This decision requires the resident to negotiate access to the clinic, i.e., to convince the resident or the fellow in the clinic to overbook. The questionnaires provide some data on the extent of these negotiations because we asked the residents what percentage of their consultations required them to "beg" to have a patient seen in a clinic. The average answer was 48 percent, an indication that overbooking requests are common.

The problems with having to negotiate access are first, that it may be personally awkward, especially if the resident or the fellow in the specialty clinic is uncooperative, and second, that there is some prospect of failure, particularly if the clinic is already heavily overbooked. A number of residents cited "horror" stories in which they were unable to secure an immediate consultation for a patient who needed one.

I guess I can give you a story of a gentleman I saw who needed a prosthetic knee replaced and couldn't get in to see orthopedics for six months; why, he was going to spend those six months in a wheel chair, and by that time his leg was going to be very weak. . . . Consequently, orthopedics may not have wanted to replace his knee because it wouldn't do any good . . . he wouldn't be able to walk anyway because it would have been so atrophied (R₁).

Another first-year resident described a patient suffering from severe hip pain, whose hip replacement could not be carried out for another three months. Until then all he could do for the patient was provide a prescription for a monthly supply of "chronic high-dose narcotics."

Although these "failures" were prominent in the residents' memories, the residents reported that more often than not they were successful in obtaining overbookings. The interviews suggest, further, that the more senior the resident, the more likely he or she is to be successful. In part this is because the judgment of senior residents is more respected than that of junior residents; in addition, senior residents are likely to assert their judgments more confidently. Another factor that works in the senior residents' favor is that they are more likely to know the resident or the fellow in the specialty clinic

and thus can draw on personal ties to secure an overbooking.

I have been in the primary care clinic when I have known the ENT people and just walked over and said, "Hey, what about this?" and they answer me. Or I walk over and I said, "This guy has been hoarse for a month and he is a big drinker and big smoker, and I think you better look at him now," and they look at him instantly. I've noticed the consults go much better if I can find the person personally. If they happen to be in clinic I can just walk over and say, "Would you?" That makes it go much smoother. And basically that's the only way I can find to really do those, do the consult service, is know the people (R₂).

A third-year resident said of overbooking, "It's not just dealing with the office, it's dealing with your buddies." According to this resident, obtaining an overbooking sometimes didn't even require direct contact:

Frequently, what we do, however, within the medicine department—we can't do it in surgery but we do it in the medicine department—I'll just write down "Overbook approved, Dr. So-and-So," because I know Dr. So-and-So is on the clinic that month and I know he would rather I just do it than call him up. It's illegal, but it seems to make things flow more smoothly.

Although it was hard to determine the extent of the practice of signing another resident's name to an overbooking—the above resident was the only one who mentioned it—there were other areas in which residents acknowledged bending the rules or not following proper procedure. One senior resident, for example, discussed his frustration with the large backlog of patients waiting to be seen in some of the clinics, and then explained his strategy for squeezing in a patient:

You know, ophthalmology and dermatology are like six months—that's ridiculous. Unless the patient has an acute problem they can go for months with a very unpleasant condition and not be seen . . . That's probably one of the most disturbing things here.

Q: And those two clinics, dermatology and ophthalmology, are ones which normally wouldn't allow overbooking?

Only if there's an acute problem. If you tell

them it looks like a basal cell carcinoma, then derm will see them. So I usually do that with everyone I want seen (R₂).

Even so, the resident noted that these negotiating "tricks" were likely to work only when the patient's diagnosis was uncertain: "It's harder to make up a case for orthopedics than, say, derm . . . you can't tell them there's a fracture when there isn't one in orthopedics."

The consequence of overbooking is an increase in queue pressures in the specialty clinics. In obtaining an overbooking, residents in effect are declaring that orderly queuing is less important than providing prompt and effective medical care.

The tactics and bargaining involved in obtaining an overbooking are reminiscent of other work settings where employees meet organizational goals by evading organizational rules. For instance, Burawoy (1979) found that piece rate workers in a machine shop routinely violated management's rules by fetching fixtures and stock themselves instead of waiting for the auxiliary workers to bring them and by punching their own production cards instead of having the time clerks do it. These rule violations enabled the operators to "make out," i.e., to exceed the rate for the job set by the company without exceeding the quota dictated by shop floor norms. Making out, Burawoy argues, provided incentive pay to the operators and supplied the company with an efficient and enterprising work force. In the case of medical residents, however, formal incentives are not a factor. We argue that their commitment to patients in the primary care clinic derives from the fact that the work is routine and yet requires considerable responsibility. These are powerful *informal* incentives.

ROUTINE AND RESPONSIBILITY IN THE PCC

An endemic dispute in sociology concerns the relationship between socialization and organizations. Do individuals behave in organizations in accordance with their preexisting values and attitudes, or does behavior result from values and attitudes transmitted by the organization itself? We will refer to the first position as the "importation" perspec-

tive, to the second as the "homogenization" perspective. This debate was initiated by studies of total institutions, notably prisons and asylums. Goffman (1961) and Sykes and Messinger (1960) were prominent among those who argued that individuals in total institutions were stripped of their prior identities and subsequently were reformed (the homogenization thesis), whereas Irwin and Cressey (1964) and Jacobs (1977) argued that inmates' behavior could be attributed to pre-institution patterns of behavior and social organization (the importation thesis).

More recently, the debate has been revived in the sociology of work. Goldthorpe et al. (1968), among others, represent the importation perspective and Burawoy (1979) represents the homogenization perspective. Goldthorpe and his colleagues argue that workers' attitudes toward work, in particular their instrumental orientation, are a result of nonwork factors such as geographical and social mobility. Burawoy, in response, claims that externally produced consciousness has little effect on workers' behavior, a position that has been challenged in turn (e.g., Thompson 1983; Valli 1986).

In this study we are faced likewise with an apparent choice between the importation and the homogenization perspectives in examining the behavior of medical residents. Is their behavior a consequence of medical school socialization or of the organizational exigencies of a VA clinic? Although we have no data that bear directly on this question, other studies of medical students are of some help here. In a landmark study of student culture by Becker, Geer, Hughes, and Strauss (1961) conducted three decades ago, the authors reported that medical students judged their training by the opportunities they received to exercise medical responsibility and to gain practical experience; responsibility and experience were the hallmarks of the established physician. Other studies have confirmed that medical students seek out internships in which they will be faced with many acutely ill patients for whose care they will have to take responsibility (Bucher et al. 1969; Miller 1970).

The next question is whether the behavior that we have represented as typical of residents in the PCC—treating patients to the full extent of one's capabilities and the clinic's resources and being willing to try to obtain an overbooking—arises from the same

values that Becker and others identified as central to medical student culture. We suspect that the answer is positive, but our endorsement of the importation perspective is qualified. The importation argument "works" because of the fit between VA organizational characteristics and residents' values, which are based in medical student culture.

In two respects the VA hospital is more conducive to the realization of students' values than the university hospital. First, the medical problems that residents encounter in the VA are more routine than in the university hospital; second, in the VA residents can exercise far more responsibility than in the university hospital.

The university hospital is a fee-for-service tertiary care center. Therefore its patients tend to suffer from unusual and/or hard-to-treat acute problems, whereas in the VA the range of pathology is more representative of the population as a whole. Residents sometimes use the term "zebra" to describe the characteristically exotic case that is found at the university hospital. One resident distinguished between typical VA and typical university hospital diseases: "At the VA you see a lot of COPD [chronic obstructive pulmonary disease], heart diseases, diabetes, lung cancer, bowel cancer. Here [at the university], you see Wolf Parkinson White, you see Kew fever . . ." The routine medicine of the VA thus complements the esoteric medicine of the university hospital. A senior resident said that he "didn't consider any training program that didn't have a VA system program associated with it"; a junior resident said, "I think there is a lot of general medicine which I think this program is a little bit weak (in), so I think it is good to see more of the common everyday things. I think you see more of that at primary care." Even a resident who complained that she found much of the work in the PCC boring declared that

"it is sort of neat to have a community hospital right next to a big tertiary care hospital."

The "bread-and-butter medicine" of the PCC has other attractions for residents. It teaches them to work efficiently because they are so busy, and it allows them to bring medical care to a genuinely ill population. Many veterans do not have local doctors; as a result their diseases are often in an advanced stage when they finally attend the PCC. As one senior resident said, "You can pick up some good, interesting medical problems there (the PCC), and you're giving care to people who definitely need care." A junior resident said:

At the VA there is less of a routine follow-up; people generally come in when they really need to be seen . . . The one thing about the veterans is that they all have genuine pathology; you know even if someone comes in for a COPD check, they're going to have an incredible exam . . . even if it is routine, it is probably not real routine.

The opportunity to familiarize themselves with a wide range of internal medicine problems is a valuable experience for residents before they enter the specialization on which most of them will embark. In our survey we asked the residents about the type of setting in which they intend to work and the type of medicine that they wished to practice after completing their residencies. Table 1 shows that of those who have decided on both a setting and a practice (79 of the 108 residents), by far the largest group (36 of 79) plan to go into academic medicine and to pursue a subspecialty. Thus, for these residents the VA is a setting where they can meet and master the challenge of work in routine, ordinary medicine before entering a career in specialized, academic medicine.

TABLE 1. Cross-Tabulation of Residents' Anticipated Postresidency Settings and Practices

		Type of Practice								Total		%	
		General Internal		Subspecialty		Combination		Other					
		N	%	N	%	N	%	N	%				
Type of Setting	Academic	1	6	36	67	0	0	2	40	39	49		
	Private	10	56	4	7	0	0	1	20	15	19		
	Combination	4	22	13	24	2	100	0	0	19	24		
	Other	3	16	1	2	0	0	2	40	6	8		
Total		18	100	54	100	2	100	5	100	79	100		

The second distinguishing feature of the VA hospital—as in other VA hospitals in which residents are used—is the amount of autonomy and responsibility accorded to residents.⁵ The residents, especially the senior residents, are in charge of patient care in the PCC, in the specialty clinics, and in the wards. In the PCC, junior residents are supervised loosely by senior residents, but they make decisions on their own once they have completed their first year, although they may choose to discuss problems with their colleagues. In order to assess to what extent junior residents were supervised by senior residents, we asked whether it was common for a senior resident to tell a junior resident that it was necessary or unnecessary to refer a patient for consultation. The results are reported in Tables 2 and 3.

It appears that a junior resident is seldom overruled when he or she has ordered a consultation—90 of the 107 residents said that this would be somewhat or very uncommon—but is overruled more often when a consultation has not been ordered. Nonetheless, more than half of the residents stated that even the latter was somewhat or very uncommon. The role of senior residents is to prevent junior residents from attempting too much on their own—to make sure that patients are referred if necessary—but within these broad limits junior residents enjoy substantial autonomy.

Senior residents have far greater autonomy and responsibility, a fact that one senior resident described as “shocking”:

I think people are often shocked at how much they are left on their own, and it is shocking. . . . You get over here [the university hospital] and we can't even have our patients' toenails cut without staff approval, and I am only slightly exaggerat-

TABLE 2. Residents' Perceptions of Supervisory Relationships

	N	%
In your experience, how common is it for a senior resident to tell a junior resident that a consultation is <i>unnecessary</i> when the junior resident has ordered one?		
Very common	1	1
Somewhat common	16	15
Somewhat uncommon	61	57
Very uncommon	29	27
Total	107	100

TABLE 3. Residents' Perceptions of Supervisory Relationships

	N	%
In your experience, how common is it for a senior resident to tell a junior resident that a consultation is <i>necessary</i> when the junior resident has not ordered one?		
Very common	3	3
Somewhat common	50	46
Somewhat uncommon	47	44
Very uncommon	8	7
Total	108	100

ing. . . . We get over there [the VA] and you really are on your own, and I think there is a feeling you are on your own to your capabilities. But you are often on your own beyond your capabilities (R₂).

This resident, however, was the only one to express these doubts. All of the residents with whom we broached the topic welcomed the autonomy available in the VA; one resident even characterized working in the VA as a “sort of promotion” over working in the university hospital.

Residents valued the PCC because there they could be real professionals; that is, they could provide direct, unsupervised medical care without the restrictions and checks of the structured, hierarchical university hospital. In the university hospital every patient seen in the outpatient clinics has an appointment and sees his or her own staff physician. There are no queues. After the patient is examined by the resident, he or she also is seen by the staff physician, who not only scrutinizes the resident's handling of the case but is the ultimate decision maker as well.

In the PCC, however, freed from these constraints and encouraged by VA policy to provide as much care as possible, residents truly can practice medicine. As one junior resident remarked, “You get more of a feeling of actually doing primary care—that you can actually go ahead and try to treat some of these things, do the workup, instead of just saying, ‘Oh, I think you have this, go to this clinic,’ and then not actually doing the workup.” A senior resident described how the identification of a potential problem—in this case a lung nodule—created the opportunity for “getting a CAT scan, getting spirometry, and essentially setting them up for an inpatient bronchoscopy from primary care” instead of merely dispatching the patient to

the pulmonary clinic. Another senior resident described the VA as a setting where residents "can get away with a lot more. If you want to excise someone's cyst, you could do that here. You could never do that at the university, so you have a lot more leeway . . . you know, you can really take a patient's problem and deal with it yourself."

Our findings regarding the differences between residents' work in the VA and in university hospitals are consistent with earlier studies of interns and residents by Kendall (1963) and Mumford (1970). Kendall found that in hospitals which were affiliated closely with a medical school, such as the university hospital in our study, the work of interns and residents was supervised far more intently than in hospitals with loose or no affiliation, such as the VA hospital or community hospitals (1963, pp. 200–204). Mumford's comparative analysis of interns (first-year residents) in a university hospital and in a community hospital revealed that very different forms of training prevailed in each setting: university hospital interns functioned as subordinate members of a medical team and were expected to turn to the more senior members for advice and assistance, whereas community hospital interns functioned as individual practitioners and were expected to cope on their own. Mumford observed that the community hospital provided the intern "with a context that allows him more immediately to feel like a doctor" (1970, p. 136). The community hospital, according to both Kendall and Mumford, gave residents the opportunity to learn their trade. The importance of autonomy for residents is supported by Lipsky's analysis of street-level bureaucracy (1980, pp. 19–21) and by Nathanson's (1971) finding that residents who feel they have control over clinic activities are far more likely to be satisfied with outpatient work than residents who feel that they lack control.

To summarize, the importation argument holds true not because working in the PCC is a harbinger of the residents' postresidency practices (cf. Freidson 1970), but because working in the PCC activates values that have been at the heart of medical student culture for a considerable period of time—the importance of acquiring experience and gaining responsibility. These values underpin the type of medicine—long, careful evaluation of

patients, indifference to queues—practiced by residents in the PCC.

CONCLUSIONS

Street-level bureaucrats often have been a source of frustration for policy makers because their considerable on-the-job discretion enables them to thwart efforts to improve distribution of services. Lipsky notes that "doing more for clients . . . place(s) additional burdens on street-level bureaucrats, who will subvert such developments in the likely absence of any strong rewards or sanctions for going along with them" (1980, p. 102). The pressures of work—the queues, the lack of resources—tend to encourage mass processing and triaging of clients.

In this paper, however, we have examined a workplace where servers, the residents in the PCC, faced a variety of queue demands—heavy patient loads, shortages in staff and equipment, long waiting lines at the specialty clinics—for which their coping strategies were not what we might have expected. Rather than requiring patients to limit themselves to one problem per visit, which would have been an effective way of working through a queue of patients, residents performed comprehensive physical examinations. Rather than reducing their loads by sending patients to specialty clinics for treatment, residents treated patients in the PCC; if a consultation was needed, residents often sought an overbooking in the specialty clinic in order to expedite care.

Our knowledge of bureaucracy tells us that without the appropriate rewards and penalties, members of organizations will be unresponsive to their clients' needs or to their organizations' purposes (Lipsky 1980). The rewards may be career advancement or the opportunity to "make out" (Burawoy 1979), but the critical element, as Stinchcombe (1985) argued, is that rewards (and penalties) are a direct function of job performance. The residents in this study clearly were not motivated by organizational rewards, nor was their performance in the VA scrutinized by staff physicians there or at the university hospital.

Instead, residents' concern for patients arose from the informal rewards they derived from PCC work. The clinic provided opportunities that corresponded almost perfectly

with the values of medical student culture—the opportunity to gain experience through practicing the craft of routine medicine and the chance to exercise responsibility by making unsupervised decisions. Neither of these opportunities was available to anywhere near the same degree in the specialized, hierarchical environment of the university hospital.

The behavior of the residents in the primary care clinic of the VA hospital resulted from the interaction of three factors: the values regarding appropriate medical treatment that residents brought with them, the overload of patients to which they were subjected, and the organizational context of the clinic itself. If any one of these factors had been different, in all likelihood the residents' behavior would have been different as well. As an illustration, consider the prepaid group practice examined by Freidson (1975). The primary care physicians in this practice, when faced with what they felt were too many patients, reacted quite differently from the residents in the PCC. In order to cope with patient volume, they omitted standard features of the routine physical examination, referred relatively uncomplicated cases to the specialists in the group, and occasionally referred patients without even having examined them. These physicians had no organizational or personal incentive for seeing additional patients or for treating problems that could be handled just as easily by group specialists. Finally, and most significant for comparison with the PCC, these physicians faced no delays in gaining access to the specialists, so that they did not have to be concerned about complaints being left untreated for long periods. In short, their behavior was consistent with what we would expect in terms of queue theory, but circumstances were conducive to this outcome. At the VA, different circumstances resulted in different outcomes.

The most important difference between the physicians in the PCC and Freidson's group practice physicians was that the PCC doctors were physicians *in training*. Although qualified, they were still learning the skills of their trade. This fact has two implications for the comparison between our case and that of other street-level bureaucrats. First, as we have noted, the learning opportunities provided in the PCC served as a set of informal rewards for residents that not only compensated for their limited formal rewards but also

encouraged them to assume additional burdens of work voluntarily. The PCC rotation was the place in which a resident tested his or her knowledge and skills; consequently, residents were more sensitive to the rite-of-passage characteristics of the rotation than to the queue characteristics. Second, as physicians in training with short-term ties to the organizations in which they were working, the residents did not have to be concerned with issues of cost or efficiency; consequently they could concentrate on the intertwined objectives of their own learning and patients' well-being, without regard to whether their practice habits were cost-effective.

In order to explain the behavior of street-level bureaucrats when they are faced with queues of clients, we must examine not only the constraints imposed by the queues but also the characteristics, values, and attitudes of the bureaucrats themselves, particularly when they do not behave as expected. Obviously it is not possible in an exploratory case study to reach definitive conclusions about queue theory. Nonetheless we hope that this study, which focuses on a deviant case, can contribute to a clearer understanding of the circumstances under which the predictions of queue theory might or might not hold. In this manner, idiosyncratic cases can help to produce stronger general theories.

NOTES

1. The affiliation of VA hospitals with university hospitals was a key element of a post-World War II plan for upgrading the quality of medical care in the VA system (Starr 1982).
2. One reason why VA patients are poorer than the average is that not all veterans are provided with free medical care or are guaranteed this care. In 1989 free, guaranteed medical care was offered to veterans with service-connected conditions and to those with annual incomes of not more than \$16,466 if single (\$19,759 if married). Veterans whose incomes exceed these limits could receive care if space and resources permitted, and would be required to pay a deductible.
3. A copy of the questionnaires is available on request.
4. The difference in consultation rates between junior and senior residents is quite small, in part because seniority is only one of the factors that determine whether a patient will receive a consultation. Other factors include the patient's

age, the reason for his visit to the PCC, and his medical problem. Although senior residents on the whole refer fewer patients than do junior residents, there are circumstances under which they will be more likely to refer a patient (Finlay et al. 1990).

5. Residents have more autonomy in VA hospitals than in voluntary hospitals partly because the personnel/patient ratio is lower in VA hospitals. Heydebrand (1973) found that the personnel/patient ratio was more than one-third lower in VA hospitals than in voluntary teaching hospitals.

REFERENCES

- Becker, Howard S., Blanche Geer, Everett C. Hughes, and Anselm Strauss. 1961. *Boys in White*. Chicago: University of Chicago Press.
- Bosk, Charles L. 1979. *Forgive and Remember: Managing Medical Failure*. Chicago: University of Chicago Press.
- Bucher, Rue, Joan Stelling, and Paul Dommermuth. 1969. "Differential Prior Socialization: A Comparison of Four Professional Training Programs." *Social Forces* 48:213-23.
- Burawoy, Michael. 1979. *Manufacturing Consent*. Chicago: University of Chicago Press.
- Finlay, William, Elizabeth J. Mutran, Rodney R. Zeitler, and Christina S. Randall. 1990. "Patient Age, Visit Purpose, and the Ordering of Consultations in a Primary Care Clinic." *Journal of Aging and Health* 2:261-81.
- Freidson, Eliot. 1970. *Profession of Medicine: A Study of the Sociology of Applied Knowledge*. Chicago: University of Chicago Press.
- . 1975. *Doctoring Together: A Study of Professional Social Control*. New York: Elsevier.
- Goffman, Erving. 1961. *Asylums: Essays on the Social Situation of Mental Patients and Other Inmates*. Chicago: Aldine.
- Goldthorpe, John, David Lockwood, Frank Bechhofer, and Jennifer Platt. 1968. *The Affluent Worker: Industrial Attitudes and Behavior*. New York: Cambridge University Press.
- Heydebrand, Wolf. 1973. *Hospital Bureaucracy: A Comparative Study of Organizations*. New York: Dunellen.
- Irwin, John and Donald R. Cressey. 1964. "Thieves, Convicts, and the Inmate Culture." Pp. 225-46 in *The Other Side*, edited by Howard S. Becker. New York: Free Press.
- Jacobs, James B. 1977. *Stateville: The Penitentiary in Mass Society*. Chicago: University of Chicago Press.
- Kendall, Patricia L. 1963. "The Learning Environments of Hospitals." Pp. 195-230 in *The Hospital in Modern Society*, edited by Eliot Freidson. Glencoe, IL: Free Press.
- Lipsky, Michael. 1980. *Street-Level Bureaucracy: Dilemmas of the Individual in Public Services*. New York: Russell Sage Foundation.
- Miller, Stephen J. 1970. *Prescription for Leadership: Training for the Medical Elite*. Chicago: Aldine.
- Mizrahi, Terry. 1986. *Getting Rid of Patients: Contradictions in the Socialization of Physicians*. New Brunswick: Rutgers University Press.
- Mumford, Emily. 1970. *Interns: From Students to Physicians*. Cambridge: Harvard University Press.
- Nathanson, Constance A. 1971. "Peer Surveillance and Patient Orientation in a Pediatric Out-Patient Clinic." *Human Organization* 30:255-65.
- Prottas, Jeffrey Manditch. 1979. *People-Processing: The Street-Level Bureaucrat in Public Service Bureaucracies*. Lexington, MA: Heath.
- Randall, Malcom, Kerry E. Kilpatrick, Jane F. Pendergast, Katherine R. Jones, and W. Bruce Vogel. 1987. "Differences in Patient Characteristics between Veterans Administration and Community Hospitals." *Medical Care* 25: 1099-1104.
- Roth, Julius A. 1985. "The Treatment of the Sick." Pp. 274-302 in *Poverty and Health*, edited by John Kosa and Irving Kenneth Zola. Cambridge: Harvard University Press.
- Schwartz, Barry. 1975. *Queuing and Waiting: Studies in the Social Organization of Access and Delay*. Chicago: University of Chicago Press.
- . 1978. "Queues, Priorities, and Social Process." *Social Psychology* 41:3-12.
- Starr, Paul. 1982. *The Social Transformation of American Medicine*. New York: Basic Books.
- Stinchcombe, Arthur L. 1985. "Three Origins of Red Tape." Pp. 322-44 in *Organization Theory and Project Management*, edited by Arthur L. Stinchcombe and Carol L. Heimer. Oslo: Norwegian University Press.
- Sykes, Gresham M. and Sheldon L. Messinger. 1960. "The Inmate Social System." Pp. 5-19 in *Theoretical Studies in Social Organization of the Prison*, edited by Richard A. Cloward. New York: Social Science Research Council.
- Thompson, Paul. 1983. *The Nature of Work: An Introduction to Debates on the Labour Process*. London: Macmillan.
- Valli, Linda. 1986. *Becoming Clerical Workers*. Boston: Routledge and Kegan Paul.
- Wolinsky, Fredric D., Rodney M. Coe, Ray R. Mosely II, and Sharon M. Homan. 1987. "Some Clarification about Health Planning in the VA." *Medical Care* 25:1105-10.

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