

Growth of Managed Care and Integrated Delivery Systems

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The health care delivery system in the Twin Cities is best known nationally for its reliance on HMOs, and for the high proportion of community residents enrolled in HMOs. It has been scrutinized as a community where “competition” among health plans has occurred, although there remains debate about the exact nature of that competition and its effects. This section describes the evolution of the Twin Cities’ health care market in three phases. The first phase covers the development and early growth of HMOs. The second phase spans the 1980s, when a large number of studies sought to evaluate the impact of that HMO development on various measures of market performance. The third phase focuses on the recent consolidation of the supply side of the Twin Cities’ health care market.

DEVELOPMENT OF THE HMO MARKET: 1970-1980

The first health maintenance organization (HMO), Group Health, Inc. (GHI), was founded in the Twin Cities metropolitan area in 1957 (6). This plan, which was managed as a consumer cooperative, employed salaried physicians and purchased hospital services by contractual arrangements with community hospitals. The strongest early advocates of HMOs in the Twin Cities were union groups and public sector employees. Most physicians viewed Group Health as inferior socialized medicine, and private employers were generally opposed to offering GHI as a health plan option (28).

In January 1970, Dr. Paul Ellwood, a health care reformer in the Twin Cities, coined the term HMO in a *Fortune* article dealing with prepaid medical care. Ellwood advocated the development of a large number of HMOs nationwide to compete for patients

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with each other and traditional insurers. The hope was that the internal incentives associated with prepayment, together with competitive pressures to contain premiums, would result in a more efficient health care delivery system and lower rates of increase in health care expenditures. The ideas of Ellwood and his colleagues appealed to the Nixon Administration to the extent that President Nixon, in his 1971 address to Congress, promoted HMOs as a national strategy to contain health care costs.

In 1972, a highly respected multispecialty group practice in the Twin Cities, the St. Louis Park Medical Center (now Park-Nicollet Medical Center), created a prepaid alternative called MedCenters Health Plan, thereby improving the image of HMOs in the Twin Cities (28). St. Louis Park Medical Center had begun to lose patients to Group Health, and large employers in the community showed interest in offering a competing HMO. The launching of the HMO initiative by the Nixon Administration provided further impetus for the formation of MedCenters. MedCenters was a group HMO, allowing physicians to provide care to patients not enrolled in the HMO. In this respect, it differed from Group Health, Inc., where physicians were salaried and treated only Group Health enrollees.

In the increasingly competitive environment of the Twin Cities, physicians outside the HMO system sought to offer alternatives to fee-for-service and the existing staff and group model HMOs (5). In 1975, Physicians Health Plan (PHP) was formed as an independent practice association (IPA) model HMO. Independent physicians could be associated with PHP while maintaining their fee-for-service practices. PHP was a much looser HMO model than MedCenters or Group Health, in that physicians in PHP were not salaried, and PHP enrollees had considerably more freedom to choose their physicians, with no physician gatekeepers to determine if visits were necessary. Enrollees, therefore, had access to a system where they could use their own doctor and favorite hospital, with the added benefit of an improved payment mechanism. Without intense price com-

petition from indemnity plans, the HMOs could be generous in the benefits they offered (57).

From 1971 to 1978, HMO enrollment in the Twin Cities grew at an average annual rate of 27 percent. By December 31, 1978, there were 240,800 individuals (12.4 percent of the standard metropolitan statistical area) enrolled in seven HMOs, compared with 5 percent enrollment in HMOs nationally at that time (10). In 1980, the Twin Cities had an enrollment in HMOs per capita that was three times larger than in the rest of the country. Table 4-1 shows HMO enrollment growth in the Twin Cities from 1970 to 1981. During the 1980s, HMO enrollment continued to grow, reaching almost 50 percent of the Twin Cities' population by the end of the decade (58). This was attributed primarily to PHP entering the HMO market. Within six years of entering the market, PHP's enrollment grew to 95,141, making it almost equal in size to MedCenters and half as large as Group Health. It has been speculated that this rapid growth was due largely to PHP promoting its policy of consumers being able to choose their own providers (28).

Why did HMO development proceed more rapidly in the Twin Cities during the 1970s than in other cities? Anderson and colleagues argued that three factors supported the development and growth of HMOs in the Twin Cities (6). The first was the "pre-existing environment." Anderson and colleagues concluded that the social homogeneity, political progressiveness, and economic stability in Minnesota were primary causes of the accelerated development of HMOs (6). These characteristics were manifested in the large number of multispecialty group practices existing in Minnesota (which facilitated the formation of HMOs), employers with a track record of successful community leadership, and a community proud of the quality and accessibility of its health care and concerned mainly with the cost of health care.

The second factor described by Anderson and colleagues involved the "initiatives" taken by employers (6). Because the primary concern in the Twin Cities regarding health care was cost, the

TABLE 4-1: Minneapolis–St. Paul HMO Market^a

Enrollment	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Group Health Plan	35,996	42,879	52,230	59,172	66,638	76,883	91,372	107,517	121,184	130,810	153,869	181,328
Coordinated Health Plan			1,715	1,945	2,184	2,941	3,578	3,985	4,025	4,459	4,922	5,243
MedCenter Nicollet-Eitel			1,000	4,233	7,049	10,090	17,591	31,797	46,706	61,278	70,616	90,282 ^b
Health Plan				441	1,853	2,370	3,179	5,491	8,485	14,957	20,984	27,373 ^b
SHARE				2,846	3,299	9,189	12,130	17,121	21,862	27,449	33,898 ^b	37,486 ^b
HMO Minnesota Physicians					1,725	2,914	3,368	6,400	12,170	26,195	48,309	49,511 ^b
Health Plan						53	9,708	14,227	26,422	45,240	85,173	95,141 ^b
TOTAL	35,996	42,879	54,945	68,637	82,748	104,440	140,929	186,538	240,854	310,388	417,771 ^b	486,364 ^b
% Growth		19	28	25	21	26	35	32	29	29	35	16
Metropolitan population	1,874,440	1,883,100	1,891,600	1,899,200	1,914,900	1,912,500	1,924,100	1,931,500	1,945,600	1,959,800	1,985,700	1,989,600
% Metropolitan population	1.9	2.3	2.9	3.6	4.3	5.5	7.3	9.7	12.4	15.8	21.0	24.4

^aSeven-county metropolitan area

^bIncludes Medicare Demonstration Project Enrollment

SOURCE O Anderson, T Herold, B Butler, et al., *HMO Development Patterns and Prospectives* (Chicago, IL Pluribus Press, 1985)

payers, and particularly large corporate employers, supported the development of alternative payment mechanisms for health care. Other areas of the country were more concerned with access and quality; therefore, efforts in these other communities were led by consumers and providers, and did not focus on alternative payments.

The third factor identified by Anderson and colleagues concerned the “responses” in the community (6). Anderson and colleagues found excellent communication and responsiveness within the Twin Cities, in contrast to other communities they studied. In the Twin Cities, when St. Louis Park Medical Center formed an HMO, the entire community was aware of and interested in its progress. Other communities were either wary of the development of HMOs or viewed them as relatively unimportant experiments. When mandated to include federally qualified HMOs in their benefit options, employers in the Twin Cities decided to offer a selection of those not federally approved as well. This greatly aided in the distribution and growth of HMOs in the Twin Cities.

In summary, the decade of the 1970s was a time of rapid growth of HMO enrollment in the Twin Cities. This appeared to have occurred in part as a response to the rising cost of health care, supported by strong interest on the part of Twin Cities’ employers, and the general progressive nature of the Twin Cities’ political climate. The HMOs spanned a variety of “*models,” with most Twin Cities’ physicians affiliated with one or more HMOs by the early 1980s (6).

COMPETITION AMONG HMOs AND ITS EFFECTS: 1980-1990

The seven Twin Cities HMOs that began the 1980s had two opportunities for growth. They could gain new enrollees from the fee-for-service sector, or they could capture business from each other. The HMOs’ emphasis on the former strategy led to accusations that they “shadow priced” the fee-for-service sector and to a perception among employers that competition among HMOs had failed. The first criticism appears to have some validity, but the extent to which competition

failed, succeeded, or indeed was ever really tried during this period is a much more complicated issue.

In 1980, about 20 percent of Twin Cities’ residents were enrolled in HMOs. Clearly, HMOs had an opportunity to grow rapidly by underpricing competing fee-for-service insurance plans. There are several reasons why the HMOs may not have pursued this strategy more aggressively. The first and perhaps most important reason relates to the conditions under which employers offered these options to their employees. Paul Ellwood, an early proponent of HMOs in the Twin Cities, in a 1984 interview with John Iglehart, in the *New England Journal of Medicine*(31) said:

His ‘biggest disappointment’ about health care developments in the Twin Cities is the failure of corporations to take advantage of their purchasing power in the market. Major national corporations based here (in the Twin Cities) . . . have been unwilling to go out and buy care on the basis of price.

In the same article, Walter McClure, another Twin Cities’ health policy analyst, noted that:

Employers and unions have been willing to offer workers health care coverage through the high-cost, traditional insurance plan, which almost totally lacks incentives to make the consumer price-sensitive, and then make that same amount available to HMOs. HMOs have been delighted to pick up that money.

In the early 1980s, few employers that offered more than one health plan set a “defined,” or fixed, contribution at or below the premium of the lowest-cost plan, which would have required employees to pay the additional cost of more expensive plans out of their own pockets. Feldman and colleagues examined 44 Twin Cities’ firms offering multiple health - plans and found that fewer than half had adopted a level-dollar contribution method for the family coverage premium and only about one-third paid a level dollar contribution toward the single coverage premium (27). Other contribution formulae, such as a level percentage contribution, or explicit subsidy of the traditional fee-for-service plan, mitigated the incentives of

HMOs to reduce their premiums, since a \$1.00 decrease in an HMO's premium would not necessarily increase the premium differential between the HMO and its competitors by \$1.00.

Also during the 1980s, some policy analysts argued that high-risk, fee-for-service enrollees were more likely to have a long-standing relationship with their fee-for-service physicians and therefore were less likely to join a staff or group model HMO. The "favorable selection" of relatively healthy employees into group and staff model HMOs in the Twin Cities was documented by Jackson-Beeck and Kleinman and Dowd and Feldman (14,32).

Feldman and Dowd modeled HMO enrollment growth, assuming that HMOs experienced initial favorable risk selection that decreased over time (22). They further assumed that, in a two-plan employee benefits offering consisting of one HMO and one fee-for-service plan, the fee-for-service plan would experience-rate, charging premiums that equaled the average cost of care for its enrollees, plus an administrative fee, while the HMO would be free to set its premium, subject to the constraint of employee demand. Under these assumptions, Feldman and Dowd showed that the HMO could maximize its profits by setting premiums at levels that would capture only a portion of the fee-for-service sector's enrollees, rather than driving the fee-for-service plan from the market. In order to capture enrollees from other HMOs, the HMO might have to set premiums so low that fee-for-service plans would be driven from the market (22). From the HMO's point of view, this would not be a profit-maximizing strategy in the longer run.

In addition to experiencing favorable selection, HMOs appeared to enjoy a "technological advantage" over the fee-for-service sector. HMOs were able to produce "output" (i.e., treatment of their enrollees) using fewer or lower cost "inputs" (e.g., hospital days and physician visits) than the fee-for-service sector. If HMOs had competed fiercely among themselves on the basis of price, the premium for HMO enrollees should have driven down the cost of producing treatment using the HMOs improved "technology." As noted above,

however, excessively low premiums might have reduced fee-for-service market share below the profit-maximizing market share.

This HMO pricing strategy, coupled with a relative lack of employer information on the health status of their employees, resulted in disappointing effects of HMOs on employer health insurance costs. Employers who offered their employees a choice of HMOs and the fee-for-service sector sometimes saw their total health insurance costs *increase* as the relatively healthy employees left the experience-rated, self-insured, fee-for-service plan to join HMOs (26).

If employers had known the health expenditures of their HMO enrollees, they might have been able to prevent some of the losses associated with this selection process. Unfortunately, however, early attempts by employers to obtain information on the actual health expenditures of their employees who were enrolled in HMOs were generally not successful. Because their premiums were community-rated, HMOs were able to tell employers that they kept no data on the experience of employees by firm. The ability of employers to threaten HMOs with expulsion from their benefit plans was limited because the national HMO Act of 1973 required employers to offer at least one federally qualified HMO of each "type" available in a market area, if "mandated" by a federally qualified HMO. Throughout the 1980s, employer pressures for experience-rated products and more data on utilization of services by HMO enrollees increased, and HMOs began to offer products that were not federally qualified in order to meet these demands.

When employers offered a choice among health plans, *employees* were quite sensitive to out-of-pocket premium differentials. Feldman and colleagues studied the choice of health plans by employees in 17 large Twin Cities' firms in 1984 (28). Unlike previous studies, the authors were able to identify precisely the health plan choice set (i.e., single versus family coverage) for each individual, and incorporate information on the availability of coverage through the spouse. The elasticities estimated by Feldman and colleagues are considerably higher than those found in pre-

vious studies, as large as -8.6 for choice among single coverage plans. This means that a one percent increase in the out-of-pocket premium differential between two plans reduces the enrollment share of the higher cost plan by 8.6 percent.

Although the HMOs' incentive to cut prices to consumers was limited by employer premium contribution methods and (for some HMOs) favorable selection, the HMOs' incentive to reduce their costs was not so impaired. Cost-cutting efforts on the part of health plans precipitated a significant reorganization of the Twin Cities' health care market during the latter 1980s from a relatively close, collaborative relationship between plans and providers to a distinct division between financing and service delivery functions. The change was often slow and subtle, but sometimes it was abrupt, contentious, and played out on the front pages of the local press. Blue Cross and Blue Shield of Minnesota evolved from a traditional insurance plan to an aggressively managed health plan engaged in outcomes research and the development of preferred provider networks in both urban and rural areas (see discussion below). Physicians Health Plan, started by physicians for physicians, experienced a bitter dispute between physicians and the health plan's management over fees and administrative practices (38). The same fate befell MedCenters Health Plan in its relationship with the Park-Nicollet Clinic.

The changes in the relationship between health plans and providers that occurred in the latter part of the 1980s were driven largely by consumer demand. In the Twin Cities' health plan market, consumers had grown accustomed to being offered a choice of health plans and recognized that not all health plans offered access to all providers. Because the majority of consumers are in good health, the choice of health plan, based on factors such as coverage, clinic locations, and out-of-pocket premiums, tended to override consumer loyalty to specific health care providers. Since premiums were an important determinant of health plan choice, even in the face of employer premium contribution policies that reduced out-of-pocket price differentials, consumer willingness

to change health plans gradually produced pressure on plans to restrain premium increases (28). That pressure eventually was transmitted to providers in negotiations over contracts.

I Empirical Studies

Hospital Finances and Demand for Hospital Services

During the 1980s there were several attempts to evaluate the competitiveness of the Twin Cities' hospital market and the changing relationship between health plans and hospitals. In a case study of the Twin Cities, using data primarily drawn from the 1970s, Luft and colleagues found no convincing evidence that the growth of HMOs had affected hospital use (40). Feldman and Dowd estimated the price elasticity of demand for hospital services from 1981 data on 31 Twin Cities hospitals (23). They found that price sensitivity at that time was either totally lacking, as in the case of Medicare patients, or fell far short of the competitive ideal. In another study, Feldman and colleagues examined the effect of HMO discounts on hospital revenue, cost, and profits (25). This study, based on Twin Cities hospital data from 1979 to 1981, found that neither HMO discounts, nor a larger share of HMO, Medicare, or Medicaid patients, were associated with lower hospital costs. Furthermore, neither HMO market share nor HMO discounts adversely affected hospital profits. The authors concluded that, if competition among health plans was to reduce hospital costs or profits, it would have to encompass more than just growth of HMO market share. Kralewski and colleagues also found that HMOs were not using competitive bidding in their contractual relationships with hospitals during the period 1977 to 1980 (36).

By 1986, however, the pattern of HMO-hospital relationships had begun to change. In a study of six HMOs in four large metropolitan areas (one of which was the Twin Cities), Feldman and colleagues found that HMOs, especially staff and network HMOs, were beginning to concentrate their patients at hospitals and that price played an

TABLE 4-2: Twin Cities Hospital Utilization by Service

Service group	1982 Discharges	1988 Discharges	1982 Length of stay (days)	1988 Length of stay (days)
Oncology	10,856	8,835	8.82	5.92
Cardiology	26,741	28,302	8.22	5.38
Psychiatry	13,328	13,924	17.84	11.95
Chemical dependency	7,906	7,422	15.45	11.31
Ophthalmology	7,528	1,742	3.10	2.24
ENT	10,830	6,938	2.51	1.97
Neurology	15,188	11,751	8.69	6.04
Orthopedics	31,769	21,833	7.85	5.38
Urology	12,650	9,884	5.85	4.07
Gynecology	11,036	7,525	5.22	4.05
Obstetrics	39,002	41,635	3.52	2.69
Newborns	35,438	37,482	4.23	3.24
General medicine	78,369	66,542	7.02	5.63
Total	300,641	263,727	6.91	6.13

SOURCE Council of Hospital Corporations (renamed the Metropolitan Health Care Council), *Trends in Twin Cities Hospital Utilization 1982-1988* St Paul MN, 1989

important part, not so much in the HMO's choice to affiliate with a particular hospital, but in the volume of services demanded from the hospital (21). The estimated price elasticity of demand for admissions in HMO-affiliated hospitals was -3.0, indicating a considerable degree of price sensitivity (a 3 percent reduction in admissions associated with a 1 percent increase in price). Independent practice association HMOs were not found to exhibit the same degree of price sensitivity. The estimated price elasticity of demand for independent practice associations was -1.0, similar to the elasticity estimate in Feldman and Dowd's study based on 1981 data (22).

Inpatient Resource Use

During the 1980s, Twin Cities' hospitals faced declining discharges and lengths of stay across virtually all types of services that were tracked by the Metropolitan Health Care Council, which is the Twin Cities' hospital trade association (table 4-2). Even among the service groups experiencing some increase in discharges (i.e., cardiology, psychiatry, obstetrics, and newborns), lengths of stay fell precipitously. Part of the declining use of inpatient resources mirrored a trend in national data.

Dowd estimated the proportion of reduced admissions from 1977 to 1982 that could be attributed to HMOs in the Twin Cities' market (13). That estimate depends crucially on the amount of credit that HMOs receive for reducing length of stay in the *non-HMO* sector. If HMOs are given credit for none of this "spillover" effect, then the reduced admissions among HMO enrollees, plus the growth in HMO market share, would imply that HMOs were responsible for one-third of the decrease in admissions over that time period. If HMOs are given credit for the entire decline in discharges in the non-HMO sector, then HMOs could be responsible for 85 percent of the total drop in admissions.

The HMO effect on length of inpatient hospital stays provides an interesting example of the refinement of resource management techniques used by health plans. In early studies of HMOs in the Twin Cities, HMO membership was associated with a 40 percent reduction in hospital admissions but no reduction in length of stay (see Dowd, et al., 1986 (16) and Johnson, et al., 1989 (33) for reviews of the literature). However, by the mid-1980s, Dowd and colleagues found that enrollees in group practice HMOs in the Twin Cities

had significantly shorter lengths of stay than indemnity-insured patients in five of seven diagnostic groups examined, while enrollees in IPA HMOs had significantly shorter lengths of stay in three of these groups (16). Johnson and colleagues also examined data from Twin Cities hospitals over the three-year period 1982 to 1984 and found that lengths of stay for group practice HMO enrollees were significantly shorter than stays for either indemnity-insured patients or IPA enrollees (33).

Why were Twin Cities' HMOs, and particularly group and staff model plans, able to reduce length of stay, relative to indemnity insurers, when HMOs in other study sites were not? All health plans should want to minimize their costs, whether those savings are passed on to consumers or not, but some cost-saving techniques may have higher payoffs and be less costly to implement than others. Dowd and colleagues suggested that reductions in admissions were easier for health plans to achieve than reductions in length of stay, since reduced admissions can occur simply by switching treatment to the outpatient setting (16). Length of stay reductions, however, involved direct intervention in the physician's onsite treatment decisions. Thus, the initial focus of HMOs on reducing admission rates is not surprising. Once HMOs had reduced admissions rates, however, the competitive advantage to be gained by reducing length of stay made that task worth pursuing, although more difficult. The maturity of the HMOs in the Twin Cities' market also may have had some effect, but competition from other HMOs does appear to have been an important factor. In three of the studies that preceded Johnson and colleagues' study, the HMOs that had not achieved reductions in length-of-stay relative to the fee-for-service sector had no close HMO rivals in their market areas (33).

Access and Health Outcomes

Three studies used data from the mid- 1980s to compare the health outcomes of subpopulations of Medicare or Medicaid beneficiaries in the Twin Cities enrolled in HMOs with beneficiaries re-

ceiving care from providers under normal program managements. One examined the difference in physical functioning and perceived general health status between Medicare beneficiaries enrolled in HMOs and in traditional Medicare (69). A second assessed the effects of HMO enrollment on the health and functional status of "dual eligible" Medicaid/Medicare beneficiaries, while a third assessed the effect of HMO enrollment on health, functional status, and service utilization among severely mentally ill Medicaid beneficiaries (9,41,43,55).

The study of Medicare beneficiaries found no significant difference in predicted health status as measured by physical functioning between those enrolled in HMOs and traditional Medicare (69). However, there was a difference between the two groups in predicted health status, as measured by perceived general health status, with those enrolled in HMOs having a significantly higher level of perceived health status. For a subgroup of lower income enrollees, no significant differences were found in predicted health status. This does not support Ware and colleagues' 1986 findings that low-income individuals have worse outcomes in HMOs, as compared with fee-for-service care (67).

Lurie and colleagues examined the effect on health and functional status measures of enrolling noninstitutionalized elderly Medicaid recipients in prepaid plans as compared with traditional fee-for-service Medicaid (41). Beneficiaries were randomly assigned to a group receiving prepaid care from one of seven health plans, with only the Medicaid proportion of their care being capitated. A sample of beneficiaries (400 in prepaid care and 400 in traditional Medicaid) were interviewed at baseline and one year later. Major outcome measures in the study included general health status, activities of daily living, instrumental activities of daily living, corrected visual acuity, and blood pressure and glycosylated hemoglobin for hypertensive and diabetic persons, respectively. The analysis found no significant difference between the two groups in number of deaths or any of the listed outcome measures, thus providing no evi-

dence, in the short-term, of harmful effects of enrolling elderly Medicaid patients in Twin Cities' HMOs.

Lurie and colleagues also studied the effect of HMO enrollment on chronically mentally ill Medicaid recipients (43). Of 739 clients identified as chronically mentally ill, half were chosen at random to remain in traditional Medicaid, and half were permitted to choose among four capitated health plans. The beneficiaries were followed for an average of 11 months. Outcome measures consisted of general health status, physical functioning, social functioning and psychiatric symptoms. No significant differences were found in general health or mental health between beneficiaries in traditional Medicaid versus HMOs. However, among the subgroup of subjects with schizophrenia, scores on the Global Assessment Scale, a measure of community function, were 7.6 points lower for the HMO group than the traditional Medicaid. The authors concluded that there was "no consistent evidence of short-term adverse health effects" among HMO enrollees relative to traditional Medicaid enrollees.

Access to services and utilization of services by the same group of chronically mentally ill Medicaid recipients also was analyzed (9,55). There were slight improvements in the majority of access measures studied for HMO enrollees, although they were not statistically significant. Thus, enrollment in HMOs did not reduce access to physical or mental health care for this group. There also were no significant decreases in the use of inpatient or outpatient services for the HMO enrollees (55). In particular, there was no statistically significant evidence that Medicaid enrollees with severe mental illness used community-based treatment programs differently than beneficiaries in fee-for-service Medicaid. However, there was evidence that HMOs reimbursed these programs at a lower percentage of their charges (9).

| Summary

In summary, the 1980s saw important changes in Twin Cities' health plans and their relationships with providers. These changes included the insti-

tution of more aggressive management strategies by health plans. The aggressive management of provider relations was made possible by the growing willingness of consumers to choose health plans based on characteristics such as required out-of-pocket premium contributions, with a weakening of loyalty to specific providers. The pressure on premiums experienced by health plans caused some plans to be more sensitive to the prices they paid for hospital care, leading to greater price shopping in the hospital market.

The empirical evidence also suggests that hospital lengths-of-stay were lower in HMOs, relative to traditional insurers in the 1980s. However, there have been no studies measuring the direct effect of the recent growth of managed care and integrated delivery systems on the growth rate of health care expenditures.

There is very limited information regarding the effect of increased HMO enrollment and competition among providers for HMO contracts on access to services and the health status of Twin Cities residents. The available evidence applies to subgroups of the population, and not to HMO enrollees from private employed groups. These studies do not find significant differences in health status and access measures for HMO versus non-HMO enrollees.

THE CONSOLIDATION OF THE TWIN CITIES HEALTH CARE MARKET

Three recent mergers involving Twin Cities' HMOs have captured national attention. The first was a merger of two large HMOs, Group Health, Inc. and MedCenters. According to one policy analyst, this merger is unique in that "we've never had a merger...in the national HMO market between two equal partners of this size" serving the same community (35). The second major consolidation involved the merger of an HMO and a hospital, and the third was a merger between an HMO and a hospital system, creating the first vertically integrated health care organization in the Twin Cities. In this section we begin by providing an historical context for understanding the importance of these mergers and the public policy issues they

TABLE 4-3: Admissions for Major Twin Cities Hospitals, by Payer, 1991

Hospital	Admissions	HMO (%)	Medicare (%)	Medicaid (%)	Other (%)
Abbott-Northwestern	30,504	15.0	34.0	8.0	43.0
Fairview-Southdale	18,927	46.3	28.4	2.8	22.5
Hennepin County	19,031	10.1	24.8	43.0	22.1
Mercy	11,555	51.8	15.8	6.1	26.3
Methodist	20,012	0.0	21.6	2.5	76.0
Metropolitan-Mt. Sinai	6,200	32.0	44.0	9.0	15.0
Minneapolis Children's	5,972	35.2	0.0	22.6	42.2
North Memorial	22,367	44.3	20.0	8.1	27.7
Riverside	23,855	67.6	17.1	8.6	6.7
St. Joseph's	13,208	44.0	25.2	13.4	17.4
St. Luke's	8,505	8.6	33.0	16.7	41.7
St. Paul-Ramsey	13,989	0.0	28.6	34.4	37.1
United	18,900	38.4	32.1	10.1	19.4
Unity	10,944	54.3	15.1	6.8	23.8
University of Minnesota	7,848	10.7	26.3	11.1	51.9

•Methodist (and possibly other hospitals) groups HMO admissions with other payers

SOURCE Citizen's League Research, "Minnesota Managed Care Review 1992," Minneapolis, MN, August 1992

raise. We do this by documenting merger activity over time in the Twin Cities involving hospitals and health plans. We then describe each of the three recent mergers noted above, focusing on the motivations for the mergers and the expectations of the merger parties. We conclude by discussing several ongoing developments in the reconfiguration of the Twin Cities' health care delivery system.

| Hospital Consolidation

In 1976 there were 35 hospitals in the Twin Cities with approximately 10,000 acute care beds at an average of 70 percent occupancy (8). By 1992, as described in the previous section, the number of acute care hospitals had declined dramatically, as had the total number of beds and hospital occupancy rates. Also, by 1992 almost all hospitals in the Twin Cities were owned by one of four multihospital systems: Fairview, HealthOne, HealthEast, and LifeSpan. The hospitals that were independent of these systems at that time included: University Hospital, St. Paul Ramsey Hospital, Methodist Hospital, North Memorial Hospital, Hennepin County Medical Center, and children's hospitals in St. Paul and Minneapolis.

Table 4-3 contains data on admissions in major Twin Cities' hospitals in 1991 by payer.

The four major, multihospital systems were formed in the 1980s through a series of mergers and acquisitions. In 1986, five different hospitals in St. Paul came together to form HealthEast (59). In 1987, the Fairview system, which existed prior to the 1980s, added St. Mary's Hospital through a partnership with the Carondelett Catholic order. In 1987, two existing multihospital systems HealthOne and HealthCentral merged to form an expanded HealthOne Corporation that included hospitals in the northern suburbs of the Twin Cities as well as facilities in both downtown St. Paul and Minneapolis. The downtown Minneapolis facilities were subsequently reduced in scale and sold to Hennepin County to augment Hennepin County Medical Center's capacity. LifeSpan, a four-hospital urban/rural system, was represented in the Twin Cities' metropolitan hospital market area primarily by its flagship, Abbott-Northwestern Hospital, a tertiary care facility located near downtown Minneapolis.

Several different but interrelated motivations for the "horizontal mergers" that occurred in the Twin Cities' hospital market have been offered by

hospital and HMO executives. The early 1980s was a period of creation and expansion of multi-hospital systems nationwide, and the aggregation of hospitals in the Twin Cities could be viewed as part of this general trend. The perceived advantages of multihospital systems included improved access to capital, the potential sharing of management expertise, and cost savings from the consolidation of certain administrative functions and the aggregation of purchasing power. It was also believed that the downsizing of individual hospitals or the conversion of facilities to other missions (e.g., psychiatric care) could be more readily accomplished under the umbrella of a multihospital organization. All of these motivations have been identified by Twin Cities hospital administrators as important factors in the hospital mergers that occurred during the 1980s in their community. In addition, a motivation more closely tied to the development of the HMO market in the Twin Cities was identified by some hospital administrators.

During the mid-1980s, HMOs in the Twin Cities were able to take advantage of substantial overcapacity in the Twin Cities hospital market to negotiate relatively low prices for hospital care for their members. As enrollment grew in some plans, so did the potential for these plans to shift a substantial number of admissions from one hospital to another through renegotiation of hospital contracts. Anticipating further HMO enrollment growth in the future, hospitals pursued the development of multi-hospital organizations as a means of negotiating more effectively with HMOs over prices and to position themselves to offer broader geographic coverage for HMO enrollees. The hospital organizations hoped that by offering broad geographic coverage they could secure long-term exclusive contracts with HMOs that would generate more predictable streams of patients and revenues for their facilities.

The consolidation of the hospital market in the Twin Cities continued in the 1990s when, in 1992, HealthOne and LifeSpan merged to form HealthSpan. This was the first merger that generated public debate over whether the consolidation of the hospital market in the Twin Cities had gone too far (35). The Minnesota State Attorney Gener-

al's office brought suit in federal court, charging that the HealthOne/LifeSpan merger violated federal antitrust laws. It argued that because the merged organization (HealthSpan) would control 28 percent of the Twin Cities hospital market, it could exercise undue market power in negotiations with payers. The state ultimately negotiated an out-of-court settlement that required HealthSpan to freeze its revenues for 1993 and document subsequent revenue reductions.

| HMO Consolidation

Approximately the same number of HMOs existed in the Twin Cities in 1991 as in 1977. In 1977, five plans contained the great majority of HMO enrollees: Group Health, MedCenters, PHP, Share, and HMO-Minnesota (Blue Cross/Blue Shield). Group Health was the dominant plan in terms of market share. In 1991, Medica had the largest HMO market share, followed by Group Health and MedCenters. The other HMOs in the Twin Cities had relatively small enrollments.

In the early 1980s, some reorganization took place in the HMO market, but most of that reorganization did not have a substantial impact on overall market structure. In 1983, the St. Louis Park Medical Clinic acquired the Nicollet Medical Clinic, precipitating the incorporation of Nicollet-Eitel Health Plan into MedCenters. HMO Minnesota, the Blue Cross/Blue Shield HMO, changed its name to Blue Plus in 1988 and absorbed Coordinated Health Care HMO in the same year. Two HMOs were created in the 1980s as the result of Medicaid demonstration projects: Metropolitan Health Plan sponsored by Hennepin County and UCare sponsored by the University of Minnesota. Both, however, have attracted relatively limited numbers of enrollees. An HMO managed by Northwestern National Life Insurance Company also entered the market in the 1980s but had fewer than 20,000 enrollees by 1991.

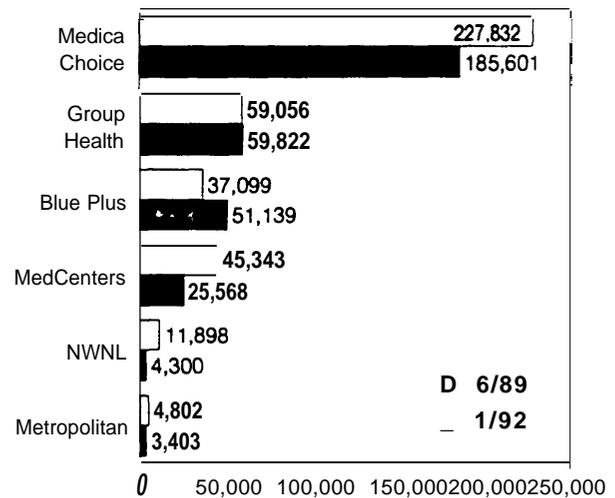
One of the most important consolidations in the HMO market occurred when SHARE Health Plan, a group model HMO, merged with Physician Health Plan, a physician-sponsored IPA model plan. The resulting entity, renamed Medica, had

480,000 enrollees in 1991, making it the largest HMO in the community. Medica continued to offer both the group and IPA model plans separately to employers, renaming them Medica Primary and Medica Choice, respectively. The ability to offer a single employer both a group and an IPA model managed by the same entity was one of the major motivations for the merger. During the 1980s, many employers felt that biased selection into some health plans made it difficult for them to realize cost savings from offering HMOs to their employees. They believed they could avoid problems associated with biased selection by contracting with a single firm that was able to offer multiple plan options (see discussion of buyer coalitions below). The merger allowed Medica to be responsive to these employer demands and thereby strengthened its competitive position relative to other HMOs in the market.

While the SHARE/Physician Health Plan merger represented a major consolidation in the HMO market, prior to this merger the most significant market developments involved product diversification on the part of the HMOs and the emergence of Preferred Provider Organizations as close competitors to HMOs. Product diversification was pursued by the HMOs primarily through the development of “open-ended” (also called point-of-service) options to the traditional closed-panel HMO product and through the sponsorship of Preferred Provider Organizations. The “open-ended” product allowed enrollees to seek care from providers that were not part of the HMO network but, if they chose to do so, they were required to pay for a greater portion of their care “out-of-pocket.” Premiums for these plans typically were set somewhat higher than for the standard HMO product, and some types of services were excluded from coverage. PHP was particularly aggressive in marketing its open-ended plan and by 1992 it had enrolled 228,000 members (almost two-thirds of all enrollees) in this option (figure 4-1).

Some HMOs also established Preferred Provider Organizations, in collaboration with insur-

FIGURE 4-1: Enrollment in HMO Point-of-Service Plans: 1989 and 1992



SOURCE Interstudy, The *Inyrtdyufy Edge*, Excelsion, MN, 1990, 1992

ers, so that they could offer a broader range of insurance alternatives to employers. The provider networks for these products generally were broader than the networks offered as part of the basic HMO product. Under a PPO, enrollees typically receive more comprehensive benefit coverage with lower out-of-pocket costs, if they obtain care from the Preferred Provider Network rather than from the general provider community. The PPOs developed by HMOs offered broader provider networks to self-insured firms. Over the past few years, enrollment in self-insured plans in the Twin Cities has steadily increased, reaching almost 900,000 at the end of 1993 (12). Their PPO networks permitted HMOs to serve this market.

In addition to HMOs, sponsors of PPOs in Minnesota during the 1980s and early 1990s included Blue Cross/Blue Shield (which reconfigured its standard insurance product as a PPO), hospital systems (including Fairview and LifeSpan), and indemnity insurers (table 4-4). Hospital systems developed PPOs to reduce their dependence on HMOs for patients and as a means of developing closer ties with their physicians.

TABLE 4-4: Twin Cities Based PPOs

PPO	Headquarter	Parent, owner or manager	1991 Eligibles/ enrollment
Aetna PPO	Ed ma	Aetna Health Plans	9,600
Blue Cross and Blue Shield of Minnesota	Eagan	Blue Cross and Blue Shield of Minnesota	1,058,805
Ethix-Midwest	Bloomington	Investor-owned	78,202
Group Health PPO	Minneapolis	Group Health	4,453
Medica Choice PPO	Minnetonka	Medica	54,551
NWNL PPA	St Paul	Northwestern National Life Insurance	o*
Preferred One	Minneapolis	HealthOne, Fairview and North Memorial hospitals	237,000
Prudential Plus and PruNetwork	Minneapolis	Prudential	o'
Select Care	Bloomington	LifeSpan hospitals	170,000

*Both NWNL and Prudential reported that they first began PPO enrollment on Jan 1, 1992

Enrollment Includes individuals living outside the Twin Cities metropolitan area

SOURCE Citizen's League Research, "Minnesota Managed Care Review 1992 " Minneapolis, MN August 1992

I Recent Mergers

The consolidation of health care providers in the Twin Cities occurred in three phases. During the 1980s, the consolidation largely centered on horizontal integration of hospitals to form multi-hospital systems. During the 1980s mergers among HMOs began, but the absorption of relatively small HMOs by larger ones had little effect on the overall HMO market. The beginning of the 1990s saw a substantial shift in the scale of mergers for both hospitals and HMOs. The merger of Health One and LifeSpan was the most significant merger among hospital systems to that point and, for the first time, raised serious concerns about aggregation of market power relating to the provision of inpatient services. The merger of SHARE and PHP was the first merger of large HMOs in the Twin Cities and resulted in a substantial consolidation of enrollment in the HMO market. As it turned out, these mergers represented only the leading edge of a series of consolidations and organizational reconfiguration that fundamentally changed the nature of the health care delivery system in the Twin Cities.

The Merger of Group Health and MedCenters

Merger discussions first began between MedCenters and Group Health in 1991 in the wake of

the SHARE/Physician Health Plan merger discussed above. There was a concern on the part of both organizations that they would not be able to compete effectively with Medica and Blue Cross/Blue Shield for employer contracts when employers demanded a "total replacement" product offered by a single health care organization. Neither MedCenters nor Group Health offered provider networks with the comprehensive geographic coverage that could be offered by Blue Cross/Blue Shield and Medica, and both HMOs had lost employer contracts because of this. The immediate precipitating factor for the merger, however, was the development of the Business Health Care Action Group and the Request For Proposals (RFP) that it issued in the Spring of 1992. (The development of the BHCAG is discussed in detail in the next section.) In order to offer a competitive bid, both MedCenters and Group Health believed that they needed to increase the size and geographic coverage of their provider networks. Therefore, they began to discuss the possibility of submitting a joint bid in response to the BHCAG RFP. This led naturally into discussions of a more formal merger between the two organizations.

A merger agreement was signed by MedCenters and Group Health in August 1992. The agreement created a holding company, HealthPartners,

to be governed by a board drawn from both organizations. The 17-member board consisted of 13 consumer representatives and four providers. This reflected an insistence on the part of Group Health that the merged entity maintain a governance structure dominated by consumers. HealthPartners continued to offer both HMOs as separate products with separate governing boards but developed a new joint product as part of its response to the BHCAG RFP. HealthPartners was subsequently chosen by the BHCAG as the winning bidder. At the time of the merger, HealthPartners had 40 medical clinics (24 owned and 18 under long-term contracts) and contracts with four hospitals. Most of HealthPartners enrollees receive inpatient care at FairView-Riverside Hospital and at Methodist Hospital, the hospitals that historically have provided the majority of care to Group Health and MedCenters enrollees, respectively. In 1992, the merged organizations reported about 580,000 enrollees and revenues of approximately \$860 million, making HealthPartners slightly larger than Medica at that time. After the merger, Medica and HealthPartners accounted for about 90 percent of HMO enrollees in the Twin Cities (12).

In addition to the precipitating factors already mentioned, there were several other considerations on the part of both parties that supported a decision to merge. For example, during the late 1980s, MedCenters had experienced substantial discord in its relations with its major physician group, the Park-Nicollet Clinic. Relationships between the Clinic and the HMO, while greatly improved, were still somewhat unsettled when Group Health initiated merger discussions. These strained relationships made it difficult for MedCenters to respond quickly to changes in the health care market and to engage in longer-range planning efforts. Also, MedCenters suffered a decline in its enrollment beginning in the late 1990s that was linked to price competition and limitations in the geographical coverage of its provider network, and this made the board of MedCenters receptive to examining a wide range of alternatives for the health plan.

From Group Health's standpoint, the merger offered several advantages in addition to those already described. The strength of Group Health's physician group was in primary care, and MedCenters' brought a strong multispecialty group practice to the program. Affiliation with MedCenters' specialty physicians was seen as an asset in enhancing Group Health's image in the community as a provider of quality medical services. Also, while Group Health had strong penetration of public employee groups, MedCenters' enrollees were drawn primarily from the private sector, with a substantial number of enrollees from firms that participated in the BHCAG. Thus, from both an employer group and a physician network standpoint, the merger offered advantages to Group Health.

The Merger of HealthPartners and Ramsey HealthCare

The creation of HealthPartners set the stage for the merger of that organization and Ramsey HealthCare (48). The merger of MedCenters and Group Health caused a reassessment of hospital relationships for the combined entity. When HealthPartners was awarded the BHCAG contract, it became necessary for HealthPartners to develop new hospital relationships relatively quickly in order to be able to deliver services within the premium offered to the BHCAG. HealthPartners issued an RFP to all hospitals in the Twin Cities asking for proposals for new long-term relationships with the health plan. The intent of these new relationships was to develop closer collaboration between the health plan and the hospitals used by its members, while at the same time holding increases in hospital expenditures to zero in the near term. This process stimulated initial discussions between HealthPartners and Ramsey HealthCare in August of 1993 that converged very quickly on the possibility of merger of the two organizations. A letter of intent to merge was signed on September 15, with the formal merger completed on December 2, 1993. Under the terms of the merger, the two nonprofit organizations com-

bined their assets. HealthPartners assumed management control of the three different components of Ramsey HealthCare: the hospital with 325 staffed (435 licensed) beds, a 200-member multi-specialty physician group (the Ramsey Clinic), and an educational and research unit (the Ramsey Foundation). Since Ramsey HealthCare was created as a public benefit corporation by state legislation in 1986, the merger cannot actually be completed without action by the legislature that would change the status of Ramsey HealthCare. Legislation will be introduced in 1994 to accomplish this.

From the perspective of Ramsey HealthCare, the merger with HealthPartners offered several advantages. As a result of its own long-range planning process, Ramsey HealthCare had concluded that the Twin Cities' health care market would soon be dominated by a very small number of provider organizations and purchasing groups. As an independent organization, Ramsey HealthCare believed that a merger with an existing HMO would be more desirable than an affiliation with a hospital group that was attempting to form an ISN, because the HMO would possess greater experience and expertise in performing the functions of an ISN. Ramsey HealthCare believed that it was well-positioned to be a partner in such a merger. It had generated operating surpluses over the past few years, was in the process of renovating and adding to its existing facility, was capable of providing primary and specialty care onsite, and possessed substantial strength in the areas of trauma and burn care. A merger with HealthPartners promised a continued patient flow to support Ramsey HealthCare's teaching mission and was expected to help the Ramsey Clinic in attracting and retaining physicians.

HealthPartners found the prospect of a merger with Ramsey HealthCare to be attractive for several reasons. Foremost was the belief that to achieve savings on inpatient cost in the future it would need to develop a much closer management relationship with hospitals. A merger with Ramsey HealthCare offered the potential for better integration of inpatient and outpatient services received by enrollees living in the east metropoli-

tan area and therefore greater cost control in the long run. And, to maintain geographic coverage of the metropolitan area with respect to inpatient care, HealthPartners needed a linkage with a hospital or set of hospitals in the eastern metropolitan area. The merger with Ramsey HealthCare filled this need.

The Merger of HealthSpan and Medica

The merger of HealthSpan and Medica, announced on December 8, 1993, was the first merger in the Twin Cities between a hospital system and a health plan. The assets of the existing organization were merged under a new entity, Allina, that was itself organized as three divisions: delivery system (including hospitals, long-term care facilities, and home health care agencies), physicians (employees of the hospital system or contracting physician group practices), and managed care (insurance and managed care components, including integrated service networks that will be formed in the future). There are approximately 750,000 members in existing Allina health plans (550,000 in Medica products and 200,000 in SelectCare, a PPO sponsored by HealthSpan). The combined annual revenues of Medica and HealthSpan are \$8 billion, and the organizations together employ about 16,000 individuals. HealthSpan owns or manages 17 hospitals in Minnesota and Wisconsin as well as 45 clinics. It has 3,200 affiliated physicians. Medica contracts with 5,000 physicians and is managed by United Health Care Corporation under a long-term management contract. (The merger will necessitate a renegotiation of the terms of this contract.) The new Allina will be the largest nonprofit firm in Minnesota and the eighth largest firm overall (61). To manage Allina, the existing boards of Medica and HealthSpan will be dissolved and a new board will be created.

The merger partners point to the Minnesota-Care legislation as the motivation for the merger. Allina will form the basis for an Integrated Service Network (ISN) that will meet the requirements of an integrated health care delivery system under the new legislation. It is expected that some reduction in the number of hospital beds will occur un-

der Allina, and there will be consolidation of other services as well. Allina also plans to create a health plan option it hopes members of the Business Health Care Action Group will offer to their employees as an alternative to HealthPartners.

Ongoing Developments

Obviously, the Twin Cities' health care market is in a period of very rapid change with the ultimate configuration of the delivery system still open to debate. Most of the actors in this system believe there will be three to four large organizations, formed through merger or contractual affiliation, that will dominate health care delivery in the Twin Cities. The ultimate closure or conversion of four or five more hospitals is anticipated with a reduction in the number of acute inpatient beds of as much as 50 percent. The current trend involving the purchase of physician practices by hospital systems and HMOs is expected to continue; already, there are very few independent physician practices in the eastern metropolitan area.

While there is agreement among key actors in the Twin Cities' market about the general form that the community's health care delivery system will take in the future, there are several ongoing developments that will have an important impact on this form. These include the conditions of contractual arrangements and other agreements among provider groups, the definition of the University Hospital and Clinics' role in the new system, and the strategies adopted by Blue Cross/Blue Shield.

Contractual Relations Among Provider Organizations

In theory, ISNs will be fully integrated systems that will be able to rationalize the use of health care resources and increase the efficiency with which care is delivered through close collaboration among participating providers. The necessity to compete for patients will provide a stimulus for the coordination of resources to achieve system efficiencies. Presumably, provider incomes will be closely tied to the success of their ISNs, so they will have a strong motivation to work collabora-

tively to keep costs down while at the same time providing a product that is responsive to the desires of consumers. Again, in theory, competitive incentives would be strongest if ISNs offered consumers and payers a clear choice among provider systems. Then providers that collaborated under ISN organizational umbrellas would benefit financially if their organizations prospered relative to competitors.

In general, the development of the Twin Cities market to date has not resulted in close exclusive ties between provider groups and health care organizations. Even HealthPartners, which may at this time be the organization in the Twin Cities that most closely approaches this model, does not have exclusive contractual arrangements with some of its key providers. For instance, the Park-Nicollet Clinic, HealthPartners' major provider group in the western metropolitan area, has recently announced a merger of assets with Methodist Hospital, the major supplier of inpatient care to HealthPartners in the same area of the Twin Cities, to form Minnesota Health Systems. One of the purposes of the merger is the development of an ISN under MinnesotaCare. Minnesota Health Systems is seeking an insurance partner for this purpose, with Blue Cross/Blue Shield being the logical candidate. Thus, HealthPartners faces the possibility of being in direct competition for enrollees in some markets with a major component of its delivery system. Even if a non-compete clause were negotiated in its contracts with Minnesota Health System providers, it could be difficult for HealthPartners to establish sufficient organizational loyalty on the part of providers to achieve delivery system rationalization under these circumstances.

A second example is provided by relationships between hospital systems and emerging ISNs in the Twin Cities. Most hospitals expect to continue to sell services to a range of purchasers regardless of their own sponsorship or ownership positions in ISNs. For example, Allina, which owns hospitals in the northern suburbs, expects to continue to provide inpatient services to HealthPartners and Blue Cross/Blue Shield enrollees living in this area. Fairview Hospital Systems, which has en-

tered into a collaborative arrangement with Blue Cross/Blue Shield and the University Hospital and Clinics to form an ISN, expects to continue to provide inpatient care to HealthPartners' enrollees.

In short, an interlocking web of contractual relationships among different provider organizations continues to exist below the overlay of ISN formation, and these relationships often are among entities that will presumably compete with each other through their affiliations with or ownership of ISNs. It is not clear at this time how or whether these relationships will be modified over time to link specific groups of providers more closely to specific ISNs. It is also not clear how they might affect the process of health care rationalization through competition among large integrated health care delivery systems as envisioned by the legislative architects of MinnesotaCare.

Blue Cross/Blue Shield

During the 1970s, Blue Cross and Blue Shield of Minnesota (BCBSM) enrolled over 70 percent of the private health insurance market in the Twin Cities. During the early 1980s, as HMOs gained market share and reportedly attracted healthier enrollees, BCBSM premium increases were often substantial. Despite this, the company lost over \$10 million during 1986 and nearly \$20 million during 1987. These operating losses caused BCBSM to completely restructure its health insurance product lines. A PPO (Blue Cross and Blue Shield of Minnesota) was formed that had over one million enrollees by 1990. A network model HMO (Blue Plus), featuring an open-ended option, evolved from HMO Minnesota, a Blue Cross/Blue Shield-sponsored HMO. This program grew slowly during the early 1980s, but by 1990 had 70,000 enrollees. An indemnity health insurance plan (Aware Gold), was developed that was very similar to the traditional BCBSM program but offered a comprehensive benefit package competitive with the HMO products and devoted a great deal of effort to cost controls. Aware Gold was very popular in the early 1980s because it gave consumers a generous benefit package and

free choice of provider. By 1989, there were over 600,000 enrollees in this plan.

To compete in the current Twin Cities health care market, BCBSM has developed a new managed care strategy with three components (47). The first and most prominent is an extensive ongoing analysis of small area variation in physician resource utilization. While this approach reportedly has been effective in changing the practice styles of some physicians, it does not provide a major competitive advantage for BCBSM. Any savings resulting from changes in physician resource use accrues to other health plans as well as BCBSM. The second component focuses on provider payment systems. Here the main thrust is to link payment to severity of illness, institute risk-sharing agreements with groups of physicians, and provide extra payments for preventive services. Again, the gains from this strategy are often shared by competing plans (e.g., prevention) and BCBSM patients are often a relatively small proportion of a physician's practice, reducing the impact of these interventions. The final component consists of a series of initiatives relating to the management of resource use (e.g., use of primary care physicians, gatekeepers, designation of referral specialists, and drug formularies).

In addition to these strategies, BCBSM intends to pursue ISN development. In May BCBSM announced a partnership with Affiliated Medical Centers in Willmar for the creation of an ISN to serve a 14-county area in southwestern Minnesota. In June it indicated that it would participate in a partnership with Park-Nicollet Medical Center and Methodist Hospital to form an ISN in the west metropolitan area. In July it announced a partnership with Aspen Medical Group to lay the groundwork for an ISN to serve residents in the Twin Cities' metropolitan area. This ISN would be developed in cooperation with Fairview Health Systems and University of Minnesota Hospital and Clinics.

BCBSM also intends to create a package of services that can be marketed to hospitals and medical groups that are developing ISNs. These services will include actuarial services, claims

management, payment systems, information systems, quality assurance programs, utilization review systems, and some clinical guidelines. This package, or parts of it, will be available as a service component provided under subcontract to ISNs or through partnerships to establish ISNs.

University of Minnesota Hospital and Clinics

In a competitive health care market an obvious issue is: can, or should, a university hospital and affiliated clinics compete effectively for patients? In the Twin Cities, most actors acknowledge that all would benefit from the continued presence of a strong medical school that can provide high-quality training for new physicians. However, there is less consensus concerning the appropriate role for the university of Minnesota hospital and clinics in the evolving system. Some contend that the education and research components of the university's mission seriously limit its ability to compete with more service-oriented community hospitals for the patients of large health plans. Others argue that the university may be able to successfully compete for tertiary care patients, but will not be able to maintain a broad enough patient base to sustain excellence in clinical training programs. Under these circumstances, one alternative is for the University Hospital to be purchased by or merged with one of the existing large health care organizations under an agreement to continue to operate it as a university teaching and research institution. The acquiring organization could then concentrate the patients needed for that role at the University Hospital and phase out duplicate services in other parts of its system. Acquiring the University Hospital could result in a competitive advantage for the purchaser because of the pres-

tige of the university system. However, it might be very difficult to preserve the role of the hospital, as envisioned by the university, when control is given over to others.

An alternative strategy which the University Hospital appears to be pursuing is to be an aggressive competitor in the evolving system. To do so, the hospital has formed a corporate structure that brings the clinical faculty and hospital together to contract with ISNs and negotiate with health insurance plans. This organization, the University of Minnesota Health System, has the capacity to develop health services programs, create new health plans, and bid on contracts to provide services to employers or health plans. As noted previously, the university has chosen to become a partner with Blue Cross/Blue Shield and Fairview Health System in the formation of an ISN. The University Hospital will be the secondary and tertiary care facility in this system. It hopes that by participating in this ISN it will be able to assure a continued flow of patients for its teaching and research programs. The danger in this approach is that providers affiliated with competing organizations could restrict referrals of patients to university physicians and withdraw from participation in its teaching programs. These losses could outweigh the gains from the ISN partnership. The university has responded to this concern by remaining available as a participant in other ISNs. According to the president of the University of Minnesota Health System, "Not to join [an ISN] could mean being left without a patient base in the competitive Minnesota health care environment. At the same time, we won't be an exclusive partner. Our mission makes it imperative that we be available to any Minnesotan who needs us." (63)