

Competition and Reform in the Swedish Health System

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THE SWEDISH HEALTH-CARE SYSTEM IS IN THE MIDST of a painful organizational reappraisal. In terms of morbidity and mortality as well as health status, Sweden continues to have one of the industrialized world's healthiest populations. Its infant mortality rate of 5.8 per 1,000 live births, like its average life span of 74.2 years for men and 80.0 years for women (Nordic Statistical Secretariat 1990), places Sweden near the top of comparative health statistics. Moreover, several decades of immigration—with the result that one of eight residents was born in another country—have not appreciably affected Sweden's aggregate figures.

Despite superior performance on collective indices, however, Sweden faces an increasing crisis at the service-delivery level. Growing demands for care from a rapidly aging population cannot be met by a health sector that, reflecting its successful cost-containment policy earlier in the decade, has set pay schedules too low to attract new personnel in a tight labor market. Pressures to increase hospital resources, to keep abreast of new technology, and to reduce long waits for elective procedures confront continued demands to build up services in the primary-care and home-care sectors (Calltorp 1989). The need to improve continuity of care, especially for elderly patients, requires resolution of an intractable dilemma as to whether primary-care services should be integrated with county-administered hospital services (as at present) or

with municipally administered social services (as in Finland) (Saltman 1988b). In order to remain industrially competitive in a period of rapid economic integration, both within and beyond the European community, Sweden must reduce tax levels that are among the highest in Europe. Tax reduction, however, precludes additional public funds for health care. Alternative sources among existing public revenues—for example, utilizing sickness insurance funds (which replace income when individuals are on sick leave) to pay for more rapid treatment of patients on waiting lists for elective surgery—involve complicated moral as well as administrative quandaries. More perplexing still, widespread economic success has created an affluent population that is less willing to accept a stratified health-care system perceived to be largely impervious to patient influence. (A recent survey reported in Petersson et al. [1989] indicated that, of all aspects of contemporary life, Swedes felt least empowered within the health sector.)

These multiple conflicting demands for major change in the Swedish health system have generated an intriguing array of proposed responses. They span a spectrum from neoconservative suggestions to replace the present public system with a set of privately operated financial and provider markets (Johnson 1986) to adamant defense of the present structure by those who believe the solution lies in providing increased resources to a strapped delivery system (Anderson 1989).

Perhaps the most important proposal has been advanced by the governing Social Democratic Party in its preliminary national program for the 1990s (Social Democratic Party 1989). In a major shift from the party's traditional emphasis upon an expert-dominated planning approach, the new program supports the introduction of certain market-oriented mechanisms inside the existing publicly operated system. Patients would have free choice of site and provider both within and across county lines, while providers would find both budget allocations and salaries tied to their ability to attract patients and to serve them efficiently. Although these proposals evoke dismay from more ideological quarters of the party, as well as from some proponents of population-based primary care, they can be viewed as part of another long Social Democratic tradition: pragmatism in the face of a changing political environment (Tilton 1987).

As these proposals indicate, two key issues surface in the developing Swedish debate: (1) the proper role for competitive behavior within a restructured health system, and (2) whether private-sector providers

and/or insurers ought to be incorporated within that new model. In this the Swedish debate resembles ongoing policy dialogues in a number of other countries, most notably the United Kingdom (Robinson 1988; Ham, Robinson, and Benzeval 1990). The strong Swedish emphasis upon social and preventive, as well as financial and curative, issues, however (National Board of Health and Welfare 1985) suggests that the outcome of the Swedish debate may contain important lessons about the capacity of publicly operated health systems to integrate effectively normative objectives with performance-oriented ones.

This article explores the institutional and organizational framework within which the current Swedish policy debate is taking place. The first section draws upon a variety of sources to trace the size, scope, and financing of the present publicly operated system. The subsequent sections suggest a general typology for competitive activity inside the Swedish health system, drawing upon existing experiments in various county councils that demonstrate present levels of market-oriented behavior.

A Structural Overview

Viewed in aggregate economic terms, Sweden has a relatively expensive health-care system, which, over the course of the 1980s, has successfully contained its overall rate of expenditure. Total health spending, as measured against Sweden's gross domestic product, has fallen from 9.7 percent in 1980 to 9.0 percent in 1987. Viewed in per capita expenditure terms, in 1987 Sweden spent \$1,233 per citizen, a figure 40 percent lower than that of the United States, which has the world's most expensive health-care system (Schieber and Poullier 1989). If one adjusts the Swedish figure to reflect the fact that it has the largest percentage of elderly (over 65 years) in the world—18 percent in Sweden compared with 12 percent in the United States or 11 percent in Japan—then the Swedish figure becomes a full 50 percent lower than the U.S. figure (*Lanstingsvärlden* 1989). In effect, when current expenditure figures are age adjusted, the Swedish system is only half as expensive as the U.S. system on a per capita basis—and with substantially less unmet need for care.

The key to Sweden's aggregate financial performance has been that its health services are predominantly financed and produced within the

public sector. Public expenditure on health care in Sweden, as a percentage of total health expenditures, was 90.6 percent in 1987. Although higher than the Organization for Economic Co-operation and Development (OECD) average of 77 percent, this figure compares with 41.4 percent in the same year in the United States (Schieber and Poulhier 1989).

Public expenditure for health services in Sweden are financed through a combination of general taxation at the national, county (regional), and municipal levels as well as by social insurance funds from the national sickness fund (Försäkringskassan). General revenue at the national level is raised through progressive personal and corporate income taxes and by a 24 percent value-added tax. Both county and municipal revenues derive predominantly from a fixed percentage collected from personal income earned by their respective inhabitants. Although each county and municipality has the legal right to set its own tax rate, most abide by "ceilings" negotiated nationally between their national federations and the Ministry of Finance. As part of current macroeconomic policy, the national government has limited the combined total of county and municipal taxes to 30 percent of earned income for the 1990 and 1991 tax years.

National sickness insurance funds, which finance ambulatory care in addition to reimbursing patients for lost income due to illness, are raised as part of general social-insurance taxes paid by employers for each employee. In 1987, total social insurances, including pensions, amounted to about 46 percent of an employee's salary.

Hospitals

In principle, all hospitals in Sweden are financed via prospective annual (calendar year) budgets set by the 23 county councils or three provider municipalities (Göteborg, Malmö, and Gotland). All medical staff and support personnel are paid on a salaried basis, in accordance with schedules determined in biannual national negotiations between the relevant labor unions and the Federation of County Councils.

There are two exceptions to this general global-budget pattern. First, all county-run acute-care hospitals—and particularly the eight university hospitals (which service a multicounty region, but are administered by their county of location) levy per patient charges for services provided to individuals who reside outside the county in which they are treated. For county-level central hospitals, these patient fees are set by

the Federation of County Councils on a national per diem basis, regardless of individual counties' actual operating costs. For university hospitals, at which out-of-county patients are predominantly referral patients, nonresident patient fees may be set by the hospital according to its operating costs, and, depending upon the type of treatment, may be levied on a per diem, per episode, or per service basis. In all instances, out-of-county patient fees are billed directly to, and are paid by, the health authority in the patient's county of residence.

The second exception to the typical fixed-budget reimbursement pattern concerns contracted services to Sweden's two 150-bed, privately operated inpatient institutions. Payment for these services typically is on a per episode basis, tied to an initial bid to the county for a guaranteed number of procedures.

Ambulatory Care

Primary care in Sweden is provided by the 26 county council/municipal provider agencies through primary-care districts, in which publicly operated health centers are supplemented by maternity clinics, child health clinics, public dental facilities, and local nursing homes (Central Statistical Bureau 1988). Most ambulatory care in Sweden, including all primary-health-center visits, is financed through the national sickness insurance. In January 1985, these ambulatory-care payments were changed to place them on an annual capitated basis directly to the 23 county and 3 municipal health-delivery agencies. This change was intended in part to consolidate public-sector control over remaining private-sector, office-based physicians because it channeled all publicly generated, primary-care revenues directly to the county councils. In turn, each county can now decide whether it wishes to enter into service contracts with existing private practitioners, and, if so, on what basis and for what total expenditure. This model of private ambulatory-physician provision—quite different from, say, the Danish system with two separate primary-care “tracks”—does *not* involve any direct patient decisions about the extent or composition of the publicly funded ambulatory services they might receive.

Physicians

In 1985, 84 percent of the 15,094 registered Swedish physicians were publicly employed (Central Statistical Bureau 1988). These physicians,

whether working in primary-care or hospital settings, are salaried employees of the county government and, as such, civil servants. They also are overwhelmingly union members (94 percent of all physicians under age 65 in 1987 according to the Swedish Medical Association) and thus bound directly by the national contract between the union and the Federation of County Councils.

There are two general payment mechanisms, which, in principle, cover nearly all physicians actively practicing in Sweden. Those employed by the public health system are paid on a 100 percent salary basis. Those who are privately employed, either within large industrial enterprises (5 percent of total registered physicians in 1985) or in independent solo or group practice (6 percent in 1985) (Central Statistical Bureau 1988) are paid in accordance with their specific contracts with private- or public-sector purchasers of care.

This distinct "two-track" pattern has begun to blur, however, as a consequence of two recent developments that affect payment patterns for publicly salaried physicians. First, salaried public-sector physicians have begun to treat additional private (typically fee-for-service) patients in their off-duty time. This increase in private care by publicly employed physicians in part reflects collective-bargaining decisions in the late 1970s, which increased physicians' compensation time in lieu of raising wage levels. The largest growth in this area has been among hospital-based specialists providing part-time services to private ambulatory clinics, like those run by a company called City-Akuten and by Stockholm's Sophiahemmet Hospital.

The second factor is the new policy for physicians' salaries, which took effect in January 1989. As part of the current national agreement negotiated between the Federation of County Councils and the Swedish Medical Association, uniform national wage gradations have been replaced by specific kroner figures to be determined on an individual physician basis.

Intersectoral Support

It is important to note that there are a wide range of intersectoral public expenditures, which, although indirect, help support personal charges levied in connection with publicly provided health services (nominal per physician visit, per prescription, and per day hospital, rehabilitative, and nursing-home fees), as well as the purchase of certain health-

related items such as eyeglasses. These indirect subsidies include an interconnected network of widely distributed income-support payments (elderly pensions, long-term unemployment insurance, social welfare maintenance, housing allowances, child allowances) and public-sector operating subsidies (housing, transportation, education, job retraining). They represent the tangible fruits of the Social Democratic Party's policy of "folkhem," which sought to reconceptualize Swedish society as "the people's home." The overall consequence of these intersectoral public expenditures is that nearly all Swedes, including all elderly Swedes, have sufficient resources to afford modest personal expenditures for health care. This assessment can be confirmed by the fact that although equity issues are still discussed in some quarters, there has been little or no mention of copayments.

Private Sector Providers

Swedish statistics portray a very small if growing private clinical-services sector. Sweden has two privately owned hospitals, each with about 150 beds: one in Stockholm and one in Gothenburg. On the ambulatory side, a company called City-Akuten operates walk-in clinics in Sweden's three largest cities, and a physician-owned business called Praktikertjänst manages about 800 physician offices on behalf of its members (Karl-Evert Mosten, personal communication, February 1988). In addition, several counties have let private contracts for managing publicly owned primary-health centers—in particular, Stockholm, Halland, and now Östergötland and Västmanland Counties.

According to the best estimate of a senior executive of the largest provider company, Praktikertjänst, in 1988 all private clinical providers' gross earnings amounted to 1 percent of total health-care expenditures (Karl-Evert Mosten, personal communication, February 1988). The preponderance of that income reflected contracts with the 26 county councils and municipalities that operate the Swedish health system because the public sector has a near monopoly over health-care revenues. Although several private insurance companies offer health insurance, they provided coverage to only an estimated 20,000–25,000 individuals in 1990, mostly senior executives in small private-sector corporations (Rosenthal 1990). Moreover, from 1988, private corporations as well as individuals have been prohibited from taking a tax deduction for private health-insurance premiums, a measure that may further diminish the attractiveness of private health insurance.

Competitive Behavior in the Swedish Health System

As Sweden's current distribution of health-care resources suggests, its debate about the usefulness of market-influenced approaches to service delivery has focused predominantly on the behavior of public-sector institutions. Although county and municipal providers have begun to reevaluate existing patterns of clinical activity, they have not reached either internal or collective consensus on which type or form of change is required. Their options are constrained, moreover, by their legal obligation under the 1983 Health Act to provide care to every citizen "under equal conditions," as well as by continued national efforts to sustain priority for primary care and preventive services. (For a review of Swedish health legislation, see Saltman 1988a.)

Present patterns of competitive behavior underscore the considerable caution with which the publicly elected county politicians approach the possibility of a major health-system reconfiguration. This section draws upon ongoing experiments to develop a three-part typology of existing competitive service-related activities in Sweden. Adopting its conceptual framework from economic theory, the analysis below divides existing competitive behavior into two major groupings of the service-delivery equation: those on the provider and/or supply side and those on the patient and/or demand side. Each will be examined in turn.

Competitive Activities among Providers

In the Swedish context, "competition" refers to three different types of actual competitive forces.

Professional Competition. Traditionally there has been in Sweden, as in other health systems, a measure of professional competition among physicians—most commonly, hospital specialists—for peer recognition and prestige. Although direct financial incentives either to the physician or to the related clinic, department, or institution are rare, there often are indirect financial rewards over the long term. These can be particularly useful as leverage over scarce resources, including capital equipment and space, reinforcing professional incentives to win recognition for doing a "better" job than colleagues in one's specialty and/or institution (Young and Saltman 1985).

Comparative Competition. This takes the form of competition be-

tween service-delivery units that are established and publicly operated and those that are newly initiated and privately operated; it can also occur between different publicly operated units. Although there is no short-term economic pressure on the publicly administered units to reconfigure themselves into similar financial and/or productivity profiles, there is long-term or background pressure on public units to reassess their activities and to justify any ostensibly untoward comparisons that might arise. When a private-sector provider is involved, the county or municipal authorities typically negotiate a short-term contract with a single provider on an "experimental" basis. Competitive pressures can only be created when there is a dual public-private or public-public service structure.

Financial Competition. The third form of competition is direct bidding by both private and public suppliers for specific short- and long-term contracts. This is the traditional neoclassical model of a market, in which multiple suppliers compete based upon such factors as price, quality, and service, and, more important, in which unsuccessful bidders are presumed ultimately to go out of business. Neoclassical theory undervalues the central regulatory role of political bodies in creating and subsequently maintaining the social context within which competition takes place (Polanyi 1944). It also ignores the serious practical obstacles to uncontrolled entry and exit in the provision of a social good like health care (Saltman and von Otter 1989a). As a consequence, the neoclassical model typically is restricted in various respects by public-sector authorities—in Sweden as in other publicly operated health systems—to ensure a modicum of service stability.

This tripartite view of competition within a publicly operated health system serves to refine the current picture within Sweden. Professional competition among hospital specialists, sharpened by years of restricted budgets, continues to increase. It is not uncommon for hospital specialists to seize upon available evidence to demonstrate that their own services are more efficient than those of their institutional or specialty colleagues. Moreover, in a logical extrainstitutional extension of the intrainstitutional budget competition to which professional competition for peer standing is linked, Swedish specialists have occasionally "gone public" when they feel they have not been appropriately accommodated by their own institution.

Comparative competition has become the most common type of institutional-level competition for clinical services in the Swedish health

system. One example of public-private competition was City-Akuten, which opened its first ambulatory clinic in downtown Stockholm in 1983. City-Akuten offered a service that was then unavailable within the publicly operated sector: general medical and/or specialist consultation on a walk-in basis in a convenient location close to many people's place of employment. Faced with the costs of financing this private fee-for-service clinic, the central Stockholm health district developed a public-sector challenger, Quarter's Akuten, which opened in early 1988 on the site of a former (and continuing) neighborhood health center. There is lively debate in Stockholm health circles as to how well the public sector has performed in response to what had previously been a private-sector monopoly.

More formal versions of comparative competition emerged in 1986 and 1987 when Stockholm and Halland Counties decided to experiment with placing an entire health center (*vårdcentral*) in private managerial hands. In Stockholm County, a newly built health center in a middle-class suburb called Vällingby was contracted out to a physician entrepreneur for a bit longer than three years. As part of the contract process, the county will evaluate the performance of this private health center in an effort to obtain useful comparative data. The county was not able to find a private contractor to take a second health center in a different suburb with a high proportion of working-class people: the one bid received was at a higher annual per capita rate than what the county itself was spending to provide the same services (Bo Könberg, personal communication, March 1988).

Several points should be made about the Stockholm experiment with comparative competition in primary care. First, the policy decision was to find a private contractor for a new facility, not to generate competing bids (or financial competition) from existing public and outside private contractors. Second, Stockholm County found that it was both more difficult and more expensive to find a private contractor willing to take full responsibility for the greater level of health problems found in a working-class neighborhood. Third, Stockholm County politicians insisted that private contractors bid for the same full bundle of preventive and curative services delivered by all publicly operated health centers.

The Halland County experiment with comparative competition similarly involved the creation of a new health-center district; however, the nature of the private operation was rather different from Stockholm's.

Taking advantage of the prior existence of a private group practice in Halmstad, one of the larger cities in the county, Halland County negotiated a contract that was both limited to curative medical care and paid partly on a volume-tied basis. In effect, whereas Stockholm County contracted out the management of a new publicly built health center, Halland County contracted with an established group practice for a form of fee-for-service curative care.

The Halland experiment has been controversial due to its traditional medical focus and the conclusion of an outside evaluation—using a methodology that measured only number of visits per hour—that the private group practice demonstrated more than double the productivity of Halmstad's publicly operated health centers (Stenberg and Åhgren 1987). Despite its different structure, however, the Halland experiment also sought to establish comparative competition among that county's primary-health centers through a demonstration project negotiated with a single private contractor.

One intriguing example of comparative competition arose from the efforts in several counties to encourage publicly employed medical specialists to compete against themselves as a part-time private group practice utilizing their daytime public-sector offices and facilities. At Mölndal central hospital in Bohus County, for example, certain clinics also see "private" patients at night or on weekends (*Arbetet*, October 5, 1987). At Stockholm's Karolinska Hospital, the cardiac surgery department also performed coronary bypass operations on off-duty time, at a negotiated price with Stockholm County high enough to trigger some unfavorable newspaper coverage (*Dagens Nyheter*, January 14, 1988). Because the county continues to pay the full costs of treating cardiac patients, this type of comparative competition has been viewed by some observers as largely a bureaucratic end-run around national union contract and legislative restrictions on physicians' working time. Nevertheless, the proliferation of efforts to retain existing public-sector resources inside the public sector by technically privatizing them is indicative of county efforts to become more flexible in the face of a perceived challenge by real private-sector providers.

There are as yet few examples of county or municipal authorities placing clinical medical services into financial competition, that is, competing public and private bids for the same contract, with clear financial consequences for a public as well as a private loser. The closest instance thus far has been in the provision of certain elective surgical

procedures, such as coronary bypass operations. Here, however, the question has *not* involved the continued public management of an existing public clinic, but rather the ability of publicly salaried specialists, reconfigured as a part-time private company, to win county contracts against competing bids from true private-sector providers. In Stockholm County in 1987, for example, bids to reduce the waiting list for coronary bypass surgery were solicited from the private Stockholm hospital, Sophiahemmet, from AMI in London, and from the Karolinska cardiac surgeons' private company. The Karolinska cardiac physicians' company was underbid by Sophiahemmet, even though the county did not charge them for use of the operating theaters at Karolinska and the same surgeons had performed the cardiac procedures at Sophiahemmet.

Patient-driven Competitive Activities

When one turns from the issue of competition among providers to meeting the concerns of patients, the Swedish situation is considerably more active. The question of "valfrihet," or patient choice of site and provider, became a campaign pledge in the 1988 national election not only from the nonsocialist coalition, but—for the first time—from the Social Democrats as well. This represented an important shift in the government's position away from Sweden's traditional demographically planned approach, in which the patient's passive role is signaled by the standard question with which a caller to a Swedish primary health center is greeted: "To which health center do you belong?" This change in Social Democratic policy reflects not only a pragmatic political move to adopt one of the opposition's key proposals, but also an explicit desire to head off the emergence of a parallel private health-care sector.

Although each county and/or municipal provider government can independently determine the precise degree and type of patient choice to introduce, a 1988 survey of all 26 provider governments showed that patients could select their primary health center in 10 instances, could do so "under certain circumstances" in 12 more, with only 2 stating that patients could not make a choice (two counties did not answer this question). Although patients were assigned their physicians or physician team in 17 of the 25 responding provider systems, a patient can change physicians (with provider concurrence) in all 25. At the hospital level, a referred patient can select the hospital within the county in 18 provider systems, and can obtain elective inpatient care outside the

county in 21 instances (von Otter, Saltman, and Joelsson, 1989). However, although counties in Sweden continue to experiment with relaxing controls over patient choice of provider and, in a more gingerly manner, of site for various levels of care, they have only begun to develop mechanisms to connect these patient-choice decisions to salary or budget-linked performance measures.

Current County Experiments

The last years of the 1980s witnessed a dramatic upsurge in the number of counties seeking to develop innovative service delivery arrangements. As of spring 1990, all but one county were either engaged in or were considering the introduction of such arrangements (Saltman and von Otter, in press). Although these new arrangements involve a variety of different mechanisms, the dominant pattern of change can be illustrated by the activities that have emerged within the two best-known instances: the ongoing sequence of experiments in Stockholm County, and the newly adopted "Dala model" in Kopparberg County in the Dalarna region of central Sweden.

Stockholm County is the largest county council in Sweden, with 1.5 million inhabitants and a wide range of publicly operated institutions, including a number of acute-care hospitals and also Karolinska Hospital, Sweden's premier university research institution. The fact that the experimental process in Stockholm was initiated by a conservative-led coalition county government, yet is being carried forward and expanded (since 1989) by a Social Democratic administration, underscores the broad political consensus that now exists in Sweden for structural change.

The initial set of experiments involved efforts to shift from a demographically assigned to a patient-choice-driven delivery system. At the primary-care level, as of April 1989, all individuals within Stockholm County can select the health center, anywhere in the county, at which they wish to receive regular care. They can do this without requesting permission to move from their assigned center: they can vote with their feet. They are also entitled to select their doctor and primary-care team as well.

This patient-preference-based public market in primary-care services has been reinforced by the beginnings of a flexible budgeting system,

using a capitated methodology. Health centers receive an additional payment of 500 SEK (about \$90) for each new patient under 65, and 1,000 SEK (\$180) for each new patient over 65; both amounts are paid on an annual capitated-list basis. County politicians expect that these additional sums will be used by health centers with rising patient volume to hire additional staff.

At the hospital level, since January 1988, expectant mothers have been able to decide which of the seven hospital maternity units within Stockholm County they would like to deliver in. During the first six months of 1990, 19 percent chose a different hospital from the one to which they "belonged." However, five of the seven maternity units delivered essentially the same number of babies as they would have under the former catchment-area based system (Karolinska Hospital 1990). Once again, as in the primary-care experiment, a specific sum follows the mother's choice: in this case the direct cost of an uncomplicated delivery.

These Stockholm experiments with patient choice have moved beyond comparative competition, in that short-term budgets are influenced by provider performance. They also clearly fall short of neoclassical notions of financial competition. However, these patient-choice experiments also fail to satisfy key conditions for a different, fourth type of competition, which lies midpoint between comparative and financial competition: "public competition," in which existing publicly capitalized and accountable providers are obligated to compete for personnel salary and institutional budgets based on contemporaneous shifts in "public market share." (For a review of public competition theory, see Saltman and von Otter 1987; 1989a,b; 1990; see also von Otter and Saltman, in press.) In contrast to the expectations of public-competition theory, the Stockholm experiments thus far only add additional amounts to good health centers or maternity units; they have not placed the budget of less successful facilities at risk. Another difference is that they provide additional funds for the health center, but not increased income to personnel inside them who must do more work. Third, they have not adjusted volume-based payments for quality of care, for instance, by using referral rates for general practitioners, or, for hospitals, specific outcome measures like readmittance or infection rates.

Stockholm County is currently poised to embark upon a more ambitious and inclusive experiment that would more closely resemble a public-competition model. Plans call for patient choice of both

primary-care and hospital providers to be combined with a new, primary-health-center-based budgeting structure (Brogren et al. 1990). Health centers will pay hospitals on a patient-utilization basis, according to an annually negotiated fee schedule, and will retain a portion of any savings achieved by reduced referral rates. Health-center budgets will similarly include responsibility for sickness insurance funds paid to patients awaiting treatment, and for drug expenditures paid to the public pharmacy monopoly (*Landstingsvärlden* 1990). Moreover, personnel salaries will be linked to productivity, which will include population as well as patient-based measures of effectiveness.

Initially, this new experiment probably will adopt a mixed budgeting framework, with a proportion of fixed as well as public-market-share-based payments to health centers and hospitals. All competing entities will be within the public sector, and, consistent with public-competition theory, poorly performing providers will be evaluated by social as well as economic criteria. Thus, this new Stockholm experiment will intentionally fall well short of introducing strictly market-based "financial competition."

The cautious incrementalism of Stockholm County can be contrasted with the more radical "Dalamodel," which was adopted in principle in June 1990 in Kopparberg County. If implemented as envisioned in the proposal document (SIAR 1990), the Dalamodel will combine a patient-driven primary-care system, similar to that planned for Stockholm County, with a manager-driven, contract-based system for hospital services that resembles the financial-competition approach established in the United Kingdom by Britain's new Health and Community Care Act of 1990. [The initial proposal for this Act was presented in the 1989 White Paper, *Working for Patients* (Her Majesty's Stationery Office 1989).]

The Dalamodel calls for the creation of 15 primary-health boards, each of which will operate the primary-health center within its district as well as purchase necessary hospital services for district residents. These new boards will control both primary care and hospital budgets for district inhabitants, under the presupposition that this financing arrangement will generate pressure for greater efficiency inside primary-health centers (to reduce unnecessary hospital referrals in order to keep a portion of the hospital budget) as well as within the publicly operated hospital clinics (to reduce per case operating costs in order to attract a sufficient number of primary-health-board contracts). Further,

the county has announced that private as well as publicly operated providers will be entitled to compete for contracts from primary-health boards (*Dagens Nyheter*, August 9, 1990).

In combination with this public/private contracting arrangement for specialist ambulatory and hospital services, the Dalamodel will include a substantial measure of patient choice as well as performance incentives for professional personnel. Individuals will be assigned annually to a primary-health center according to their residential district (for purposes of developing annual budgets). However, they will be able to enroll as regular patients at any other health center, with the cost carried by their "home" health centers. In order to make private ambulatory visits, individuals will be required to pay a small supplemental charge out of pocket, although most of the cost also will be defrayed from the "home" health center's budget. Finally, the Kopparberg proposal may allow patients to choose inpatient hospital services from among existing county institutions, but it is unclear about the ability of patients to elect out-of-county and/or private hospital clinics.

The Dalamodel also includes direct financial incentives to health-care personnel for improved performance, in the form of bonus payments to salary. The proposal's emphasis upon new marginal incentives to fixed salaries reflects the pragmatic realities of existing national labor-union contracts and sitting politicians' electoral sensitivities.

The Dalamodel as presently designed contains a number of unresolved issues: (1) The potential conflict between patient choice of hospital clinic, on the one hand, and established contracts between that patient's local health board and a particular public or private hospital clinic, on the other. (2) The administrative expense involved in requiring local boards to negotiate contracts for each category of patient treatment, which could require substantially increased administrative resources and divert considerable funding from clinical use. (3) The mixed public/private character of the proposed new market for clinical services, which may generate unstable price-dominated forms of financial competition similar to what some British commentators expect will evolve from the United Kingdom's mixed-market approach (Harrison et al. 1989).

The elements that differentiate the Dalamodel from the Stockholm County proposals indicate the range of reorganization alternatives currently under consideration in Sweden. Perhaps the most important difference concerns the character of the new market to be established and

the relative decision-making balance between patients, on the one hand, and administrators and politicians on the other. The Stockholm approach will generate a public market based on annually established prices, in which the driving force in both primary-care and hospital sectors will be the patients who bring institutional budgets and personnel salary with them. Although volume-tied incentives will encourage efficiency within provider institutions, as will the process involved in setting annual prices, patient pressure will serve to prioritize quality and continuity of care.

In contrast, whereas the Dalamodel will create a roughly similar type of public market in primary care (but with out-of-district payments directly from "home" primary-health boards), the hospital sector will have a mixed public/private market based on short-term contracts; the driving force will be the administrators and politicians who negotiate these contracts. Conversely, although there will certainly be concern about quality and continuity of care, reflecting the elected nature of primary-health-board members as well as legal requirements under the 1983 Act, the central interests of administrators and politicians may well prioritize issues of cost. Although Stockholm County is pursuing a form of public competition, in terms of the typology of competitive models described above, the Dalamodel establishes a considerable measure of direct public/private financial competition for ambulatory-specialist and hospital services.

Taken together, these two experiments signal a major departure for Sweden's publicly operated health system from the notions of comparative competition that had previously dominated reform efforts within it. Although the mechanisms differ, in both instances market elements will now be incorporated into the public system as a means through which to reinforce the achievement of public-sector goals and objectives.

Conclusion

Current experiments provide an important vantage point from which to assess the Swedish reform process. They attempt to respond in an integrated manner to a number of policy dilemmas that plagued the prior, hierarchically administered and budgeted public system. In Stockholm County, the emphasis upon patient choice as the allocating mechanism for health-center and hospital operating budgets, as well as for person-

nel salaries and/or bonuses, signals a major effort to increase patients' influence within the heretofore provider-dominated Swedish health sector. Similarly, the restriction of this new market to only publicly capitalized institutions, directly accountable to elected officials for their overall effectiveness, indicates that traditional population-oriented objectives—and the aggregate financial and health-status advantages they entail—will remain a central element within the design and delivery of health services.

The Dalamodel, adopting a different approach, emphasizes cost containment by introducing a managed-care format for hospital services tied to negotiated contracts. The Kopparberg proposal also will introduce a mixed public/private market in which public accountability and traditional population-based objectives will be tied only to the financing rather than to the provision of health services as well.

Beyond these (considerable) differences, both models take much the same approach to several other major difficulties in the prior public system. The Stockholm and Kopparberg experiments both create similar financial incentives for greater productivity in the primary-care and hospital sectors, inasmuch as institutional budgets and personnel salaries will more closely reflect work done rather than prospectively allocated resources. In the primary-care sector, both models encourage providers to be more attentive to patient concerns by improving continuity of care, and introducing financial incentives to treat rather than refer patients "upward" in the system. Under both approaches, waiting lists for elective surgery would likely shrink because hospital specialists would benefit if they were more productive. Similarly, salaries for health professionals, linked to their performance, could be increased by greater efficiency and effectiveness in their use of time and institutional resources.

Despite these advantages, the potential difficulties that confront either model in attempting to implement a more flexible public-sector health system in Sweden should not be underestimated. The complexities involved in designing an adequately flexible public-budgeting mechanism have not yet been adequately resolved (Jönsson 1989). Initiatives to generate major new forms of information through which to inform meaningful patient choice also need to be introduced (Enthoven 1989). Existing clinical reporting systems will have to be re-designed to enable national authorities to monitor service quality—an issue currently under study by two national government committees.

More important, as in any health reform, special effort will be required to convince medical professionals that the new model will better help them accomplish their professional and patient-related objectives. Similar efforts may be necessary to reconcile the large public-sector unions to the necessity of trading higher productivity for differential salary levels.

Even if they are successful in their own terms, however, it remains unclear whether either new model is capable of resolving the central financial dilemma that underlies this search for a new framework. The inability to generate new tax revenues, in combination with increasing service requirements for an aging population, may well force the Swedish government to release one or more additional public-funding sources for use within the health sector. One possibility currently under discussion is to allow the health system to tap sickness-insurance revenues in order to speed elective treatment for ill or injured workers. Although this approach has the attraction of increasing health-care revenues while reducing overall welfare expenditures, it could threaten the maintenance of social equity if it forced pensioners and other nonworkers to wait longer for necessary procedures. More comprehensively, a joint investigatory commission representing the Ministry of Social Affairs and Health, the Federation of County Councils, and the National Board of Health and Welfare is expected to propose alternative scenarios for change in existing financing and institutional arrangements in a report to be presented to the Federation of County Councils Congress in June 1991.

The present reform process in Sweden will be closely scrutinized by policy makers in other publicly operated health systems. Although the Swedish notion of comparative competition can already be utilized elsewhere, the current experiments may well hold the greatest promise. Efforts to introduce public competition in Sweden have already attracted interest in the United Kingdom (Ham, Robinson, and Benzeval 1990) as well as in Italy (Fattore and Garattini 1989) and Spain (*Expansion* 1990). Policy makers in these and other countries may not be under equally as intense demographic or fiscal pressure as their Swedish counterparts. Like the Swedes, however, they confront problems concerning efficiency levels within publicly operated institutions, waiting times for elective procedures, low salaries for professional personnel, and inadequate responsiveness to patient preferences. The Stockholm and Kopparberg experiments are of international interest in that they retain public accountability over service outcome while introducing

market-style mechanisms to encourage more efficient provider performance. The particular appeal of public competition reflects its ability to incorporate an element of patient empowerment into a delivery structure that also has predictable expenditures and planned population-based outcomes. Further, by creating a wholly public market, public competition offers a normatively acceptable alternative to left-of-center political parties committed to maintaining the universal public character of existing health-care services.

Current Swedish experiments are still at the developmental stage, and thus far there are few concrete results that document the dramatic changes underway. However, the broad outline of a new Swedish health-care model, combining competitive with planning elements in a publicly responsible framework, can be discerned on the horizon. If the present reform process fulfills its promise, the Swedish health system may well reassert its traditional role as an international model for publicly operated health systems in Europe.

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