Financial performance in the social health maintenance organization, 1985-88

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Since early 1985, four social health maintenance organizations have delivered integrated health and long-term care services to Medicare beneficiaries under congressionally mandated waivers that included shared public-program risk for losses. Three of four sites had substantial losses in the first 3 years, primarily because of slow enrollment and resultant high marketing and administrative costs. After assuming full risk, two of the three showed surpluses in 1988. Service and management costs for expanded long-term care were similar across sites and were affordable within the framework of Medicare and Medicaid reimbursement and private premiums.

Introduction

The Social Health Maintenance Organization (SHMO) Demonstration began operations at four sites in early 1985 under congressionally mandated waivers of Medicare and Medicaid regulations. The consolidated, prepaid SHMO model has been looked to by many policymakers and providers as a rational way to deliver managed, integrated health and long-term care (LTC) services (Callahan and Wallack, 1981; Rivlin and Wiener, 1988). In 1987, Congress extended the demonstration until late 1992. An evaluation of the SHMO is being supported by the Health Care Financing Administration (HCFA), which has produced several supporting papers and an interim report to Congress (Health Care Financing Administration, 1988).

How have the SHMOs performed financially? The brief answer is that the model has proven to be complex to develop, manage, and market; and this has had an impact on revenues and expenses. There were substantial initial losses at three of the four sites, resulting in large part from slower than expected enrollment (and thus high per member administrative costs), plus high marketing costs from the effort to overcome slow enrollment (Health Care Financing Administration, 1988). During the first 30 months of the demonstration, these three plans were heavily subsidized in operations through a risk-sharing arrangement that limited provider sponsors' losses to preset amounts (Leutz et al., 1985). Medicare, and, to a lesser extent, Medicaid, have absorbed losses after these thresholds (Clark, 1986).

Since mid-1987, SHMOs at all sites have been operating without the protection of risk sharing and will continue at full risk during the 4-year extension period. An examination of the trends in revenues and expenses from 1985 through 1988 provides insight into the future prospects for these organizations. The analysis also provides policymakers and potential SHMO sponsors with information about the costs of developing the model and bringing it to break-even levels.

Six questions are addressed:

- What have been the expenses, revenues, and net revenues over time?
- Have losses come more from service costs or administration and overhead?
- What do expanded long-term care benefits cost?
- What has it cost to market the SHMO?
- Has the performance of the SHMOs improved since assuming full risk?
- What is the break-even enrollment for SHMOs, and does this differ by model?

Before looking at the numbers, some background on the demonstration and sites is necessary.

Model and sites

The SHMO demonstration was designed to expand prepaid coverage of community and nursing home care in a controlled manner and to link these expanded LTC services with a complete acute care system. SCAN Health Plan and Elderplan are new HMOs initiated by LTC organizations (Table 1), and Seniors Plus and Kaiser Permanente plans are sponsored by established health maintenance organizations (HMOs). Thus, at the latter two sites, the new HMO and SHMO are one and the same, and at the former two sites, the SHMO is essentially a new benefit program for the existing HMO.

The "new SHMO" model has been more difficult to develop than the "new HMO benefit" model. Both SCAN Health Plan and Elderplan are new health care systems bringing together hospitals and physician groups with little prepaid health care experience. Building the systems has involved much effort and some false starts at both sites (Health Care Financing Administration, 1988). Also, because the SHMOs are relatively small parts of these partners' overall business, during contract negotiations, the new SHMOs have at times had to rely as much on the goodwill of their medical providers as on a strong bargaining position. In contrast, SHMO planners in Portland (Kaiser Permanente) and Minneapolis (Seniors Plus) could rely on the stability and efficiencies of established HMO sponsors for their medical care.

When the SHMOs began marketing in March 1985, Kaiser Permanente membership quickly outpaced the other three organizations, despite having the highest monthly member premium: $49 through 1987 and $57 for 1988 (Table 1). Elderplan is the only one beside Kaiser Permanente to reach the 4,000-member research-sample target. Possible reasons for these marketing shortfalls, as well as their financial implications, are discussed later.

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Table 1

Characteristics of 4 social health maintenance organizations (SHMOs): 1985-88

Plan characteristic	Elderplan	Kaiser Permanente	SCAN Health Plan	Seniors Plus
Location	Brooklyn, New York	Portland, Oregon	Long Beach, California	Minneapolis, Minnesota
Type of sponsor	Comprehensive LTC organization	HMO	Case management agency	Comprehensive LTC organization and HMO
Other major organizations	Multispecialty medical groups	None	Hospital and IPA medical group	None
Type of SHMO	Own HMO	New benefit program	Own HMO	New benefit program
Total members as of:				
December 1985	776	3,174	1,140	433
December 1986	2,571	4,305	2,062	1,688
December 1987	4,307	4,974	2,840	2,597
December 1988	5,015	5,005	3,041	3,031
Member premium[1] per month, 1988	$29.89	$57.00	$24.95	$29.95
1988 LTC benefits[2]				
Home and community	$6,500 per year	$1,000 per month gross	$625 per month net	$7,200 per year gross
Nursing home care	$6,500 per year	100 days per episode of illness[3]	$1,000 per month to $9,400 lifetime	21 days per episode of illness[3]
Overall limit	$6,500 per year	$12,000 per year gross	None	$7,200 per year gross
Home care copayment	$10 per visit	10 percent of charges	$7.50 per visit	20 percent of charges
Nursing home copayment	20 percent of charges	10 percent of charges	20 percent of charges	20 percent of charges

[1]1988 premiums were higher than in previous years at most sites. Elderplan and Kaiser Permanente were level through 1987 at $29.89 and $47.00, respectively. SCAN sold for $40 until January 1987, when it introduced the $24 option without dental. Seniors Plus went from $29.50 to $24.95 and back from 1985 to 1988.

[2]Benefits in initial years were different at SCAN and Seniors Plus. Prior to September 1987, the SCAN cap was $7,500 for either nursing home or community-based services with no lifetime limit. Seniors Plus was $6,250 per year home and community, $6,500 lifetime nursing home, and $6,250 per year overall.

[3]New episodes of illness at Kaiser Permanente and Seniors Plus start after 60 days of living at home.

NOTES: HMO is health maintenance organization. LTC is long-term care. IPA is independent practice association.

SOURCE: Brandeis University: Data from the SHMO Consortium Finance Data Set, 1989.

All new members are surveyed and screened by the LTC unit for disability and health status, and they appear to be similar to the overall Medicare population (Greenberg et al., 1988). Parallel community surveys conducted by the HCFA evaluator confirm the general similarity of SHMO members in terms of severe disability. The surveys also showed that members have slightly higher rates of moderate impairment and fewer people at the extremes of either excellent or poor health than the community in general (Newcomer, Harrington, and Friedlob, 1987).

The SHMOs are financed on a prepaid, capitated, at-risk basis through monthly premiums from Medicare, Medicaid, and members. The representative population and prepaid financing allow the SHMO to establish an insurance risk pool to pay for the expanded chronic care benefits. Medicare pays monthly rates set at 100 percent of what would have been spent on members in the local fee-for-service system, as calculated in a modified version of HCFA's adjusted average per capita cost (AAPCC) formula. Regular HMOs receive 95 percent of the AAPCC (Langwell and Hadley, 1986).

To compensate for the higher medical costs of community residents who are severely disabled, the AAPCC formula has been modified to pay SHMOs the higher institutional rate (about double the overall average of the AAPCC) for members who meet State criteria for being nursing home certified (NHC). To keep the formula budget-neutral, the NHC formula also pays slightly less for nondisabled community residents. Being NHC qualifies a member for SHMO LTC benefits. Across all sites, 7 percent of the 16,092 members active at the end of 1988 were NHC, and 6 percent were receiving chronic care services.

Each plan and State Medicaid agency negotiated their own reimbursement rates and formulas for categorical and spend-down eligibles. Rates covered both medical and LTC costs, except in Oregon, which did not accept Kaiser Permanente's proposal to provide the private benefit to Medicaid eligibles for $29.10 per month. Minnesota and California established separate high rates and coverage for NHC members, and New York developed a single LTC-acute rate based on case-mix assumptions (Leutz et al., 1985).

Core SHMO benefits include all Medicare-covered services, a range of ancillary medical services (e.g., prescription drugs), plus a full array of expanded community care and nursing home services for chronic conditions not covered by Medicare, HMOs, and Medicare supplementary insurance. These expanded care services include personal care, homemaker, day care, respite care, transportation, and institutional care. As in most previous LTC demonstrations, chronic care services are managed by a distinct case management unit (Capitman, 1989).

Because of the limits of Medicare and insurance financing, the SHMOs' expanded LTC benefits for private-pay members are controlled through a variety of

benefit caps and benefit statuses (Table 1). Home- and community-based services are covered up to a limit of between $6,500 and $12,000 per year (defined either in monthly or annual terms) and are fully renewable each year for members remaining in the community. Except at Elderplan, nursing home benefits beyond those covered by Medicare are limited by either an episode-of-illness concept or lifetime limits and thus are not renewable for permanent placements. Most plans also have an annual dollar limit on the amount a member can receive in either setting or any combination of the two. All four plans charge copayments, which vary in level and structure.

The limited coverage of nursing home care leaves a major gap in LTC protection, because long nursing home stays account for the bulk of LTC costs. Because long-term nursing home liability is so great, however, covering this risk would more than exhaust the limited LTC-benefit dollars available through the financing. A front-end, community-oriented benefit structure was judged to be a better use of limited funds and to be consistent with public preferences to remain at home. Care managers report that most needs can be met within the various limits (Abrahams et al., 1989; Greenlick et al., 1988; Leutz et al., 1988); and SHMO quarterly reports to HCFA show that only 10 to 20 percent of those using the LTC benefit have exceeded the cap (usually in nursing homes).

Data

Most of the data presented herein are from two of several data sets maintained by the Social HMO Consortium. Membership data are taken from the Management Data Set (MDS), which contains monthly membership, case mix, and utilization data for both acute and LTC services. The MDS is based on the same data sources as are HCFA quarterly reports, but utilization is aggregated monthly and annually, rather than quarterly. The other is the Finance Data Set, which is based primarily on the SHMOs' quarterly cost reporting to HCFA. The data differ in some respects from quarterly report data, however, and from figures reported by the project evaluator's financial report and Interim Report to Congress (Harrington, Newcomer, and Friedlob, 1987b; Health Care Financing Administration, 1988). First, Consortium financial data are all compiled by date of service, but the evaluator reported Seniors Plus spending by date of payment receipt. Second, summary tables of service and other costs combine small categories in different ways. Neither of these differences in assumptions and data leads to major differences in results. Differences and similarities are explained further in the "Technical note." Finally, all data reported by the SHMOs herein, to HCFA and to the evaluator, are based on each plan's accounting practices, which may differ across programs. This may hamper analysis of administrative costs, especially where one plan, for example, may account for certain medical group administrative costs in the medical capitation, and another may put these costs in health plan administration. Instances in which this appears to be a clear problem are pointed out later.

The financial implications of Medicaid reimbursement and costs are ignored herein, because the bulk of memberships at all plans are private-pay, and the marketing problems and utilization patterns have been roughly similar for both private and dually eligible members. The only plan for which this may distort comparisons is SCAN, where Medicaid eligibles constitute approximately 8 percent of the membership (more than twice the level at any other site) and have chronic care utilization patterns two to three times the level of private-pay members. This is still small enough, however, to not greatly affect the analysis herein.

Financial performance over time

Have revenues covered expenses?

The bottom line looks different at each site. Kaiser Permanente has had small and stable losses all 4 years; Elderplan has had large and stable losses; and Seniors Plus and SCAN Health Plan have had decreasing losses followed by surpluses in 1988 (Table 2). The two "new SHMO" models lead the way in overall losses: from a high of $11.0 million during the 4 years at Elderplan, down to $3.6 million at SCAN, $2.0 at Kaiser Permanente, and $1.5 million at Seniors Plus. From 1985 through 1988, losses exceeded revenues by more than 26 percent at Elderplan, nearly 11 percent at SCAN, and nearly 8 percent at Seniors Plus.

In Table 2, Kaiser Permanente's losses are shown as nearly 4 percent of revenue, but this is an exaggeration. Because Kaiser's costs are determined in advance by the adjusted community rate (ACR) methodology, apparent losses could be the result of fluctuations and inaccuracies in the ACR (Porrell et al., 1987). During these years, the required ACR calculation produced cost estimates that exceeded the revenue required to pay for the services used by the population. If the full ACR had been taken by Kaiser Permanente, the premium to the member would have been higher than appropriate. Therefore Kaiser Permanente management's internal rate buildups show a "dues subsidy." This produces what appears as a loss in these tables, but what in fact produced a program balance during most of these years. Also, a benefit stabilization fund that accumulated from operating surpluses in expanded care reached $919,342 in December 1987 and was drawn down to $729,298 in December 1988.

Several factors should be considered in assessing SHMO losses. First, these levels of loss are not out of line with what has been experienced in new HMO startups (Goran, 1981), but the losses are larger than those experienced by most HMOs that began between 1983 and 1984 in the Medicare HMO demonstration (Nelson et al., 1986). In that demonstration, only 12 of 24 HMOs suffered losses in their first 1 or 2 years of Medicare operations, with losses ranging from $16 to $1,758 per member per year. SCAN Health Plan, Elderplan, and Seniors Plus all came close to or exceeded the upper end of this range in 1985 and continued at high loss levels at least well into 1986. It is important to remember, however, that the SHMOs started at least a year later than the HMOs, which means all SHMOs except Elderplan faced experienced HMO competition in

Table 2

Social health maintenance organization revenues and expenses: 1985-88

Plan	Revenues	Expenses[1]	Net revenue	Net revenue divided by total revenue
SCAN Health Plan				Percent
Total	$33,982,447	$37,576,541	($3,594,094)	−10.6
1985	2,242,159	3,774,051	(1,531,892)	−68.3
1986	6,972,727	8,188,382	(1,215,655)	−17.4
1987	10,728,727	12,169,158	(1,440,431)	−13.4
1988	14,038,834	13,444,950	593,884	4.2
Elderplan				
Total	42,287,025	53,303,555	(11,016,530)	−26.1
1985	1,633,023	3,594,145	(1,961,122)	−120.1
1986	5,726,551	9,054,991	(3,328,440)	−58.1
1987	13,997,665	17,117,288	(3,119,623)	−22.3
1988	20,929,786	23,537,131	(2,607,345)	−12.5
Seniors Plus				
Total	20,123,635	21,667,336	(1,543,701)	−7.7
1985	680,389	1,190,092	(509,703)	−74.9
1986	3,552,178	4,547,332	(995,154)	−28.0
1987	6,462,470	7,031,665	(569,195)	−8.8
1988	9,428,598	8,898,247	530,351	5.6
Kaiser Permanente				
Total	55,777,716	57,768,535	(1,990,819)	−3.6
1985	5,123,953	5,367,315	(243,362)	−4.7
1986	13,072,459	13,683,211	(610,752)	−4.7
1987	17,230,964	17,623,919	(392,955)	−2.3
1988	20,350,340	21,094,090	(743,750)	−3.7

[1]Includes set asides for risk reserves.

SOURCE: Brandeis University: Data from the SHMO Consortium Finance Data Set, 1989.

addition to fee-for-service supplements. Also, by that time, there was increased retrenchment in Medicare payment policy and concomitant concerns about the adequacy and accuracy of the AAPCC methodology. Finally, trends through 1988 are not the last word on the SHMOs' bottom lines. On the one hand, after positive years, Seniors Plus and the SCAN Health Plan faced provider partners who wanted to raise rates to share in surpluses. On the other hand, Elderplan found lower cost physician, hospital, and nursing home providers and completed 1989 in the black for the year.

What caused initial losses?

To understand the issues related to deficits, it is useful to detail the various components of 1987 costs, when all four SHMOs still showed losses. In Table 3, one can see in detail the distribution of nonservice expenses for 1987, including marketing, administration, case management, interest, depreciation, and reserves. Revenues, rather than expenses, were used in the denominator because the combination of Medicare, Medicaid, and member premiums is a common measure of market financing capacity across the plans. The figures show that service costs were not the culprit behind losses in 1987. Services required high but similar proportions of revenues at all sites. SCAN and Elderplan, however, had much higher nonservice costs than did Kaiser Permanente and Seniors Plus. Although case management costs show some fluctuation across plans (from 2.0 to 4.5 percent of revenues), there are more striking differences in other categories. First, to bolster enrollment, Elderplan, Seniors Plus, and SCAN Health Plan each spent from 6.7 to 9.7 percent of revenues on marketing in 1987, while Kaiser Permanente spent less than 1 percent. Second, because Elderplan and SCAN Health Plan are new SHMO models, they carry higher interest, depreciation, and amortized startup costs than do the other plans. Third, general administrative costs are higher at Elderplan and SCAN Health Plan (18.1 percent and 12.0 percent, respectively) than at Seniors Plus and Kaiser Permanente (5.8 percent and 3.1 percent, respectively). For Kaiser Permanente and Seniors Plus, a large part of administrative costs is paid on a capitation basis to the parent health plan. Thus, since the beginning of operations, these HMO-based plans have had built-in economies of scale and experience for much of their administrative expenses.

Table 3

Social health maintenance organization administrative and other nonservice expenses as a percent of revenue: 1987

Type of expense	SCAN Health Plan	Elder-plan	Seniors Plus	Kaiser Perma-nente
		Percent		
Total	30.1	33.4	17.0	5.4
Case management	4.5	2.0	3.3	2.2
Marketing	8.7	9.7	6.7	0.1
Interest and depreciation	2.5	2.8	1.2	0.0
Reserve/risk funds	2.4	0.8	0.0	0.0
General administration	12.0	18.1	5.8	3.1

SOURCE: Brandeis University: Data from the SHMO Consortium Finance Data Set, 1989.

Table 4

Social health maintenance organization service expenses as a percent of revenues: 1987

Type of expense	SCAN Health Plan	Elder-plan	Seniors Plus	Kaiser Permanente
	Percent			
Total	83.1	88.7	91.7	96.8
Inpatient hospital	28.4	28.0	33.2	38.0
Physicians and affiliated personnel	24.1	29.2	31.4	37.0
Medicare SNF and HH	6.8	6.6	3.7	4.9
Expanded LTC	8.2	6.7	9.8	8.4
Prescription drugs	5.0	10.4	8.5	6.7
Other	10.6	7.8	5.1	1.8

NOTES: SNF is skilled nursing facility. HH is home health care. LTC is long-term care.

SOURCE: Brandeis University: Data from the SHMO Consortium Finance Data Set, 1989.

In Table 4, service costs are broken down as a percent of each plan's total revenues. With some exceptions, the figures show similar distributions of costs within categories at all sites. The only clear difference is that the two news SHMO models—SCAN and Elderplan—spent lower proportions on physician and hospital services than did the HMO-based sites. This may stem in part from the fact that these "new SHMO" models have assumed some of the administrative tasks (e.g., utilization review) that are performed at the Kaiser Permanente and Seniors Plus HMOs by the health plan and are thus included in the capitation. Changes in revenues and expenses in 1988 are discussed in a later section.

Expanded long-term care cost

In Table 5, one can see a clustering of LTC costs in 1988 of $27 to $30 per member per month (PMPM). SCAN Health Plan had case management costs of $12 PMPM, while the other three plans showed the same $7 PMPM. Total LTC costs ranged from $34 to $39 PMPM. This remarkable similarity in costs for seemingly different benefits is primarily the result of the fact that plans serve different proportions of their memberships with expanded care because of different case mixes and different targeting guidelines. For example, during 1988, the proportions of members with active expanded care plans

Table 5

Social health maintenance organization costs for expanded long-term care[1] services: 1988

Plan	Total	Service costs[2]	Case management costs
	Amount per member per month		
SCAN Health Plan	$39	$27	$12
Elderplan	36	29	7
Seniors Plus	34	27	7
Kaiser Permanente	37	30	7

[1]Expanded long-term care services include personal care, homemaker, day care, respite care, transportation, and institutional care.
[2]Gross amounts for Elderplan and Seniors Plus; net (of copayments) amount for SCAN Health Plan and Kaiser Permanente.

SOURCE: Brandeis University: Data from the SHMO Consortium Finance Data Set, 1989.

Table 6

Social health maintenance organization costs for expanded long-term care services[1]: 1985-88

Plan	1985	1986	1987	1988
	Amount per member per month			
SCAN Health Plan	$15	$26	$29	$27
Elderplan	25	32	22	29
Seniors Plus	40	29	25	27
Kaiser Permanente	21	21	25	30

[1]Expanded long-term care services include personal care, homemaker, day care, respite care, transportation, and institutional care.

SOURCE: Brandeis University: Data from the SHMO Consortium Finance Data Set, 1989.

were 6.9 percent at SCAN, 8.6 percent at Seniors Plus, 5.4 percent at Kaiser Permanente, and 4.2 percent at Elderplan (Leutz et al., 1989). Service costs per member with an active expanded care plan were therefore $391 per month at SCAN Health Plan, $314 at Seniors Plus, $556 at Kaiser Permanente, and $690 at Elderplan (derived from Table 5 and Leutz et al. [1989]).

Per month costs have not been so similar throughout the project, but there have not been wide differences. There is a variety of reasons for differences in patterns of expanded care service and case management costs (Leutz et al., 1988; Abrahams et al., 1988a), including:

- Broader staff categories in case management units at some sites (for example, SCAN includes a physical therapist who performs mostly Medicare physical therapy, and both SCAN and Elderplan include hospital utilization review and discharge planning staff).
- A proportion of Medicaid members at SCAN (8.9 percent) that is more than twice the share of that at any other site.
- Different local costs of medical care as reflected in Medicare per capita payment levels.

It should also be pointed out that all SHMOs' case management costs include significant research-related costs, most importantly, the costs of performing comprehensive initial assessments, bi-annual reassessments, and participating in ongoing training and testing for assessment reliability (Abrahams et al., 1988b).

A key issue in the feasibility of offering expanded care is whether costs can be controlled as the members age and become increasingly disabled. An examination of LTC from 1985 to 1988 may show cause for concern but also a way to manage it. The concern is with Kaiser Permanente, which has seen its LTC service costs rise steadily from $21 PMPM in 1985 to $30 PMPM in 1988 (Table 6). (The costs in 1985 and 1986 were actually substantially lower than indicated by the figures in the table, as reflected in the buildup in the benefit stabilization fund mentioned previously.) In contrast, benefit costs at the other three sites were more stable. One source of their stability is "queuing" new applicants according to disability, with the goal of maintaining a proportion of severely impaired members similar to community levels (Greenberg et al., 1988). Another source for the increasing costs at Kaiser Permanente may be the aging of that plan's large first-year cohort of members. Because Kaiser Permanente does not queue, the new members are not as likely to offset increasing

disability among existing members as at the queuing sites.

Are these LTC costs affordable in the context of SHMO financing? Although it is not possible to say what source of funds covers what services in a pooled financing system, three particular sources stand out. First, in 1988, the extra 5 percent of AAPCC amounted to $11 to $17 PMPM across the plans and thus equaled 32 to 44 percent of LTC costs. Second, the member premiums ranged from $25 to $57 per month and thus equaled 64 to 158 percent of LTC costs. Third, SHMOs—like HMOs—keep hospital utilization well below fee-for-service levels and thus generate savings that can be diverted to pay for other services. So far, these three streams of funding have been sufficient to support the medical and LTC benefits offered.

What has marketing cost?

Except at Kaiser Permanente, it has been expensive to persuade Medicare beneficiaries to join the SHMO. During the 4 years, costs per new member enrolled for direct mailing, newspaper advertisements, sales representatives, and advertising agencies averaged $378 at Seniors Plus, $528 at Elderplan, and $704 for SCAN Health Plan (Table 7). Kaiser Permanente's costs were only $21 per member.

Table 7

Social health maintenance organization (SHMO) costs for marketing, new enrollment[1], and spending per new member: 1985-88

Plan	Total expenses	New members enrolled	Spending per new member
SCAN Health Plan			
Total	$3,183,817	4,523	—
1985	754,552	1,244	$607
1986	767,197	1,281	599
1987	929,634	1,102	844
1988	732,434	896	817
Weighted average	—	—	704
Elderplan			
Total	3,825,493	7,252	—
1985	607,479	1,042	583
1986	1,040,677	2,231	466
1987	1,357,449	2,400	566
1988	819,888	1,579	519
Weighted average	—	—	528
Seniors Plus			
Total	1,401,569	3,703	—
1985	186,186	444	419
1986	631,798	1,387	456
1987	436,207	1,084	402
1988	147,378	788	187
Weighted average	—	—	378
Kaiser Permanente[2]			
Total	145,255	6,823	—
1985	35,751	3,270	11
1986	85,128	1,492	57
1987	13,171	1,047	13
1988	11,205	1,014	11
Weighted average	—	—	21

[1]Enrollment figures do not take account of disenrollment, which has had different rates at each site.

[2]Totals do not include amounts for marketing conducted by the health plan for the SHMO project, which equals about 20 percent of administrative costs paid to the plan.

SOURCE: Brandeis University: Data from the SHMO Consortium Finance Data Set, 1989; Health Care Financing Administration, Office of Research and Demonstrations: Data from SHMO quarterly reports.

Why has Kaiser Permanente been so different? No comprehensive analysis of marketing problems is available, but factors that may distinguish Kaiser Permanente are its strong reputation in Portland, its large internal market of Medicare eligibles (more than one-half of its SHMO members), and its decision not to market its regular Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) plan in competition with the SHMO. SCAN and Seniors Plus face stiffer competition than does Kaiser Permanente from other HMOs in their areas, some with more substantial marketing budgets and low-premium or zero-premium options. Elderplan has had to expend considerable resources not only to sell itself but also to sell the HMO concept in an aggressively fee-for-service environment.

Problems identified by the HCFA evaluator include a limited number of physicians and service sites at SCAN Health Plan and Elderplan, small catchment areas that limited media use at all sites, the demonstration status of the project, inadequate initial marketing budgets, and inexperience in marketing to Medicare beneficiaries except at Kaiser Permanente. Also, surveys conducted by the evaluator found that beneficiaries and opinion leaders seldom understood the nature of the SHMO's LTC benefits, reflecting Elderplan's and Kaiser Permanente's decisions not to highlight these benefits and SCAN's and Seniors Plus's apparent failure to communicate their uniqueness (Harrington, Newcomer, and Friedlob, 1987a).

Pre- and post-risk performance

Elderplan, SCAN, and Seniors Plus each had aggregate stop-loss risk-sharing arrangements with HCFA that limited the sponsor's losses on overall program costs to pre-stated amounts in the first 2 contract years, with the amounts doubling in the second year. Elderplan and Seniors Plus stop-loss arrangements also included State Medicaid agencies. Kaiser Permanente's risk-sharing arrangement was different, with Kaiser Permanente taking full risk from the beginning for all acute and ancillary costs and Medicare taking full risk for the new expanded chronic care services for the first year only (Leutz et al., 1985).

Kaiser Permanente showed a surplus in expanded care in year 1 and took full risk for all costs thereafter, while Elderplan and SCAN each exceeded the sponsor risk-sharing level in each of the first 2 years of operations. Seniors Plus exceeded its level in the first year and absorbed nearly one-half of its loss limit in year 2.

Well before the end of risk sharing, SCAN Health Plan, Elderplan, and Seniors Plus began to assess whether it was possible to cut costs sufficiently to continue into the full-risk period. All decided to continue and each implemented cost-cutting measures. The results are shown in Table 8, which details costs at these three sites for the last 12 months of risk sharing versus the first post-risk-sharing year. The net gain (loss) line at the bottom of the

Table 8

Revenues and expenses during and after risk sharing for three social health maintenance organizations, by type of expense: 1987

Revenue or expense	SCAN Health Plan		Elderplan		Seniors Plus	
	October 1986-September 1987	October 1987-September 1988	October 1986-September 1987	October 1987-September 1988	July 1986-June 1987	July 1987-June 1988
Revenues	Amount per member per month					
Total	$356	$387	$321	$358	$238	$264
Medicare AAPCC[1]	298	330	269	302	199	220
Medicaid capitation	19	17	12	9	3	4
Premiums and copayments	35	34	37	40	35	38
Interest, coordination of benefits, or other	4	6	3	7	1	2
Total expenses	411	372	418	405	271	255
Expenses for services						
Total	301	291	293	343	226	229
Inpatient hospital	101	106	96	118	83	80
Physicians and affiliated personnel[1]	87	103	96	90	82	80
Medicare SNF and home health care	26	19	16	29	7	9
Chronic care benefit	29	29	25	27	27	26
Prescription drugs	18	17	32	36	12	20
Other service expenses	40	17	28	44	15	13
Other expenses						
Total	110	81	126	62	45	26
Case management	16	13	7	7	8	8
Marketing	37	20	39	15	18	6
Interest, depreciation, and startup	12	6	11	5	4	2
General administration	45	42	69	34	15	11
Risk reserves	14	0	3	2	0	0
Total expenses and risk reserves	425	372	421	407	271	255
Net gain (loss)	(69)	15	(101)	(49)	(34)	(9)

[1] The "physician and affiliated personnel" line reflects only the physician services cost; at SCAN, in the full-risk period, payments for home health care, therapy, durable medical equipment, and emergency care are reflected in their appropriate lines.

NOTES: AAPCC is adjusted average per capita cost. SNF is skilled nursing facility.

SOURCE: Health Care Financing Administration, Office of Research and Demonstrations: Data from SHMO quarterly reports.

table shows that SCAN Health Plan and Seniors Plus were successful in turning around losses, but Elderplan was not. Elderplan clearly had the largest gap to close ($101 PMPM), and it did manage to cut $52 PMPM from its deficit. SCAN Health Plan was able to realize an $84 PMPM turnaround, compared with a $43 PMPM turnaround for Seniors Plus. How were the plans able to make these changes?

The first ingredient for success was increased revenues, although this was not a sufficient condition. Elderplan had the largest increase, but all three plans' increases were in the 9-to-12-percent range. The major source of increased revenues at all sites was Medicare.

The second ingredient for success was decreasing administrative and other costs, but this was not a sufficient condition either. In Table 8, it can be seen that all three cut their totals for these costs by one-quarter to one-half from the risk-sharing period, with the largest decrease at Elderplan. First, all cut marketing by nearly one-half to two-thirds. This is the least surprising cut, as promotional costs are extremely flexible. Full-risk marketing budgets were still substantial at SCAN Health Plan ($684,000) and Elderplan ($756,000), but much less ($169,000) at Seniors Plus. A comparison of 1987 and 1988 enrollment figures in Table 7 shows that there were modest negative effects on enrollment. Second, all made cuts in general administration. Cuts were modest at SCAN Health Plan and Seniors Plus and substantial at Elderplan ($35 PMPM). Elderplan's large general administrative costs were more than halved through layoffs, reorganizations, and decisions not to fill some positions. Third, it should be pointed out that there were some extraordinary administrative costs associated with analyzing and planning for the transition to full risk during the last year of risk sharing. Both Elderplan and SCAN Health Plan retained outside financial and management consultants to help them assess if and how it was possible to turn deficit-ridden programs into viable businesses.

The final ingredient for success was holding down service costs. Here SCAN Health Plan and Seniors Plus succeeded and Elderplan failed. SCAN was able to actually decrease service costs by 3 percent. The most important enabler was that St. Mary's Hospital and the Physicians of Greater Long Beach agreed to hold down rates to help make it financially feasible for the health plan to enter the new fiscal year at full risk. Furthermore, the hospital and medical group not only assumed full risk for their services, they also took on risk for other services

at favorable rates, including out-of-area emergencies, all nursing home care, and Medicare home health care. This allowed SCAN Health Plan to accurately predict its medical costs and focus more on case management and utilization control. The hospital and physicians also purchased their own stop-loss insurance, which allowed the health plan to avoid this cost. Finally, SCAN made significant cuts in its benefit package effective September 1987. These included increases in copayments on ancillary and LTC services (which artificially increased utilization of some services just before the increases went into effect) and narrowing eligibility criteria for expanded LTC services to members who were nursing home certifiable, the same criteria in effect at Kaiser Permanente and Elderplan since 1985. By narrowing eligibility, SCAN reduced the proportion of members with LTC plans from 13.5 percent in December 1987 to 6.9 percent in December 1988 (Leutz et al., 1989).

Seniors Plus held overall service costs to a 1-percent increase in the full-risk period. Most importantly, they actually reduced hospital and physician costs through a combination of favorable rates from Group Health Incorporated (sponsor) and lower hospital utilization in the period. At the beginning of 1987, the plan also restructured its LTC benefits by reducing the nursing home coverage and increasing the value of home- and community-based services.

In contrast to Seniors Plus and SCAN Health Plan, Elderplan saw service costs increase by $50 PMPM (17 percent), wiping out most of the gains from increased revenues and decreased administrative costs. The source of the increases lies in a history of unstable relationships between Elderplan and its initial medical providers. The geriatric medical group that Elderplan formed for the SHMO experienced increasing staff turnover and operating deficits that were absorbed by Elderplan. As membership grew, the group handled increasing volume by referring patients to independent specialists, who controlled most admissions to the primary hospital and also exercised significant control over outpatient care and prescription drug use for these patients. As an alternative to its own medical group, in 1986, Elderplan contracted with one multispecialty group on a capitation basis; another signed on in 1988, which allowed Elderplan to dissolve its medical group in the fall of 1988. On top of these problems, Elderplan's primary hospital demanded and retroactively gained substantial rate increases for 1988, which the plan was still paying off in 1989. Elderplan's achievement of break-even since December 1988 is the product of moving all patients to the multispecialty groups at favorable rates and shifting increasing numbers of hospitalizations to a lower cost hospital.

One other bright point in the service picture for both SCAN Health Plan and Elderplan is decreases in hospital utilization resulting from more aggressive utilization control. Both plans expanded their hospital utilization review and discharge planning staffs during 1987, which eventually paid off in terms of lower utilization in the latter half of that year and in 1988. In Table 9, it can be seen that hospital utilization at SCAN and Elderplan now looks very much like utilization in the established HMOs.

Table 9

Hospital utilization rates for social health maintenance organization members: 1987 and 1988

Plan	1987	1988
	Days per 1,000 members per year	
SCAN Health Plan	1,660	1,650
Elderplan	2,937	1,873
Seniors Plus	1,748	1,889
Kaiser Permanente	1,624	[1]1,889

[1]Jan.-June only; July-Sept. data are unavailable because of work stoppage.

SOURCE: Brandeis University; Data from the SHMO Consortium Finance Data Set, 1989.

What is break-even enrollment level?

Because marketing SHMOs has proven to be so problematic and expensive, it is important to assess how many members a SHMO needs to break even financially. This is a difficult question to answer with much certainty, because changes in reimbursement, benefits, partnership and contracting arrangements, service utilization, marketing budgets, and management make break-even a moving target.

Although exact numbers are not available, it appears that the two HMO-based plans could break even at around 2,000 members or less, but the two new SHMO models may need 3,000 to 5,000 members each. The HMO-based SHMO is thus a much easier and cheaper model to develop than a freestanding SHMO. Startup costs are lower, because there is no need to build a health care system, and existing economies of scale for administration, marketing, and medical services allow profitable operation at a lower membership level.

Discussion

The SHMO demonstration has been a more expensive venture than anticipated by government agencies and most provider sponsors, with deficits especially high at the two sites that formed new HMOs. The financial picture has improved over time, however, and all plans entered the full-risk period in mid-1987 hoping to operate the SHMO in the black in the future. Two of the three high-loss sites quickly succeeded in this, and the third (Elderplan) showed a surplus for 1989.

The demonstration's risk-sharing model was a success in that it enabled the demonstration to take place: All of the four designated plans completed the startup period with the membership, management, and service system bases necessary for self-sustaining operations. The research samples were less than targeted levels at two sites, but the evaluation has been extended to increase analytic power. This experience should also be put in the context of other government-sponsored demonstrations such as Channeling, in which large sums were spent to test a concept that had no chance of becoming self-sustaining without major new spending authority. Even so, if tests of the SHMO concept are expanded, it is doubtful that the Government would grant the same open-ended financial support. Without substantial public support, it appears that existing managed health care

systems would be the most likely sponsors of future plans.

The primary source of losses at three of the four sites was slow enrollment and related high marketing and administrative costs per member. The major question that faces both the current and potential sponsors is whether the future will be different and if so, how? Will plans be able to improve or even sustain their memberships without the large marketing budgets of the past? Will increasing public awareness of the SHMOs and gaps in LTC coverage improve future sales? Would the experience of new sponsors be more like Kaiser Permanente or the other plans, or yet something new? The next few years will answer at least the first two of these questions.

Finally, it is important to remember that the purpose of a demonstration is to provide information. Although the problems of losses and slow enrollment represent important learning, they may be overshadowed by other contributions that the SHMO demonstration can make in shaping policy and practice. At heart, the SHMO is a demonstration in improved service delivery and new financing. It integrates and expands benefits for acute and chronic care in a managed, self-financing manner.

Perhaps the most important message of the data presented herein is that the costs of the SHMO's expanded LTC benefits are significant, but not beyond the reach of current streams of financing. Although the benefits offer little financial help for members who become long-term nursing home residents, the benefits do focus funds on trying to keep members in the community. All plans have modified benefit packages and/or eligibility to focus more funds on community, rather than nursing home, care and to control costs. Costs for services and care management have been predictable, controllable, and similar across four sites with different service eligibility and benefit systems. The benefits have been financed without increasing Medicare spending over fee-for-service levels and within the range of beneficiary spending on medigap supplements.

The central goal of the SHMO Consortium's research agenda is to study and improve the methods for managing expanded care services in a manner that furthers quality, equity, and efficiency. One question that cannot be answered with the data at hand is whether increased risk to providers affected the quality of care. Initial analyses have begun to address these issues (Leutz et al., 1989; Leutz et al., 1988; Greenberg et al., 1988; Greenlick et al., 1988; Abrahams et al., 1989), and the groundwork has been laid for much more detailed work in the future.

Technical note

Explanations of differences from evaluator's Report to Congress

Elderplan—Our figures match the plan's quarterly reports for 1985-87, but the evaluator's do not match for 1985 or 1986. We agree on revenues, service costs, and risk reserves for 1985 and 1986, but the evaluator shows higher administration and other expenses, leading to higher reports of losses. For 1988, we have used the plan's figures for revenues and costs certified by its auditor, which are more current than quarterly report figures. Quarterly report figures for prior years are acceptable because post-audit changes were incorporated into subsequent quarterlies.

SCAN—Our figures match plan quarterly reports for 1985-88, but the evaluators' do not match for 1986. As at Elderplan, we agree on revenues, service costs, and risk reserves for 1986, but the evaluator shows higher administration and other expenses, leading to higher reports of losses.

Differences in the distribution of service expenses in our analysis in 1987 and 1988 are the result of disaggregation of several individual items in the physicans' capitation beginning in September 1987. In 1987, this includes in-area emergency ($1.30 PMPM), out-of-area care ($4.40), Medicare home health care ($2.69), and durable medical equipment ($3.25). In 1988, this category includes Medicare ambulance expenses ($15,912), emergency in and out of area ($124,878), Medicare home health care ($119,393), and Medicare durable medical equipment ($51,403). The 1988 skilled nursing facility and intermediate care facility costs reported in HCFA quarterlies are revised to reflect actual days in the facilities. The figures for the disaggregation were supplied by the plan.

Seniors Plus—Our figures differ from the plan's HCFA quarterly reports because the reports contained data by date of payment rather than by date of service for 1985-87. The plan supplied quarterly data by date of service, and our figures agree with these plan reports for 1985-88. Our data also agree with the HCFA quarterly reports after 1988, because the report format was changed then from a date-of-payment to date-of-service format.

Kaiser Permanente—We have obtained from Kaiser Permanente the same figures supplied to and used by the evaluator.

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