

# Cost Containment Through Risk-Sharing by Primary Care Physicians: A History of the Development of United Healthcare

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*A new type of independent practice association has been organized to encourage primary care physicians in private practice to become coordinators and financial managers for their patients' medical care. Each patient chooses one internist, family or general physician, or pediatrician and must be referred by that physician for all specialized care. The primary care physician authorizes payment from his/her own account for hospital and referral care provided to patients. He or she shares any deficit or surplus remaining at the end of the year. This is a background paper detailing the history of development and specific features contained in this new concept of putting the physician in charge and "at risk" for the costs of medical care to his/her patients. The plan has been operating in northern California, Washington, and Utah and has 40,000 members and 750 participating physicians. This historical background paper is part of a large project—State Employees' Insurance Benefits Utilization Study (SEIBUS) being done by the University of Washington School of Public Health to evaluate use and costs of medical care under this innovative plan.*

## Introduction

United Healthcare (UHC) is a prepaid primary care network plan organized by the SAFECO Insurance Company. It combines the advantages of a prepaid comprehensive health plan and the advantages of a traditional fee-for-service independent practice organization of doctors and patients. It is also characterized by the expanded role of the primary care physician in cost containment. It is primarily this innovation that has led to increased interest in this plan.

The intent of this paper is to provide a brief history of the development of UHC and a detailed analysis of specific features of the plan. All data presented in this paper were gathered through discussions with the President or other employees of UHC or from reports available from them.

This is a background paper for a large-scale study being conducted by the University of Washington which will compare UHC with Blue Cross and Group Health Cooperative of Puget Sound. It will evaluate the effectiveness of the UHC model in controlling use and costs of medical care. There are five components to this State Employees' Insurance Benefits Utilization Study (SEIBUS): (1) What type of patients choose UHC; (2) why doctors participate or refuse to participate and the impact on their practices; (3) use and cost under this plan compared to Blue Cross and Group Health Cooperative; (4) a randomized trial of the impact of risk-sharing by primary care physicians on cost containment with the UHC system; and (5) the comparison of use and costs under the UHC Plan in California versus Washington. The design and results of these five components will be included in future publications and will not be addressed further in this background paper.

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## BRIEF DESCRIPTION OF UHC

The model will be referred to in this paper as UHC. It actually has two different names, Northwest Healthcare (NHC) in Washington State and United Healthcare (UHC) in California and Utah. There are three innovative features. The first is organization of the entire health care delivery system through the primary care physician. The plan contracts with family physicians, internists, and pediatricians who are private practitioners. They become the "general managers" for referral specialty care, emergency room use, and hospitalization. Self-referral by the patient is not paid for by the plan unless it has been approved by the designated primary care physician.

At the time of enrollment, each member selects one physician from the list of participating primary care physicians and then obtains all care either from the physician personally, or upon his referral, from other specialists in the community. The primary care physician thus controls all other medical care by his power to deny payment for the services if they are undertaken without his authorization. When authorized by him, all medical care is paid, with no deductibles or co-payment, except for a \$2 co-payment charge paid by the member for each prescription.

The second important feature of the plan is that the primary care physician becomes the financial manager for his patients in the costs of care. Premium dollars are paid into the plan by employers or employees through monthly deductions. About 80 percent of those premium payments are placed into the accounts of participating primary care physicians. The remaining 14 percent is the current cost for administering, marketing, and reinsuring the plan. The amount of money placed in each physician's account to cover the total costs of care is calculated on the basis of the age and sex of subscribing members in the physician's panel. More information will be given about this capitation method later in the paper.

Figure 1 shows how the premium dollars were disbursed in 1979. The physician's account is divided into two parts. The first part of the account covers the services of the primary care physician. If there are fewer than 200 members in the physician's panel, then reimbursement for office and hospital visits is based on a fee-for-service system at a reimbursement rate of 95 percent of the charges. If there are 200 or more members in the panel, the physician is paid a fixed monthly amount determined by the age and sex of patients covered by UHC and the scope of services provided in the office. Thus, when a physician has 200 or more patients under the plan, a "capitation within capitation" system is created. The larger capitation is for total medical care, and roughly one-third is paid by capitation for services rendered by the primary care physician.

The referral part of the account uses a little over two-thirds of the dollars in the primary care physicians' accounts. This account is used to pay for all services not provided by the participating physician. Hospitalization costs, referral care given by specialists, procedures, laboratory and X-ray tests done outside the primary care physician's office, emergency-room treatment, and prescriptions (any amount above the \$2 co-payment paid by the member) are all paid for from this part of the account. The plan

pays specialists and hospitals 100 percent of whatever they charge after the primary care physician has reviewed and authorized the bill. The physician gets a monthly listing of all charges against the referral account and must approve the payment before any check is written by the plan.

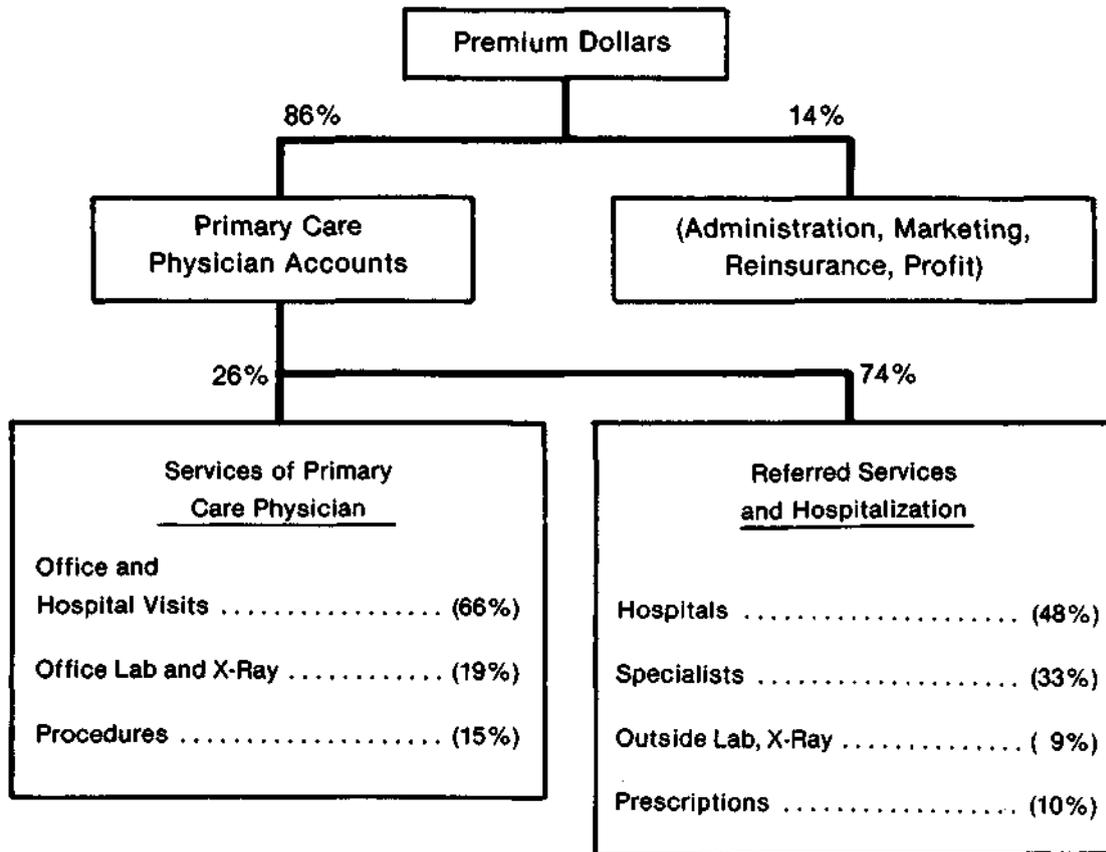
The third innovative feature of UHC is an incentive system to encourage the participating primary care physician to take seriously his/her new role as the coordinator and financial manager for all subscribing members' medical care. Briefly explained, this system requires the participating physician to share in any deficit or surplus in his/her account at the end of the year. The physician must share 50 percent of the deficit or surplus with the plan up to a maximum of 10 percent of his/her own fee-for-service office charges. Under capitation, the physician's share of the surplus is limited to 50 percent of his/her capitation revenue, and that of the deficit is limited to five percent of the capitation revenue.

## History of Development

SAFECO historically is a property and casualty insurance company. The largest volume of SAFECO's business traditionally has been homeowners', automobile, title, and life insurance. In 1969, executives at SAFECO became interested in entering the small group health insurance market. At that time, most available information promoted the closed-panel health maintenance organization (HMO) as a means of containing future health care costs. In May 1971, the Corporate Development Department decided that the closed-panel HMO model was not a good model for SAFECO to develop. First, it was too capital-intensive. Expansion to include a new market required million-dollar investments to build physical facilities. Second, the closed-panel HMO model could function only in large metropolitan areas where major employers might be convinced to offer the plan. On the other hand, SAFECO had always preferred small group insurance and individual insurance markets in small towns and suburbs. Thus, even though the savings inherent in a closed-panel HMO was recognized, there was no inclination to get into that market. With closed-panel HMOs excluded as an avenue of future development, some innovation was required if SAFECO (now UHC) was going to enter the HMO field.

UHC was convinced that the different incentives offered to doctors were part of the reason for lower costs in closed-panel HMOs. The company already had developed a liaison relationship with the Medical Group Managers Association, an association of administrators of small groups of physicians around the country. Through this relationship, the opportunity to work with a group of physicians in Woodland, California presented itself. It was an opportunity to reorganize the financing of medical care so that some of the same incentives that exist in a closed-panel HMO could be offered to large groups of physicians. The liaison also provided the chance to experiment in the field without building the facilities required to start a bona fide closed-panel HMO. By contracting with an existing group practice, UHC could do the marketing, the administration, and the risk-bearing for a comprehensive prepaid insurance plan.

**FIGURE 1**  
**Cash Flow in United Healthcare**  
**(1979)**



The Woodland Clinic in Woodland, California heard, through the Medical Group Management Association, about UHC's interest in alliances with existing group practices. Woodland, a town of 30,000 people 30 miles west of Sacramento, asked whether an arrangement with an insurance carrier could be developed to market a prepaid plan to its employees and other businesses around the area. At the time, Woodland had 52 physicians in the multi-specialty group practice. The Clinic also had more than 15 primary care physicians and was starting a department of family practice.

UHC's guiding philosophy was to contract with an existing multi-specialty group practice and not with any one group of primary care providers within the group practice. Thus, the initial contract at Woodland was with the entire Woodland Clinic and not with individual physicians within the Clinic. Initially, the entire Clinic had one large account, from which all physicians' services were paid. The entire Clinic shared in any surplus or deficit in that account at the end of the year. However, the risk-sharing and incentives were never extended below the level of the whole group of 52 physicians. It was not until several months after the UHC plan was initiated that new members were asked to choose either internal medicine, family practice, or pediatric departments to coordinate all their medical care. These departments contained between five and 15 physicians and, even today, members do not have to choose an individual physician within the department. The Clinic also allows patients to refer themselves to specialists within the Clinic. While UHC had a very positive experience in its joint venture with the Woodland Clinic, it was obvious to executives at SAFECO that there were not enough large, multi-specialty group practices willing to joint-venture with an insurance company to make it feasible to limit marketing to these practices. UHC executives became convinced that the primary care physician was in the best position to coordinate the rest of the medical delivery system. Thus, if they could joint-venture with a majority of primary care physicians in any new area, the rest of the medical care system could be coordinated efficiently by these physicians. As a result of the two years of experience with the Woodland Clinic, executives at UHC realized the importance of individual physician incentives which have been used in all other group practices since.

One model which was examined very carefully was the Wisconsin Physicians' Service, a health maintenance program developed by Blue Shield, which had about 150,000 members at that time. The unique part of the Blue Shield service plan was that it included an account for each physician which was funded with the money necessary to pay for the total health care of that physician's panel of patients. Members chose one physician, and then all bills incurred by a member were paid out of the account of his/her physician. UHC executives felt that the Wisconsin Physicians' Service plan had two potential problems. The first was that specialists were allowed to contract with the prepaid plan, even though they preferred not to deliver a broad range of care for patients who elected to take the plan. Thus, the specialists were referring much of the primary care to other physicians. The second problem was that patients were allowed to self-refer to any physician participating in the plan. There was no restriction limiting

the patient to one coordinating physician. Accordingly, there could be no financial accountability of one physician for a panel of patients.

Thus, UHC decided that when expanding to other areas it would exclude contracts with specialists and work totally through primary care physicians. Furthermore, in order to promote individual physician financial accountability, there would be a marketing approach which required members to choose one primary care physician through whom all care would be channeled.

Creating accounts for individual physicians, rather than groups of physicians, soon became a central feature of the plan. Early experience showed that allowing several physicians to be part of the same account diluted individual financial responsibility and accountability. There were several instances when the motivation and efficiency of one physician in the group were compromised by the inefficient behavior of another physician. As a result, it was essential that individual physician accounts be set up even within the same group practice. In this way, accounts could be kept separate, and one doctor's inefficiency did not cancel another doctor's efficient pattern of practice.

In addition to the "account concept" which was a capitation system for all medical services, it was felt that there should be development toward putting primary care physicians on capitation for their own services. While the account concept would provide pressure for physicians to coordinate the medical care system outside their offices in the most efficient way, a capitation system for their own services would introduce incentives to coordinate their own office services in the most efficient way possible. If the physicians were to be on capitation, then there would be incentives to use their own labs and X-ray, to encourage patients to return only when necessary, and to use efficiency improvers such as physician's assistants or nurse practitioners in their offices.

After its first experience in Woodland, UHC began looking for a larger metropolitan area in which to try the concept. Because of the home office location, and largely because it would be easier to administer the plan without setting up another branch office, it was decided to try to start the plan in Seattle. The new location was accepted despite a very competitive health care market due to the presence of the Group Health Cooperative and the long history of widespread participation by large employers in comprehensive insurance plans sponsored by physician groups.

In August of 1975, the plan (Northwest Healthcare) was initially marketed to physicians in one suburb of Seattle. Within three months, UHC had about 40 physicians in contract with the plan. It then started marketing to several small businesses in the suburb and became aware of the need to have physicians in greater Seattle participate in the plan before employers would agree to offer the plan as an option to their employees. The theory that employees would want to use physicians in the area where they lived did not prove true, and UHC was forced to start marketing to 300 physicians in Seattle. By December, 1976, about 15 months after it began, UHC had 200 physicians participating in the plan in the greater Seattle area.

There were several reasons why Seattle physicians signed up with the plan. Without question, the environment in Seattle is not typical of the rest of the United States. Physicians have had competition from Group Health and a general acceptance of risk-sharing as a result of the long history of the insurance plan sponsored by physicians in western Washington. Preliminary results from the SEIBUS study now show that "fear of losing existing patients" and "peer advice" are the two most frequent reasons given by physicians for joining the plan. Another plausible reason for such high participation in the Seattle area was the enthusiasm with which the concept was presented by the marketing staff. They presented a professional image of a plan which was intelligently and efficiently managed by a reputable local company with a sound financial basis.

By January, 1977, with 200 Seattle physicians committed to participating in the plan, UHC began marketing to employers in the metropolitan area. By the end of 1977, several small companies had offered the plan to employees, resulting in the enrollment of 2,300 employees of the various companies in the Seattle area.

Marketing to physicians in Spokane began in 1977. It was already recognized that the presence, and recent growth, of a closed-panel HMO in a community makes marketing to physicians easier because of widespread concern that patients will be taken away by the closed-panel HMO. Spokane was such a city. Marketing to physicians there was extremely successful throughout the summer of 1977 and early 1978. By March 1978, there were 110 physicians, (almost 90 percent) of all primary care physicians) contracted with UHC. Marketing to employers in Spokane began in late 1977. The State of Washington employees contract brought 600 new families (nearly 1,500 individual members) into the plan during its first year of operation. Together with school districts and several smaller companies, total enrollment in Spokane now approaches 7,000 members.

It is instructive to consider how UHC came to be offered to State of Washington employees. This group now represents the largest employee group in the Plan (almost 30 percent of the total). In 1977 and early 1978, UHC had attempted to convince the State of Washington Employees' Insurance Board that the plan should be offered as a third option to Blue Cross and Group Health Cooperative of Puget Sound. The Insurance Board believed that employees already had enough options. They felt there was no reason why they should take on the additional complications of administering another plan for State employees.

Any attempts to interest the Insurance Board were unsuccessful until the Board had to deal with a group of State employees in Bellingham, Washington (about 100 miles north of Seattle) who had no HMO in their service area. In this city, State employees who wanted the comprehensive HMO benefit plan could not choose one, because Group Health Cooperative facilities were nearly 100 miles from Bellingham. Thus, the only choice available to State employees in Bellingham was the Blue Cross Plan, which had out-of-pocket deductibles and coinsurance which had to be paid. This situation was also true for State employees outside the Seattle, Tacoma, and Olympia areas where Group Health Cooperative facilities were

located. In Spokane, another closed panel HMO with a comprehensive benefit plan was available, but in other areas there were no such options.

Marketing to physicians in the Bellingham area was quite easy. Not only was there the clear threat that State employees would switch from non-participating physicians to take advantage of the comprehensive benefit package, but there was also a high level of dissatisfaction with the Blue Shield plan in the area. The Blue Shield plan was paying primary care physicians on a lower fee schedule than specialists for the same services and procedures. Thus, when UHC entered the market and offered 95 percent of the physicians' charges, it was seen as a great improvement for primary care physicians. While there was no impending threat of an HMO stealing patients away from the private physicians, there were these other two factors which caused wide-spread acceptance of the UHC Plan by the doctors.

The State Employees' contract had a major impact on growth of the plan. Whereas the total enrollment in UHC between June, 1977 and June, 1978 had grown only from 1,337 to 3,580 members, the growth in one month (June, 1978), when State employees were offered the plan for the first time, was from 3,580 members to 8,880 members, an increase of 25 percent. In addition, since that time the plan has been getting 20 to 25 percent of all the new hires at the University of Washington, one of the single largest employers in the State employee system. The State pays the premium for the employee and all dependents and offers three choices with no cost to the employee for any of the three—Group Health Cooperative, Blue Cross, and NHC.<sup>1</sup>

In July 1979, there was another open enrollment period for State employees. This open enrollment was poorly timed, because State higher education institutions adjourned for the summer in June. Because of the poor timing, the open enrollment period was extended until the end of October, 1979 at those institutions. UHC was surprised to receive only another 1,300 families (3,500 individual enrollees) by the end of September, 1979. It had expected between 5,000 and 8,000 new members during this period.

There are two possible sets of reasons for the poor penetration in the State employees market during the 1979 open enrollment. The first reason has to do with the lack of information available to State employees. Because of the size of the group, there is no opportunity to meet individual employees on a face-to-face basis to explain the optional health insurance plans. UHC has always done better in groups where it is able to hold well-attended meetings. UHC attempted to hold meetings during the first open-enrollment period in 1978, but these were poorly attended by State employees. Therefore, the plan did not arrange for meetings during the 1979 open enrollment. Instead, the employer sent a letter to employees at their work places explaining the options available. In addition, a letter went to the homes of almost 13,000 University of Washington employees (the largest single institution), describing the options briefly and notifying the employee and spouse that they would be eligible to change plans during July. One might conjecture that

<sup>1</sup> In 1979, a payroll deduction of \$19 per year per family was instituted for those who chose Group Health Cooperative.

these two letters were important only to those employees who were dissatisfied with their current plans. In face-to-face meetings, UHC is frequently able to convince employees that they have the option to change to a better benefit package for a comparable premium. When meetings are attended, many employees who previously had no dissatisfaction with their current health insurance plan will switch to the UHC plan.

The other possible set of reasons for the low penetration rate has to do with the characteristics of the optional plans. Since the State employees already have a Blue Cross comprehensive health benefit package with only \$50 deductible per family member and a 10 percent co-payment of the first \$1,000 of care during any one year, most families do not feel a need for an even more comprehensive benefit package. This standard plan satisfies the need for security with respect to major and minor illnesses, and subscribers have no compelling reason to scrutinize new options available to them which might improve their coverage. Furthermore, those who have wanted an even more comprehensive package have had the Group Health closed-panel comprehensive plan available to them for at least a decade. Once they have made the sacrifices necessary to change physicians and join the Group Health Cooperative, they're unlikely to switch to a prepaid primary care plan (similar to an open-panel HMO) such as UHC unless they have high-level dissatisfaction with Group Health Cooperative. In fact, of those State employees who switched to the UHC Plan during 1978, only 30 percent came from Group Health Cooperative and the remainder from Blue Cross.

It is also possible that the concept of the primary care physician as coordinator of medical care may not be acceptable to many of the employees. Perhaps the State employees of Washington, and the American public in general, want to coordinate their own medical care and go to the specialists of their choice. Perhaps many of those who are willing to allow their primary care physician to coordinate and approve all their referral care already switched into the plan during the previous year's open enrollment. It may be that the deductible and co-payment by Blue Cross is not high enough to offset the loss of individual freedom inherent in the primary care physician network of UHC.

In the 19 organizations with the largest member groups in UHC in Washington State, the penetration rate after two years is between five and 20 percent. During the second year, penetration is dependent on word-of-mouth recommendations from those employees who have been in the Plan for a year.

Utah has provided the newest market for expansion of the UHC Plan. Two employers were contacted in July, 1978. Educators Mutual Insurance Company, which provides coverage for all Utah school district employees, was interested, together with another large employer that wanted to offer the plan as an alternative to an indemnity plan covering its employees. They were interested in a more comprehensive benefit package at an affordable premium with some innovative features to control future costs of health care.

With the interest of these two large employers in the Salt Lake area, UHC decided it was worthwhile to attempt to enroll physicians in and around Salt Lake City. Marketing to physicians began in November, 1978, and within a year about 250 physicians were contacted; 105 of them have joined the plan. UHC began marketing to employees in January, 1980 and currently has about 2,000 members in the plan. The target plan size is 10,000 enrollees by January, 1981.

## **Detailed Analysis of Specific Features of the United Health Care System**

### **UHC'S RELATIONSHIP WITH THE PRIMARY CARE PHYSICIAN**

The most important single feature of the UHC system is the alliance with the primary care physician. The effectiveness of the plan depends on the ability of the participating physicians to coordinate use of the medical care system in the most efficient manner. When considering which physicians to initially contract with, the plan must reconcile two competing objectives. In order to cut costs, UHC has to contract with a select group of providers who are enthusiastic about the primary care network concept and who will work with the plan in containing costs while continuing to deliver high-quality care. This objective, however, is compromised by the need to market the plan to employees, many of whom will switch only if they find their current physician among the list of participating physicians. Therefore, the plan will have a much larger initial penetration if UHC contracts with as many primary care physicians as will sign up with the plan. Thus, there is some attempt to strike a balance between getting a large number of providers versus limiting participation to high quality, efficient providers who have solid reputations with the lay and professional communities.

In some instances, there are strong barriers to getting any primary care physicians interested in the plan. In small, rural communities there frequently is a close-knit relationship between the primary care physicians and the specialists. In one such community, the specialists disliked the concept of being monitored by their primary care colleagues strongly enough that they negatively influenced one large employer's impression of the plan and also convinced the primary care doctors not to join. Thus, the plan was effectively boycotted because of the close-knit relationships among specialists, primary care physicians, and industrial leaders in that small community. The same situation rarely develops in larger metropolitan areas where, normally, primary care physicians will participate without the knowledge of the specialist community. Also, because the plan grows slowly during the first few years, no threat is presented to the specialists. For instance, in metropolitan Seattle, with a population of 1.5 million, UHC enrollment is now about 15,000, and many specialists have never heard of the plan.

Unlike other insurance plans, the most critical aspect of expansion of this plan is the initial marketing to primary care physicians in a new area. The process requires the part-time services of a physician and between one and three non-physician representatives who present a professional image. When representatives attempt to make an appointment with the physician, they are almost automatically put into the category of a "drug detail person." The representative must strive to avoid that image and establish credibility with the primary care physician's front office, as well as with the physician himself. Until recently, it has been difficult for representatives to get appointments with physicians by simply calling at the front office. They usually are put off until a convenient time, when they can be seen as one of several "drug detail persons" within a one-hour period of time set aside by the physician. The widespread national publicity recently received by UHC has improved the credibility of the plan with physicians. Usually, with an advance mailing and the help of the medical director, the representatives can get through the front office and present the concept to the physicians in more detail.

The first physicians approached in the marketing effort in any new area are critical to the success of the Plan. In both California and Utah, the situation has occurred where one group of high-quality physicians refused to participate because the list of physicians already included providers whom they don't respect as high-quality doctors. Thus, the first physicians to participate in the plan should be the leaders of the medical community who are well-respected by their colleagues. This frequently means going to a large group practice of known high-quality care to avoid being associated only with solo practitioners who may be seen as "low-quality providers."

During the initial presentation, the primary care physician is usually struck by several features of this new concept. The first feature that many find objectionable is capitation for total cost of care. The doctors frequently state that they have little or no control over many of the costs of medical care and therefore don't think they should be at risk for hospitalization and services of specialists. They say these costs usually result from events which are beyond their control. These objections are countered by attempts to convince them that the level of their risk-sharing is limited (five percent of their office revenue if they are on capitation or 10 percent if they're on fee-for-service). It is explained that in the past this has not amounted to a great deal of money, but that the concept and the small incentive are enough to encourage physicians to help control costs in those areas where the physician has some control.

The second feature which rarely elicits any enthusiasm is "capitation for his own office services." Physicians see this goal of the plan as contrary to their own system of values. They want to be paid for services they render and not paid if they do not see a patient during the year. This objection comes most strongly from internists and pediatricians, who feel they take care of a more complex case-mix of sicker patients than the family physician. These objections are usually answered by the explanation that capitation for their own services is dependent on what their fee-for-service charges were the year before. At the

beginning of each year, there is a negotiation, and the capitation rates for their yearly services are adjusted according to fee-for-service charges of the previous year. The philosophy of the plan is not to save money on the primary care physician's services but to pay him well in exchange for his efforts to monitor the referral and hospitalization side of the account. In keeping with this philosophy, UHC has recently decided to delay capitation until the number of patients in the physician's panel has reached 200 (previously it had been set at 50). A panel of 50 patients was considered too small to set an accurate capitation figure for the 10 physicians with whom it was tried. A second reason was the acknowledgment that there is little savings to be realized by putting the primary care physician on capitation for his own office services. Seventy-four percent of the dollars in the primary care physicians' accounts continue to be spent on other than primary care services (Figure 1) and that percentage is increasing. Thus, requiring 200 patients is equivalent to delaying capitation for his own services by two additional years.

The third feature which can negatively influence the primary care physicians at the time the concept is presented is the requirement for their review and approval of all other physician and hospital bills paid by the plan. The physician sees this as a heavy administrative burden adding to the substantial time he spends with forms and paperwork. This objection can usually be met by accurately quantifying the amount of work required. If the physician has 100 patients in his panel, on the average, 100 bills from specialists, eight hospitalization bills, and 10 to 15 emergency room bills would have to be reviewed during the entire year. The physician's job will also be made easier by a computer listing of all bills incurred by the UHC panel of patients at the end of the month. These bills require either approval or denial of payment for those done without the physician's approval. Currently, the physician is asked to review each bill from the specialist's office or hospital during the month. Another change which is being planned is that the primary care physician will be paid a "management fee" for this administrative burden. A specific amount of money per patient per year for coordinating the rest of the delivery system, regardless of the outcome (in terms of surplus or deficit) of the account, will be paid to the physician.

The fourth feature which primary care physicians resist is monitoring their colleagues in specialty medicine. While they may agree that specialists are too "procedure oriented" and charge too much for what they do, they have always deferred to specialists about the necessity to operate or do a procedure. They frequently are in no position to argue with a colleague who has had more experience and training in a specialty area. They don't have the time or interest to educate themselves and question the specialist about the indications of cost of these procedures.

Referral habits don't change easily. The physicians frequently have established referral patterns that depend more on long-term relationships, impressions of competence, convenience, and personality of the specialist than on the costs of care rendered by that specialist. They are reluctant to change those referral patterns, even if presented with a list of other

specialists who might be willing to do the same procedure for one-half to two-thirds the amount charged by the current specialist. UHC has recently started publishing average costs of common procedures in each of its geographic service areas and has asked physicians to scrutinize costs which they are incurring from their referrals. Furthermore, the primary care physician is encouraged to inquire of the plan what charges are made by specific specialists. The plan has that information but does not publish information on individual specialists. In Seattle, UHC recently sent a letter requesting each participating primary care physician to list his choice of specialist for high-quality, cost-effective referrals in 23 specialties. The plan now is approaching the most frequently mentioned specialists in hopes of persuading them to become part of a cost-effective panel of specialists who agree with the philosophy of cost containment espoused by the plan. The panel will help minimize hospitalization and marginally indicated lab, X-ray, and high cost diagnostic procedures. The primary care physician will be free to use any of the specialists he wants, but will have obvious incentives to use a member of the cost-effective panel.

This attempt to educate and influence referral patterns can work only in larger metropolitan areas where there is a choice of several specialists doing one procedure and where the possibility exists for a spectrum of quality and price options. In smaller areas, the primary care physician may have little choice about changing his/her referral patterns in order to lower the cost of specialist services or hospitalization.

This complaint about monitoring colleagues also applies to monitoring hospitalization of their panel of patients. The participating physician may have hospital privileges at only one or two hospitals in the area. There are strong religious, cultural, and convenience reasons why these relationships have developed, and the doctor is reluctant to change hospitalization patterns simply because rates charged by one hospital may, on the average, be lower than another. The physician's patients also have preferences, and the doctor cannot easily admit patients across town at a less expensive, more efficient hospital in order to minimize the cost of hospitalization for the patient. Recently, UHC has negotiated a per diem rate with a large hospital and is attempting to do the same with several other hospitals, laboratories, and free standing X-ray facilities. It remains to be seen how many patients will be channeled to these less expensive referral facilities by the primary care physician.

The primary care physician can also influence his/her total costs of care by referring to specialists who do outpatient surgery instead of admitting patients to the hospital. The physician can do the diagnostic work-ups in the office, or encourage specialists to do so, instead of admitting patients to the hospital. There are frequent anecdotes about primary care physicians who are "cracking down" on duplication or excessive use of lab and X-ray by the specialists and the hospitals they use. Thus far however, there is reluctance on the part of primary care physicians to argue with their specialist colleagues about the level of professional fees. In all likelihood, many economies in the referral side of the

account will have to be made by the plan when contracting with hospitals and specialists, rather than waiting for the savings to evolve from the interface of primary care physicians with specialists.

The final feature influencing primary care physicians' decisions to participate is the threat of this plan to the physicians' existing patient loads or ability to acquire new patients. Many of the serious objections to the concerns mentioned above melt away in the face of significant likelihood that the plan will be widely accepted by employees in the area. It is only the most established practitioners with no need for new patients who do not consider the potential success of this plan an important consideration in deciding whether they want to participate in it. This is why, when UHC markets the plan in new areas, it does best when it has commitments to offer the plan from several large employers in the area.

When physicians decide to participate in the plan, panel sizes usually grow slowly. An analysis done in August, 1979 on the 470 participating physicians in Seattle, Spokane, and Bellingham indicates that two-thirds of the physicians still have fewer than 30 patients in their panels. Thus, 95 percent of these physicians' incomes are still derived from patients who are not participating in the UHC Plan. At the end of 1979, 52 percent of these physicians had surpluses in their accounts. The average physician's share of surplus paid was \$413; the highest amount was \$5,007. For the 48 percent of physicians who had deficits, the average physician's share was \$169; the largest physician's share paid back to the Plan was \$1,833. All except five physicians who had deficits sent "deficit checks" back to the company within three months of being requested to do so. It is usually at this time that the most significant opportunity exists to educate the primary care physician about how this plan works. Also, many of the physicians who receive bonus checks at the end of the year do not understand what the bonus checks are for and need to have the incentive system explained to them.

## UHC'S RELATIONSHIP WITH SPECIALISTS

There are two major differences in the way the UHC Plan relates to specialists compared to a normal insurance plan. The first difference is that it pays 100 percent of whatever charge the specialist makes for a given procedure or consultation. This is not common among other insurance plans. In the case of service plans such as Blue Shield and Blue Cross, it is customary to pay according to a fee schedule or profile, and in the case of indemnity insurance, it is customary to pay some part of the fee with the patient paying the remainder of the bill.

The second way in which the UHC Plan relates differently to specialists is that it does not allow patients to self-refer to specialists. If the patient wants the specialist's bill paid, he or she must have at least the tacit approval, if not the active referral, of his/her designated primary care physician. Thus, the specialist becomes a "doctor's doctor," and second opinions are mandated by virtue of the requirement that a patient have a consultation with the primary care physician before seeing a specialist.

Currently, there has been no strong reaction of specialists to the concept of being "monitored" by their colleagues in large metropolitan areas. Even in a city as over-supplied with specialists as Seattle, the plan is not yet recognized as a threat because of its low market penetration. When it enters smaller, more confined rural communities, it can be seen as an immediate threat to the existing system.

The UHC Plan prefers to market to primary care physicians exclusively, and not present the plan concept in a large meeting including specialists, such as at a medical staff meeting of a hospital or a medical society meeting. UHC physician representatives have met strong negative reactions from specialists in those situations, thus impeding the marketing to primary care physicians. The usual objections are characterized by the following two quotes:

"Primary care physicians are often not qualified to judge when a given patient should see me."

"I think the best interests of both the patient and myself are served by allowing freedom for the patient to see me when he chooses. I am opposed to any system where this freedom is taken away and put in the hands of some insurance company or alliance of an insurance company with primary care physicians. This is no better than the government regulating our practice."

This potential backlash by specialists represents a threat to the expansion of this and other primary care physician network plans.

UHC is now beginning to develop ties with selected specialists. The goal is to identify the most efficient and highest quality consultants in each specialty and contract with them to provide care to UHC members. The primary care physicians are encouraged but not required to use these "preferred specialists." This not only guarantees high quality referral care but also aims to contain costs compared to the past system which operates without specialists' contracts.

## UHC'S RELATIONSHIP WITH EMPLOYERS

The appeal of the UHC Plan to employers is that the plan will eventually control the rising cost of health insurance premiums. They hope to offer more health benefits to their employees for a lower premium. One potential advantage for the employer is that the UHC Plan uses experience rating. Usually, this is an advantage only in groups with more than 100 employers where information is available from the employer regarding utilization experience in previous insurance plans. When the employer has fewer than 100 employees, frequently the actual utilization experience in the previous plan is not available and the age-sex profile is used instead to quote a premium rate. The difficult competition comes from indemnity plans which have large enrollee out-of-pocket costs (deductibles and copayments) and, therefore, lower premium rates. In competitive marketing situations with these plans, the UHC Plan has learned to an-

ticipate an adverse selection of employees who tend to be higher users than those who choose the indemnity plan with a lower premium. In groups of nine or fewer employees, the plan can use medical records and questionnaires and to some extent limit adverse selection. However, with more than nine employees, enrollment is open and there is no way to limit this trend. The only way the plan can do it is to keep its premium very close to its competition so as not to draw only those enrollees who feel they "must get what they have paid for."

The experience rating is also advantageous in renewal situations where premium rates may be kept down because of the low health-care use by that group during the first year of enrollment in the plan. For instance, in Swedish Hospital in Seattle this year, based on low use by members, premium rates did not increase, whereas they increased between 10 percent and 20 percent for other major groups in the same area.

An important aspect of marketing to small and medium-sized groups is that the transaction must involve an insurance agent. In these groups, the insurance agent typically receives five percent of the first \$10,000 in annual premium and two percent of the excess, up to \$100,000, in annual premium. By contrast, many indemnity plans pay the agent a 10 percent commission for the first \$10,000 in annual premium. Thus, agents are generally more reluctant to sell the HMO benefit plan because of the commission structure. Also, in the Seattle area, most of the medium-sized companies already have Group Health as one option for their employees, and the agent or broker in large groups is not inclined to administer and service another HMO plan.

In larger groups, any new plan such as this is at a disadvantage. The first requirement in large companies with sophisticated buyers is a long track record of trustworthy claims administration and payment with sound financial reserves. Most of the larger companies buy their health insurance package through brokers. Frequently, the broker is not even willing to consider a plan until it has been around for several years. Also, since the broker's income is dependent on the current premium, there is no incentive to introduce the employer to new plans which might eventually lower the overall costs of health insurance.

There are other aspects of marketing to large employee groups. Frequently the company's benefit package is determined by a bargaining process between labor unions and management. Since UHC has only the comprehensive HMO benefit package, with no copayments or deductibles, the plan frequently represents more comprehensive benefits than have been won by the unions over the bargaining table. Also, large companies with branches in more than one site are not likely to offer a plan which is confined to Washington State, Utah, and California. Thus, Boeing, for example, would be more interested if the UHC Plan were available in Wichita, Kansas, as well as Seattle.

## UHC'S RELATIONSHIP WITH EMPLOYEE MEMBERS

When this plan is marketed to any new group of employees, a different educational effort is required than in any other insurance plan. The prospective member must understand the importance of choosing one primary care physician from the list of participating physicians and channeling all future medical care through that one physician. Thus, the member's established relationships with specialists such as dermatologists, gynecologists, allergists, and surgeons are initially jeopardized, until the member can ascertain from a primary care physician whether referral will be allowed. In some cases, the patient is able to convince the primary care physician that the service is unavailable from the primary care physician's office and that referral should continue as it was prior to joining the UHC Plan. In other instances, members sense that they might jeopardize the relationship with their specialist and will not join the plan for that reason.

In some cases a member will enroll with a primary care physician but then attempt on several occasions, to "test the system" by continuing to self-refer to emergency rooms and specialists at will. UHC handles this problem by asking the physician to notify the plan about these members. With first offenders, a letter is sent to the member describing how the plan works and warning that *future* bills will not be paid unless the patient is referred by the primary care physician. With second offenders, another letter goes out denying payment of the claim, reiterating how the system works, and offering to insure the patient under an indemnity plan. In only two instances has it been necessary to negotiate with individual members about their abuse of the system. However, the administrators of the plan think that much abuse goes unnoticed or unreported by the participating physicians.

Employees are influenced to a large extent by the share of the premium they must pay and the trade-offs they perceive between more comprehensive benefit packages and higher payroll deductions. The UHC Plan is especially attractive to groups of public employees with richer benefit packages because a high percentage of the premium is usually paid for by the employer. The UHC Plan offers a more comprehensive benefit package with little additional cost to the employee, and in most instances the member can continue with the primary care physician in his own neighborhood.

Among other employees who have only indemnity plans, the UHC Plan costs more because of greater benefits and consequently suffers from adverse selection. Where there is another reasonably comprehensive plan offered to employees, UHC has in general been able to offer its plan for no more than a five to 10 percent higher premium. Although rates vary, depending on age and sex compositions of each group of employees, an average monthly premium for an employee in the Seattle area during 1979 was \$40 for a single and \$115 for a family member.

Satisfaction with the plan has been high among members after enrollment. One indicator of this is the low number of people switching out of this plan for alternative coverage. Among 1,518 State families, only 23 switched to an alternate plan during the open enrollment in 1979.

## INFORMATION SYSTEM

The information system is the backbone of the relationship among employees, physicians, and the UHC Plan. This system has three functions. The first is to pay claims. Most claims are paid on a fee-for-service basis according to the charges made by the physician. The primary care physician is required to complete an encounter form. The encounter form includes critical information such as the physician and patient identification codes, a procedure code, a diagnostic code, a date of service, and a dollar charge. On the average, 2.5 of these encounter forms are received by the company per member per year. They are processed in batches, and checks are written to the participating physician every two weeks.

The specialist currently bills the plan through the primary care physician. Sometimes a bill comes directly to the plan and has to be sent to the primary care physician for approval or denial. Generally, the specialist sends the bill first to the primary care physician, and this physician forwards it to the plan. All this will be changed when the new system creates a list for review by the primary care physician. Bills will then all come directly to the plan.

One advantage to the specialist is that he/she doesn't have to fill out any special billing form. The specialist submits his/her usual bill, and the plan codes the bill on a data entry form to enter it into the computer and pay the specialist every two weeks. The patient usually doesn't see any bills from either the primary care physician or the specialist.

Each month, a "medical group statement" is created for each primary care physician by the computer information system. This statement details how much money was put into his/her account and how much was paid out during each preceding month for the "year to date." The physician is given a breakdown of the money spent for office services, as well as for referral care. The physician knows from this statement how much money was spent from his account on hospitalization, referral to medical specialists, referral to surgeons, outside lab and X-ray, and pharmacy service. The statement is accompanied by a list of all patients in the physician's panel during the preceding month, but no further identification of costs incurred by individual patients is made unless the physician requests a special report.

As an aid to the cost control system, the UHC Plan currently publishes a monthly newsletter to all participating primary care physicians which features articles such as "How Much Should You Be Paying Your Surgeon?" In that article, UHC published the average professional fee schedule for the 10 most common surgical procedures during 1979 for the three largest service areas. The primary care physician is expected to use that information to judge whether bills coming from the specialists are more or less expensive than the average in the area. The physician can also receive information (by request to UHC) for any individual specialist's fees.

The plan has recently developed a "referral form" for the primary care physician to use in sending patients to specialists. The form specifies the level and content of the consultation which the primary care physician expects from the specialist. The form is meant to prevent specialists from repeating diagnostic tests and beginning treatment when the primary care physician needs only a consultative opinion. It also is intended to prevent automatic referral by one specialist to another without consulting the primary care physician first. The form serves to notify the specialist that the bill should be sent to the primary care physician for review before it is paid by the plan.

The UHC Plan currently does very little review of individual claims. Specialists and hospitals are commonly paid whatever they bill, as long as the bill has the approval of the primary care physician. There is a great deal of dependence on these physicians to monitor costs, and the only denial of claims that occurs in the central office is for those services not covered under the benefit package.

There are monthly reviews by the plan managers of the dollar amounts going into and coming out of each participating physician's account. There have been several instances where this kind of "quantity review" has brought a physician to the attention of the Plan manager because of unusually high amounts of money being spent for the primary care physician's services. On two separate occasions, physicians were charging UHC three times the average in the community for their own services. After discussion with an advisory panel of physicians, each physician was put on probation. One physician subsequently changed his mode of delivery and stayed with the plan; the other decided to quit the plan completely after his payments were cut back to the average of the other doctors in his area.

The information system has also been used for quality review purposes. On two occasions it was used to look for excess use of drugs. In a 1978 review, there was no recorded office use of Chloramphenicol on claims submitted during 1976, 1977, and the first half of 1978. On another occasion, it was used for review of Valium prescriptions being written by a specific group of physicians. In the future, it is anticipated that the information system will be merged into a Physician Ambulatory Care Evaluation (PACE) system similar to the one currently being developed and used by the State of Utah to review Medicaid claims submitted for payment (Bigelow, 1977). This system is generally thought to be one of the best in the country for review of the quality of ambulatory care. The system will apply criteria which are developed and approved by physicians for acceptable ambulatory care to claims being submitted under the UHC Plan. Lists of exceptions which don't meet the criteria will be generated and investigated. Education of the physicians who continue to violate the criteria will be attempted. If education is not effective, the physicians eventually will be put on probation and could be terminated from the plan if they do not change their quality of care.

A claims review at the central office is currently done for the purpose of coordination of benefits. For all claims of more than \$300, members are queried about their coverage by other carriers. Through such efforts, the UHC Plan is able to save four to eight percent of total claims dollars because of double coverage when another insurance carrier is obligated to pay part of the claim.

### Utilization and Costs of Health Care under UHC

When hospitalization use rates for UHC are compared with other plans in the area, they are lower. One comparison of employed persons under 65 in the Seattle area during 1978 found Blue Cross at 479 bed days per thousand members, Group Health at 350, and NHC at 298. These differences are not explained away by different age-sex profiles. The possible explanations for these low rates are several, and they certainly do not prove that the plan has been able to control hospitalization rates by changing the behavior of patients or physicians. Until the SEIBUS study is completed in 1981, there will be no "hard" factual information upon which to base an answer to this provocative question.

In looking at the premium rates for the UHC Plan versus other competitive plans in California and Washington, several features are striking. The premiums charged by the UHC Plan in Seattle average between \$35 and \$45 per month per employee. A spouse costs another \$40 per month to insure, and one or more children increase the premium to \$115 per month. These average rates differ significantly across employee groups, depending on the age and sex and past experience of the group. During the last two years, the premium rates in California have been 15 percent higher than those in Washington for similar groups of employees. However, the rates for other plans in northern California are also higher than in Washington, allowing the UHC Plan to remain competitive.

Hospitalization costs comprise the chief reason for the variation in premium rates between the two States. In northern California, hospitalization use rates have varied between 320 and 340 days per 1,000 enrollees per year. Rates in Washington State were between 270 and 340 days per 1,000. (330 during 1979). Since 30 percent of UHC's premiums are used to pay for hospitalization, the difference in these rates is the largest factor in the variance of premium structures from one area to another. Geographic variation in use and costs of the UHC Plan in California versus Washington is being studied in SEIBUS.

One area where the UHC Plan has not been able to maintain as low a premium as the competition is in Spokane, Washington. The UHC Plan is more costly to the consumer than the local Spokane Physicians' Bureau Plan. The Bureau Plan is comprehensive, and premiums are between 10 and 15 percent lower than the UHC Plan for similar employee groups. Hospitalization figures for the Bureau are slightly higher than they are for the UHC Plan. However, the Bureau does have contractual relationships with all physicians in the area which allows them to pay less than the usual charges paid by UHC. In Spokane, the UHC Plan loss ratios (claims paid out compared to premiums collected) on its largest group (State of Washington employees) have run more than 100 percent, necessitating premium increases each year.

The number of physician office visits under the UHC Plan usually are the same as comparable plans in the area. In general, 3.5 to four office visits per year is the prevailing rate for members in both California and Washington. About 2.5 of those visits are to primary care physicians, and the remainder are to specialists. Group Health Cooperative in Seattle is reporting about the same visit rate per year per member.

Many areas of the United States have large savings to be realized by any plan which can reduce hospitalization rates among its members. The areas targeted by UHC have hospitalization rates two to three times the rate in the areas being served. Initially, the expansion will be to those market areas in which a closed-panel HMO is already established. It is easier to start primary care network plans in these areas because of the threat which the closed-panel HMO has raised to physicians. If the plan can control annual hospitalization rates in these areas and keep them down to 500 per thousand enrollees, it will be competitive in the area.

### **Future Directions of the UHC Plan**

The managers of UHC talk optimistically about the prospects for expansion of the primary care physician network. However, they realize that their prospects are dependent on their ability to contain costs without the use of co-payments and deductibles. They are committed to offering a single comprehensive benefit package because of the ease of administering such a package and because of its desirability to the patients. They realize they are giving up the ability to restrain the patient's use by not applying co-payments and deductibles to the benefit package.

Success in containing costs is dependent on two features. The first is developing an efficient group of primary care physicians who are willing to take an interest in controlling use of hospitals and specialists. It is apparent to the managers that in some existing service areas there are many physicians currently participating in the plan who are not interested in maximizing the efficiency of the system. Thus, the only way to successfully control costs will be to slowly develop a plan with a smaller group of participating physicians who identify more closely with the plan goals.

The second generation of the UHC plan is evolving into a system which involves hospitals and specialists in efforts to maximize the cost-effectiveness of the delivery system. In order to maintain competitive rates, the plan managers want to organize a referral network of specialists and offer it as an alternative to primary care physicians who have the incentives to use contracted specialists and hospitals where medical care can be delivered at a significant savings. They are seeking to get discounts from specialists and hospitals and then publish relative rates for common procedures and surgery so that the primary care physician can use these alternatives if he wants to do so. The direction will always be toward education and providing alternatives rather than forcing referral patterns to change.

### **Necessary Ingredients for Replication of the UHC Model in other Geographical Areas**

Interest in developing the UHC-type plan can come from any one of several parties involved in the attempt to control costs of health care. Employers frequently are interested in HMO options for their employees because they have read about the cost savings intrinsic in the closed-panel HMO plans. Physician organizations hearing about the UHC Plan often ask if their physician organization could sponsor such an effort in their area. Some insurance companies interested in gaining greater penetration in the health insurance market are interested in pursuing some HMO options, one of which is the UHC-type of plan.

When serious consideration is given to starting a UHC-type plan in a new geographical area, it soon becomes obvious to the initiating party that there must be interest and involvement from four separate parties (each with different vested interests) in order for a plan to get started. These four parties are an insurance company, physicians, employers, and employees.

The role played by the insurance company is a strategic one. Any physician organization which decides to sponsor an independent practice association (IPA) or foundation for medical care soon realizes that it has no expertise in such areas as administering claims, structuring premiums, or marketing the benefit package. In most States, a new plan cannot be licensed unless it has money in reserve to insure against bankruptcy. Furthermore, any plan must file an extensive number of documents with State agencies in order to become licensed to operate in the State. The insurance company becomes a natural partner in these endeavors. There are, of course, options other than an insurance company. Many IPAs create their own organization to perform these necessary tasks.

One of the largest barriers to expansion of this type of plan is the number of applications and documents that must be submitted to the State before the plan can be marketed. UHC has one full-time lawyer and another person working with him filing for new State licenses and updating old licenses in the States where the company currently operates. It frequently takes more than a year from the time an initial application is filed until the license is granted. In most States, large reserves of capital are required. Usually, less reserve capital (\$100,000) is required of HMOs than of commercial health insurance plans. HMOs don't have to pay the premium tax of two percent applied to all premiums collected by insurance companies. Thus, there are some incentives for HMO-type plans but also many roadblocks which make expansion a tedious and legalistic process.

Physician participation in the development of this type of plan is crucial. Without primary care physician participation, the plan cannot function. Thus, the second ingredient which must be present is interested physicians. It helps to have the sponsorship of large organizations of physicians in the area, such as the local Medical Society, Association of Family Physicians, Society of Internal Medicine, and the Academy of Pediatricians. Usually, a nucleus of five to 10 interested physicians is enough to start the plan. The largest amount of interest is demonstrated by family

physicians and general practitioners. In multi-specialty group practices, it's frequently the general internists and general pediatricians who are delivering most of the primary care, and who elect to participate in the plan with or without approval of specialist colleagues.

Employers in a new geographical area are the third vital part of any effort to begin marketing a plan. Recently, UHC has had the interest of at least two large employers in a new area before it marketed to physicians in the area. In the past, some of these employers have helped to defray the initial start-up costs incurred during the six-to-12-month physician marketing period. Thus, frequently, it turns out to be a joint-venture between large employers and the plan during the start-up period. The employer usually agrees to offer the plan as an alternative to the existing coverage for his employees.

The fourth ingredient in the development of the plan in a new area is the employees who will be offered the plan as an alternative to their existing health insurance. As mentioned with the State of Washington employees, one requirement for market penetration in

the first two years is dissatisfaction among employees with the current benefit package. For instance, Georgia Pacific Company employees in Washington were not interested in enrolling in the UHC Plan because their benefit package was already as comprehensive. Unless the new comprehensive HMO plan offers significantly more coverage to employees, UHC will not be able to overcome the employee tendency to remain with a known plan rather than switch to an unknown plan.

There has been a great deal of interest from other organizations in replicating the UHC Plan. UHC has given one-day seminars to three large insurance companies which have decided to start similar plans in their areas of the country. In addition, nine physician groups of 30 or more members have requested help in pursuing a new UHC-type plan. By June, 1981 the SEIBUS project hopes to clarify whether the features embodied in this primary care network plan are successfully containing health care costs and thereby warrant duplication.

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