HEALTH MAINTENANCE ORGANIZATIONS FOR BRITISH COLUMBIA: ARE THEY FEASIBLE?

By

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B.Sc.N. University of Windsor, 1968

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This policy/planning thesis takes the format of a hypothetical study done for the Senior Assistant Deputy Minister in the B.C. Ministry of Health. The Ministry had shown interest in restructuring as a means of setting some boundaries on an open-ended medical care system in order to reduce expenditures for health care services. Because the clients' specific interest was in the American health maintenance organization (HMO) model, the study was concerned with the feasibility of introducing this model into the health care structures of B.C.

The problem situation of increasing expenditures for health care services in B.C. was described and relevant systems involved in the situation were identified as: the Ministry of Health, the medical profession and hospitals. The unique perspectives of each system were described so their implications for the feasibility of an HMO model could be assessed.

The HMO model, in the American context, was analyzed according to its generic elements and variant characteristics. In addition, the policy process of developing and implementing the HMO strategy was described. The HMO was found to be a highly complex organization that integrates financial mechanisms and service delivery. Evidence reviewed about its performance indicated that HMOs are a less expensive means of providing care than fee for service practice, that hospitalization rates range from 20 to 40% lower and are the primary source of HMO cost saving and that enrollees probably receive comparable quality care.

The publicly funded health insurance system presents a primary obstacle to adopting this model to a Canadian setting because of weakened financial
incentives for competition. The principles upheld by the program also hamper enrolling a fixed population which is a basic HMO element. To implement an HMO model in B.C., considerable restructuring of financial systems would be necessary to redirect funds to an HMO so that it could be at financial risk for providing hospital and medical services to an enrolled population.

In reviewing some policy options, it was apparent that an HMO model would be most easily adapted to B.C. within the context of publicly funded competition in medical care practice. However, there did not appear to be sufficient support from relevant constituencies for such a comprehensive approach. But a consensus was evident in support of an HMO pilot project in order to assess more fully feasibility problems, to build support for the concept and to evaluate its effectiveness.
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<td>ADM</td>
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<td>AMA</td>
<td>American Medical Association</td>
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<td>BCMA</td>
<td>British Columbia Medical Association</td>
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<tr>
<td>CHC</td>
<td>Community health centre</td>
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<td>CHRHC</td>
<td>Community human resources and health centre (British Columbia)</td>
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<td>GNP</td>
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<td>HMO</td>
<td>Health maintenance organization</td>
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<td>HSO</td>
<td>Health service organization</td>
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<td>IPA</td>
<td>Individual practice association</td>
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<td>MOH</td>
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<td>MSP</td>
<td>Medical Services Plan</td>
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<tr>
<td>NDP</td>
<td>New Democratic Party</td>
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<td>OHIP</td>
<td>Ontario Health Insurance Plan</td>
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<td>PGP</td>
<td>Prepaid group practice</td>
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My interest in the feasibility of health maintenance organizations (HMO) for B.C. as a thesis topic arose out of a discussion that I had with Paul Pallan, Director of Policy and Planning in the B.C. Ministry of Health. Due to cost constraint policies, he indicated that the Ministry was under some pressure from the Treasury Board to find lower cost alternatives in funding health care services. In light of this, the senior Assistant Deputy Minister, at that time, had expressed some interest in the HMO model, since he felt that this might be a strategy for improving the Ministry's negotiating position with the B.C. Medical Association.

About the same time, some other tangential events transpired which added fuel to the Ministry's interest in an HMO model. First, the CU & C Health Services Society financed the development of the Mount Pleasant Community Health Centre which opened in April, 1983 with the goal of providing a competitive alternative to traditional fee-for-service medical care practice. Later that year, a Vancouver-based consulting firm submitted to the senior Assistant Deputy Minister a proposal for a feasibility study on HMOs for the province (this was rejected by the Ministry). Following in the spring of 1984, this same firm sponsored a conference on HMOs for senior health administrators from the western provinces, at the Group Health Co-operative of Puget Sound, in Seattle, Washington. From the sequence of events, both inside and outside of the Ministry, it seemed to me that, perhaps, a more in depth examination of the issue of HMOs for B.C. would indeed be timely.
ACKNOWLEDGEMENTS

The preparation of this thesis has benefited from the generous assistance of numerous people who deserve recognition. First, I owe a great deal of thanks to Joan Milling, Executive Director of York Community Services, Toronto, Ontario for stimulating my interest in community health centres and allowing me the freedom for professional growth that led me to the Health Services Planning and Administration Program. Next, I owe gratitude to my thesis committee for faithfully piloting the development of this thesis. Particular thanks are extended to Anne Crichton for chairing the committee and for her support as mentor and friend throughout the process. Also, thanks to Morris Barer, and Carolyn Tuohy, Department of Political Science, University of Toronto, both of whom have contributed very valuable advice. Appreciation is extended as well to staff of the B.C. Ministry of Health who co-operated with interviews and offered other assistance in specific areas. In addition, many others gave of their time for interviews and are individually acknowledged in Appendix A. Also, the many, many hours of typing done by Irene Korosec contributed significantly to preparation of this thesis. Finally, I would like to extend thanks to other unmentioned members of faculty, colleagues, and friends in the Department of Health Care and Epidemiology who have in various ways all had input into this effort.
CHAPTER 1 RESEARCH FOCUS

PURPOSE

The purpose of this thesis is to identify the issues associated with the adaptation of the American health maintenance organization (HMO) to the publicly funded health care structures of British Columbia. It is hoped that identification of the issues may lead to a better understanding of the potential value of this model as a strategy for restructuring medical care services in the province with the intention of achieving greater economy.

CONTEXT

Since the late 1960's, discussions of restructuring the health care system by means of alternative forms of medical care practice have been a recurrent theme in Canada. The restructuring discussion is associated with bringing increased administrative rationality to bear on the utilization of health care resources, thereby achieving greater economy through improved efficiency and effectiveness. Despite the rationality of the restructuring paradigm, it has had minimal influence in the evolution of Canadian health care services.

Drifting towards more rational health care policies, federal governments in the early 1970's provided a significant impetus towards restructuring. In Canada, the impetus was the Community Health Centre Project, whereas in the United States, it was the HMO strategy. Both initiatives arose at the time of an expansionary period in health services, where cost control was being recognized increasingly as a critical issue. Similarly, both approaches were
based on the principle of prepaid group practice (PGP) which linked the payment mechanism for health care with responsibility for service delivery thus altering the economic incentives for physicians associated with fee for service (FFS) practice. Accessibility to comprehensive health care services, emphasis on prevention as a focus of care rather than illness and consumer participation in the delivery of health care services were also characteristic of these new models. Despite similarities, the two approaches had vastly different outcomes in their respective countries.

Initial enthusiasm for the community health centre (CHC) in Canada was short-lived\(^1\). Some provinces such as British Columbia, Ontario, Quebec and Saskatchewan took up the challenge but, the number of centres developed was too small to have anything but a negligible impact on restructuring except in Quebec. However, throughout the 1970's in Canada, the percentage of gross national product (GNP) attributed to health care expenditures remained relatively stable in the 7 to 7 1/2\% range\(^2\) as shown in figure 1. A perceived urgency for change, therefore did not appear evident as "sit on the lid" policies of tighter fiscal control masked any cost crisis\(^3\).

Quite a different scenario was experienced in the United States, where the percentage of GNP accounting for health care expenditures rose to almost 10\% (n.2). Thus, it was out of the anxiety generated by an apparent health care cost crisis that the HMO strategy was conceived and, after a shaky start, HMO development has continued to increase, the major attraction being its cost containment potential. Health maintenance organizations have now achieved sufficient status to be recognized as part of the mainstream of the American health care system\(^4\). Because there is now greater concern about cost
Figure 1

control in Canada, it would seem that there may be lessons in understanding the HMO model and the policy process that led to its implementation and growth.

The Canadian health care context has changed dramatically since the time of the Community Health Centre Project. The percentage of GNP going to health care expenditures rose to 8.4% in 1982. Complicated further by economic recession and slow recovery, health care services have been subjected to contractionary measures. Cost containment now seems to take precedence over accessibility as an objective of the system. Since economic necessity has prompted certain institutional restructuring in hospitals, perhaps the time is ripe again to consider the restructuring of medical care services? The potential of the HMO model for cost control and restructuring for greater efficiency would seem to make its feasibility worth exploring for Canada.

For a variety of reasons, circumstances in B.C. would appear to favour an exploration of feasibility of the HMO model. First, senior level Ministry of Health (MOH) staff have expressed specific interest in HMOs, in relation to problems encountered by the Ministry. Second, the general economic restraint policies of the Social Credit government would suggest receptiveness to efficient and cost conscious models of delivering health care. Finally, in the past, B.C. has had some experience in the realities of introducing alternate forms of health care delivery with the community human resource and health centres (CHRHC). These particular circumstances in B.C., plus the present context of health care services in Canada, have led to the formulation of the following research question to be addressed by this study.
Is it feasible and desirable for the Ministry of Health to consider the introduction of health maintenance organizations into the health care structures of British Columbia as an alternative to traditional fee for service medical care practice?

OBJECTIVES

1. To determine the appropriateness of the HMO model as a strategy for change in the health care structures of B.C.
2. To identify the obstacles and supports within the existing health care structures in B.C. that might inhibit or facilitate the adoption of an HMO model.
3. To establish the modifications in the existing health care structures of B.C. necessary to facilitate change towards the introduction of an adjusted HMO model.

FORMAT

The format of this thesis will be a policy/planning study, presented as a documentary analysis, using secondary sources of data including literature reviews and interviews with key informants. In accordance with this approach, the assumption will be made that the senior Assistant Deputy Minister (ADM) in the health Ministry has commissioned a study to explore the feasibility of introducing HMOs into the health care structures of B.C. The senior ADM, therefore, will become the 'client' to whom the study is directed, thus focusing on the MOH perspective.
In the course of this study, it was not possible to interview the senior ADM, although many attempts were made to do so. Therefore, the views of the senior ADM expressed here are those reflected by staff working in close association with him and were consistent among several staff. Furthermore, the senior ADM was promoted to Deputy Minister before the completion of the study. Since data from MOH interviews had been collected prior to this change, it was decided to continue to consider the senior ADM as the client. The former Executive Director of Policy, Planning and Legislation eventually filled the ADM position responsible for management operations. Because he had been interviewed, support was provided for not making the client the Deputy Minister.

METHODOLOGY

The subject matter of feasibility and desirability of organizational change in the health care structures of B.C. is beset by interwoven complexities and political implications which make the problem situation highly variable. As a result, scientific research focusing on hypothesis testing and the collection of hard data would be problematic and narrow considerably the focus of the study.

In order to meet the above objectives, Checkland's "soft" systems methodology, which has been developed for application in complex situations, will provide the methodological framework and will be described in Chapter 2. The sequence of stages specified by that model will be the basis for division of individual sections of the study. As well, the description of each stage of the methodology will include references to specific chapters. Within a variable and complex situation, this framework appears to
facilitate the identification of relevant issues so that the feasibility and desirability of an alternative structure can be rationally evaluated.


This sheds some light on the sudden upward shift in the percentage of the Canadian GNP going to health care expenditures in 1982. Some of the increase may be related to a drop in total GNP as a result of recession. While the GNP was falling, however, health spending was increasing. If health spending were to be "recession-adjusted", the ratio of health expenditures to GNP for 1982 falls to about 7.84 to 7.86%. This suggests the importance of recession in the ratio but indicates that it would still remain higher than the previous year.


CHAPTER 2 RESEARCH DESIGN

The "soft" systems methodology as outlined by Checkland will provide the basic framework for the study. This methodology is essentially a problem-solving approach, developed for application in complex situations where problems are evident but unstructured, and elusive of explicit definition without over simplification. Checkland proceeds from the premise that these are not problems as such, but rather problem situations that arise in human activity systems. The contexts of such systems are so vulnerable to numerous influences that the passage of time always modifies the perception of the problem. Hence, the methodology offers a set of methodologic principles that define the roles of key actors, delineate stages of a problem-solving process, and account for various perspectives and environmental constraints impinging on the problem situation. These principles are to be reduced to a method uniquely tailored to the particular problem situation. A general description of the methodology and its application to this study follows.

ROLES

At the outset, Checkland defines the key roles that he considers pertinent in using the methodology. The first role, that of the "client", is the person commissioning the study because he wants to know or do something. The implicit assumption is that this person may cause something to happen as a result of the study. Second, the "decision taker" role in a human activity system possesses the power to alter organizational arrangements and to decide resource allocation within the system. Finally, the third role is that of "problem owner" who has an unease about the situation, which he may be unable to articulate in a precise
way, and who wishes something would be done about it. These roles could be filled by individuals, groups or organizations. One individual, for example, could fill more than one of the roles. Also, there could be more than one "problem owner" in the situation and likewise more than one "decision taker".

PROBLEM SOLVING PROCESS

The stages of the problem solving approach are illustrated in figure 2. While this represents a chronological sequence, work can start at any stage as long as the relationships between stages are respected. Stages 1, 2, 5, 6 and 7 are real world activities, necessarily involving people in the problem situation, whereas, stages 3, 4, 4a and 4b are "systems thinking" activities that attempt to unravel and understand the real world complexity of the problem. This study will follow the chronological order of the stages.

Stages 1 and 2: These are the expression phases of this problem-solving approach, where an attempt is made to construct the richest possible picture not of the problem but of the situation in which the problem is perceived. The elements of slow-to-change structures and continually changing process are identified in the situation. Then an impression is formulated of how structure and process relate to each other in the particular climate of that situation.

Section I is concerned with these stages and attempts to assess the problem situation experienced by the MOH. Chapter 3 identifies the clients perspective and his roles in the situation. Chapter 4 presents data on expenditures and identifies current problems related to the structure of the health care system.
Figure 2
Summary of "Soft" Systems Methodology

1. The problem situation: unstructured

2. The problem situation: expressed

3. Root definitions of relevant systems

4. Conceptual models
   - 4a. Formal system concept
   - 4b. Other systems thinking

5. Comparison of 4 with 2

6. Feasible, desirable changes

7. Action to improve the problem situation

Real world
Systems thinking

Stage 3: This involves developing root definitions of systems that appear to be relevant to the problem. The objective is to get a carefully phrased explicit statement of the nature of each system. The choice of systems will represent a particular outlook on the problem situation. The purpose of carefully naming the systems is both to make the outlook explicit and to provide a base from which the implications of taking that view can be developed.

Section II pertains to stage 3 and chapter 5 identifies and describes the systems in B.C. relevant to the problem situation identified in section I. Each system is described according to six criteria outlined later in this chapter.

Stage 4: This consists of building conceptual models of the human activity systems named in the root definitions. The definition is an account of what the system is, while the conceptual model is an account of the activities the system must encompass in order to be congruent with the definition. Stage 4a involves checking the model developed for any fundamental deficiencies and Stage 4b modifies or transforms the model into a form tailored to the particular situation at hand.

Normally in the use of this methodology, a conceptual model for change evolves from the process of describing the problem situation and identifying relevant systems. In this case, the model for change has been specified by the client and does not evolve from that process. Section III part A includes chapters 6 to 11 and describes the HMO model and its policy development in the American context. Since that model has not evolved from the analysis of the B.C. problem situation, emphasis will be placed on stage 4b in section III part B which is concerned with modifications of the model to fit the particular situation in B.C.
Chapter 12 addresses the accommodations likely to be necessary for adapting the HMO model to B.C.

Stage 5: Here the process returns to the real world, where the model is set against the perceptions of the problem situation and serves to generate debate among concerned people. Since the views of the world, on which different key people in the situation base their actions, may well be incomplete, the debate may result in generating conflict as well as promoting consensus.

Section IV covers stage 5 and attempts to raise issues that may stimulate debate about the HMO model. Chapter 13 looks at policy alternatives and whether the HMO model would be appropriate for B.C.

Stage 6: An attempt is made to bring a resolution to the debate and define possible changes that could be made, provided that the changes meet two criteria simultaneously. They must be agreeably desirable to people in the problem situation and they must be feasible, given prevailing attitudes and power structures with regard to the history of the specific situation.

Stage 7: Based on the desirable and feasible changes that emerge from stage 6, specific actions likely to improve the problem situation are formulated.

Stages 6 and 7 are discussed in chapter 14 which looks at the different perspectives of relevant systems on the feasibility and desirability of an HMO model for B.C. Then, conclusions and recommendations for change are offered.

ENVIRONMENT

The crux of the methodology lies in stage 3, where the decision to choose certain systems as relevant to the problem situation introduces limitations into
the problem-solving process. The choice and definition of these systems is extremely critical because they represent the "bounded rationality" of the environment of the problem situation. Checkland and his colleagues developed a checklist of six elements that they considered an essential guide to the formulation of a root definition for each system (n.1 p.224).

1. Who are the customers or beneficiaries of the system?
2. Who are the actors performing the main activity of the system?
3. What is the transformation process of the system?
4. What is the Weltanschauung or perspective that makes the system meaningful?
5. Who owns the system or has ultimate power?
6. What are the environmental constraints impinging on the system?

OUTCOME

The outcome of using this methodology is not a prescriptive technique which, when applied, yields a particular kind of result. Rather, the "soft" systems methodology is a problem-solving approach which uses systems ideas in the construction of frameworks applicable to complex situations. The result is the orchestration of a structured debate which facilitates a decision to take action to modify the situation, in the knowledge that this will not lead, in general, to the problem being solved but to a new situation where the process can begin again. The unique value of this methodology, is that it teases out different world images that influence the perceptions of the problem situation and examines their implications for change in the problem situation.
LIMITATIONS

Since the central concern of this study is feasibility, the allowance that the "soft" systems methodology makes for the incorporation of multiple perspectives causes it to be especially suitable. However, by placing emphasis on means, a systems approach may be less attentive to ends or goals. For example, the means might be attempting to facilitate the achievement of inappropriate goals. A systems approach, also may tend to de-emphasize conflict and the relative power of groups to influence circumstances by stressing maintenance and adaptability of systems. Furthermore, this approach is inclined to neglect the strategic behaviour of groups, thus making it difficult to hypothesize what their behaviour might be over a period of time. While the "soft" systems methodology provides a good overall framework for the investigation of this research question, it will be necessary, at various points in the study, to complement the framework by the introduction of other paradigms or models to strengthen analyses, particularly those concerned with legitimacy.

SCOPE

The scope of this study with respect to feasibility is limited to the perspective of the B.C. Ministry of Health. It is acknowledged that there will be other perspectives on the feasibility of the HMO model, such as those of the medical profession. Other perspectives, however, will be assessed in relation to the Ministry's perspective and not independent of it.

Because this study involves the adaptation of an American model of health care delivery to a Canadian setting, it is important to place some boundaries on the range of differences between the two countries, relevant to an assessment of
feasibility. Thus, the study will limit the identification of differences to those specifically related to the HMO model and their implications for Canada. For example, differences in the economic approach to health care have major impact for feasibility in Canada, whereas differences in political structure and process, while germane to HMO policy development, are less critical in terms of the feasibility of HMOs in Canada.

In spite of conspicuous differences between the two health care systems, there are areas of commonality evident concerning HMOs. With the goal of neutralizing differences, within reason, the study will strive to identify and accentuate the areas of commonality in order to gain a more realistic assessment of feasibility.
FOOTNOTES


SECTION I: STAGES 1 AND 2 ASSESSING THE PROBLEM SITUATION

The intention of Stages 1 and 2 - the problem expression phases of the methodology is to gain the richest possible picture of the problem situation without imposing a particular structure. Such a picture facilitates the selection of viewpoints or perspectives from which further study will lead to relevant problem solving. Choices of perspectives, then, can be made in the full knowledge that an array of perspectives is possible, but that there may be variation in the degree of insight that each could offer to the problem situation.

With this in mind, the role of the client and his reasons for the study will be reviewed. Then, an investigation of the problems of the health care system of B.C., as experienced by the Ministry, will be made using data from interviews with ministry and government staff, presentations by ministry staff and available documented material on health care expenditures.
CHAPTER 3 THE CLIENT

As noted earlier, the senior ADM in the B.C. health Ministry has been assumed to be the client for the purposes of this study. It is important to understand this role not only in the context of the MOH, but also in the broader context of the provincial government.

The return of the Social Credit party to power in 1975 signalled a shift to a more corporate ideology of government. A Cabinet committee structure was implemented that established planning and control agencies at Cabinet level. The most important of these was the Treasury Board, which was responsible for expenditure planning and the management of government operations. The corporate values and objectives which pervaded the Cabinet and Treasury Board had been previously external to the health Ministry. However, penetration of these values into health was accomplished by the selection of senior staff.

Senior positions in the MOH were filled by professional managers who, by virtue of their education, experience and personal philosophies, were strongly oriented towards the supply side dynamics of conservatism, rationing and control (n.l p.33). The Treasury Board had to approve all expenditures so the MOH could no longer decide its own priorities. As a result, the new managers appeared to de-emphasize "health" in favour of cost-control objectives (n.l p.34). The old network of medically-oriented bureaucrats faded, with its philosophy of demand side expansion and development of the health care delivery system (n.l p.33). A new network of senior managers emerged who were aligned with the corporate objectives of government as a whole, and not health in particular. Similarly, political influence permeated the selection of senior
level staff, facilitating the creation of new power structures with a strong allegiance to the government as a "team" approach.

Given this context, it would follow that the senior ADM in the health Ministry is supportive of the ideology and policies of the Social Credit party as well as the corporate objectives of government. In addition, it should be noted that the Minister, the Deputy Minister, the senior ADM and the Executive Director of Policy, Planning and Legislation all moved simultaneously to the MOH from the Ministry of Consumer Affairs. This is indicative of the government stance of consistent fiscal constraint and corporate management policies across ministries, with no exception being made for any peculiarities in health.

THE CLIENT AS PROBLEM OWNER

The commissioning of this study would suggest that the senior ADM was convinced that government as a purchaser of health care services should be involved in health planning. Likewise, it implies that the client perceives himself as a "problem owner" who has a sense of discomfort about a situation. In this case, the unease appears to originate from a mismatch of expectations placed on the senior ADM. On one side, the Treasury Board is exerting pressure for the constraint of health care expenditures and the development of new efficient lower cost alternatives. On the other side, professionals, institutions, interest groups and consumers are demanding that the MOH increase expenditures for higher salaries and the expansion and/or maintenance of existing services. The senior ADM is caught in the crossfire between these conflicting sets of expectations. While needing to gain administrative control over expenditures, he is deterred by an open-ended medical care system.
His interest in the HMO model, therefore, stems from an effort to find a solution that could meet the expectations of the Treasury Board yet satisfy demands on the Ministry.

The introduction of publicly funded health insurance increased the awareness of the provincial government of the costs of health care services and the inadequacies of the structures of the traditional health care system for delivering efficient services. The CHC movement had been one approach to reforming the health care system through restructuring. The NDP government in B.C. had made some efforts toward restructuring with introduction of the CHRHCs. This concept, however, never gained legitimacy as an alternative form of health care delivery with the MOH or with health care providers, despite some evidence of cost reduction. So when the Treasury Board began encouraging the exploration of lower cost alternatives in health care delivery, this option was dismissed in general by MOH staff interviewed as having been a "social experiment". Consensus was evident among those interviewed that, if feasible, the HMO would be the model of choice now because of its potential for better allocation of resources and improved efficiency.

THE CLIENT AS DECISION TAKER

The senior level of the client's position qualifies him for the role of "decision taker" as well as "problem owner". The senior ADM has ready access to both the Minister and the Deputy Minister who, because of political influence, are likely to be supportive of his views. These linkages would be strategically important for gaining support in the Cabinet and in the Treasury Board for any structural change in the health care system. At a more practical level, the
senior ADM has direct responsibility for management operations within the Ministry. As well, the other ADM positions, which are responsible for preventative medicine, community care and institutional services, have a reporting relationship to the senior ADM as figure 3 illustrates. Should the HMO model prove to be a feasible strategy for restructuring in the B.C. health care system, the senior ADM as "decision taker" would be in a pivotal position to be crucially influential in implementing any structural change.

BASIC ASSUMPTIONS

The selection of the HMO model by the client, as the reason for this investigation, implies two assumptions: that the HMO model is worthy of consideration in the B.C. context, and that the model is perceived as a possible solution to some of the problems experienced by the Ministry, as a result of the current structures of medical care practice. The first assumption will be discussed in section III part A, where the goal will be to gain an understanding of the HMO model and the associated policy development of an HMO strategy for restructuring in the United States. The second assumption will be addressed in chapter 4, which will outline the problems of expenditures for health care experienced by the MOH as a result of the open ended medical care system.
Figure 3
British Columbia Ministry of Health Organizational Chart, 1983

Source: Adapted from British Columbia Ministry of Health Annual Report, 1983.


5. Interview with Chris Lovelace, Executive Director, Policy, Planning and Legislation, B.C. Ministry of Health, Victoria, December 3, 1984.
CHAPTER 4 PROBLEMS OF THE HEALTH CARE SYSTEM IN B.C.
MINISTRY OF HEALTH PERSPECTIVE

As identified in the last chapter, a central concern of the senior ADM is gaining administrative control over expenditures for health care. The dilemma confronting the client is the issue of overfunding of health care services as perceived by Treasury Board and the issue of underfunding of health care services as perceived by professionals, institutions, interest groups and consumers. Beneath the rhetoric about whether expenditures are too high or too low are more fundamental issues of ideology, values and objectives. The rhetoric becomes further complicated by the structures of the health care system, particularly the open-ended structures of the medical care system which place no finite limits on expenditures. Given the complexity of the situation, focusing on expenditure data alone is unlikely to be sufficient to resolve the dilemma but it may be useful in identifying and clarifying specific problem areas.

The intent of the following discussion is to utilize some available data relevant to expenditures in order to identify problem areas associated with an open-ended medical care system. While emphasis will be on provincial expenditures, certain national data have been used which offer a perspective on B.C.'s performance in the broader Canadian context. The major contributors to health care expenditures in B.C. are physician and hospital services, although expenditure levels in each area are dependent on a variety of factors. Some factors most likely to have significance within an open-ended medical care structure have been selected for discussion and include: quantities of available resources, prices of services and utilization of services.
Furthermore, an attempt will be made to link ministry policies to expenditure patterns in these areas in order to gain some assessment of the influence of policy on expenditures.

GENERAL CONTEXT

Since the introduction of publicly funded health insurance, governments have become sensitized to the costs of health care services as a result of increased expenditures. The amount of provincial gross domestic product going to health care expenditures in B.C. increased from 5.9% in 1961 to 7.5% in 1981\(^1\). Within that amount shifts in the proportion of expenditures for hospital and physician services have occurred. In 1961, 1.6% went for hospital services; by 1981 an increase to 2.7% had occurred (n.1). In contrast, 1.2% in 1961 accounted for physician services with a slight increase to 1.3% in 1971 but that amount remained stable to 1981 (n.1). The shift in the proportion of expenditures highlights the association between increased total expenditures and expenditures for hospital services.

Nationally, a trend towards the narrowing of differences between provinces in per capita spending on health care has been evident since 1960 as table 1 illustrates. From the mid 1970's until 1981, B.C.'s spending was consistently higher than the national average. Other provinces, with the exception of Alberta, Manitoba, and Nova Scotia, have held their per capita spending below the national average which suggests significantly weaker cost control measures in B.C. as well as in these provinces. When expenditures are broken down into the components of per capita expenditures for hospital services and physician services, a different picture emerges as table 2 shows.
Table 1
Health Care Expenditures Per Capita, Canada, and Provinces Relative to Canada 1960-1982

<table>
<thead>
<tr>
<th>Year</th>
<th>Canada</th>
<th>B.C.</th>
<th>Alta</th>
<th>Sask</th>
<th>Man</th>
<th>Ont</th>
<th>Que</th>
<th>N.B.</th>
<th>N.S.</th>
<th>PEI</th>
<th>Nfld</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>$120.34</td>
<td>114.4</td>
<td>105.5</td>
<td>107.2</td>
<td>104.8</td>
<td>112.3</td>
<td>85.2</td>
<td>88.5</td>
<td>83.6</td>
<td>80.7</td>
<td>57.4</td>
</tr>
<tr>
<td>1965</td>
<td>170.86</td>
<td>99.5</td>
<td>106.4</td>
<td>97.2</td>
<td>100.7</td>
<td>110.1</td>
<td>93.9</td>
<td>82.2</td>
<td>89.4</td>
<td>74.9</td>
<td>63.6</td>
</tr>
<tr>
<td>1970</td>
<td>293.37</td>
<td>98.8</td>
<td>103.7</td>
<td>86.4</td>
<td>102.3</td>
<td>109.9</td>
<td>96.8</td>
<td>78.1</td>
<td>64.9</td>
<td>80.4</td>
<td>63.5</td>
</tr>
<tr>
<td>1971</td>
<td>329.86</td>
<td>96.9</td>
<td>100.4</td>
<td>86.6</td>
<td>100.0</td>
<td>109.0</td>
<td>99.4</td>
<td>79.2</td>
<td>85.0</td>
<td>79.6</td>
<td>64.1</td>
</tr>
<tr>
<td>1975</td>
<td>544.79</td>
<td>102.5</td>
<td>100.4</td>
<td>91.9</td>
<td>97.5</td>
<td>103.7</td>
<td>101.6</td>
<td>79.3</td>
<td>91.3</td>
<td>78.9</td>
<td>75.7</td>
</tr>
<tr>
<td>1976</td>
<td>615.12</td>
<td>102.3</td>
<td>99.3</td>
<td>93.8</td>
<td>100.1</td>
<td>103.3</td>
<td>101.4</td>
<td>77.4</td>
<td>93.3</td>
<td>78.3</td>
<td>78.9</td>
</tr>
<tr>
<td>1978</td>
<td>726.34</td>
<td>105.5</td>
<td>100.1</td>
<td>92.7</td>
<td>99.7</td>
<td>103.6</td>
<td>98.3</td>
<td>82.1</td>
<td>93.8</td>
<td>82.4</td>
<td>86.9</td>
</tr>
<tr>
<td>1980</td>
<td>921.42</td>
<td>109.0</td>
<td>110.5</td>
<td>91.6</td>
<td>100.0</td>
<td>98.6</td>
<td>99.5</td>
<td>84.2</td>
<td>94.2</td>
<td>97.1</td>
<td>85.1</td>
</tr>
<tr>
<td>1981</td>
<td>1,057.58</td>
<td>109.5</td>
<td>109.4</td>
<td>96.0</td>
<td>103.6</td>
<td>98.4</td>
<td>97.6</td>
<td>89.6</td>
<td>97.6</td>
<td>90.6</td>
<td>86.0</td>
</tr>
<tr>
<td>1982</td>
<td>1,220.18</td>
<td>107.4</td>
<td>113.9</td>
<td>95.7</td>
<td>101.9</td>
<td>98.5</td>
<td>95.6</td>
<td>92.8</td>
<td>103.8</td>
<td>89.2</td>
<td>87.7</td>
</tr>
</tbody>
</table>

Average Annual Growth Rates (X)

<table>
<thead>
<tr>
<th>1960-65</th>
<th>7.26</th>
<th>4.33</th>
<th>7.44</th>
<th>5.18</th>
<th>6.40</th>
<th>6.82</th>
<th>9.37</th>
<th>5.70</th>
<th>8.71</th>
<th>5.68</th>
<th>9.48</th>
</tr>
</thead>
</table>

Table 2
Hospital and Physician Expenditures per Capita,
Canada and British Columbia Relative to Canada
1960 - 1982

| Year | Hospital Expenditures |  | Physician Expenditures |  |
|------|----------------------|  |------------------------|  |
|      | Canada $             | B.C. % | Canada $             | B.C. % |
| 1960 | 46.62                | 114.3  | 19.82                 | 142.6 |
| 1965 | 72.89                | 91.8   | 27.70                 | 122.8 |
| 1970 | 132.00               | 87.5   | 48.81                 | 119.1 |
| 1971 | 146.02               | 85.0   | 57.91                 | 107.7 |
| 1975 | 245.41               | 97.3   | 84.22                 | 117.1 |
| 1976 | 285.49               | 91.3   | 91.37                 | 125.4 |
| 1978 | 317.98               | 92.5   | 108.10                | 124.1 |
| 1980 | 394.05               | 97.0   | 136.46                | 123.0 |
| 1981 | 440.13               | 98.1   | 153.53                | 128.4 |
| 1982 | 505.71               | 95.7   | 179.02                | 134.0 |

Average Annual Growth Rates (%)

| Period      | Hospital Expenditures |  | Physician Expenditures |  |
|-------------|----------------------|  |------------------------|  |
| 1960-1965   | 9.35                 | 4.67  | 6.92                   | 3.78 |
| 1965-1970   | 12.61                | 11.54 | 12.00                  | 11.30 |
| 1970-1975   | 13.20                | 15.62 | 11.53                  | 11.15 |
| 1980-1982   | 13.29                | 12.50 | 14.54                  | 19.54 |
| 1960-1982   | 11.44                | 10.55 | 10.52                  | 10.21 |
| 1971-1982   | 11.96                | 13.17 | 10.80                  | 13.03 |

After starting in an above average position in 1960, B.C. has remained consistently below the national average in hospital spending. Per capita expenditures for physician services, in contrast, show dramatically different trends. In 1960, B.C. physician costs were an amazing 42.6% above the national average whereas by 1971 they had fallen to 7.7% above average. Since that time, B.C. physicians seem to have circumvented pressures to contain physician costs exercised elsewhere in the country. By 1982, per capita expenditures for physician services in B.C. had returned to the highest position for any province at 34% above the national average. Thus, it appears that the costs of physician services have been a major force driving up health care expenditures in B.C. faster than in the rest of the country.

**HOSPITAL SERVICES**

Although B.C. has remained below the national average in hospital spending, its expenditures have steadily increased. Table 3 shows that the bulk of expenditures are directed towards operating expenses but the major expenditure growth has occurred in capital debt. Within the structure of an open-ended medical care system, hospital capacity and bed supply plus the price and rate of utilization of hospital services are factors likely to affect the levels of hospital operating expenditures and capital debt.
Table 3
Summary of Hospital Programs Expenditures 1976/77 to 1982/83

<table>
<thead>
<tr>
<th></th>
<th>Administration</th>
<th>Operating Claims</th>
<th>Grants for Equipment</th>
<th>Grants for Capital and Debt Payment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>76/77</td>
<td>3,777,840</td>
<td>507,165,564</td>
<td>15,254,344</td>
<td>16,262,395</td>
<td>542,460,143</td>
</tr>
<tr>
<td>77/78</td>
<td>3,917,922</td>
<td>545,013,211</td>
<td>10,094,851</td>
<td>18,788,838</td>
<td>594,828,155*</td>
</tr>
<tr>
<td>78/79</td>
<td>4,237,159</td>
<td>587,412,858</td>
<td>15,884,637</td>
<td>23,848,117</td>
<td>631,382,771</td>
</tr>
<tr>
<td>79/80</td>
<td>4,459,302</td>
<td>660,982,515</td>
<td>8,247,803</td>
<td>26,954,208</td>
<td>700,643,828</td>
</tr>
<tr>
<td>80/81</td>
<td>5,137,086</td>
<td>916,179,454</td>
<td>8,754,673</td>
<td>35,025,786</td>
<td>965,276,999</td>
</tr>
<tr>
<td>81/82</td>
<td>6,123,401</td>
<td>1,021,532,143</td>
<td>22,741,890</td>
<td>48,919,762</td>
<td>1,099,317,196</td>
</tr>
<tr>
<td>82/83</td>
<td>5,121,720</td>
<td>1,125,846,391</td>
<td>16,311,899</td>
<td>63,982,651</td>
<td>1,211,262,661</td>
</tr>
</tbody>
</table>

* Long term care program is included in this total and subsequent totals

During the period 1946 to 1982/83 the number of hospitals in Canada increased at slightly under 70% while bed capacity for public general and allied special hospitals tripled\(^2\). In general, B.C. has followed national growth trends for hospitals as shown in table 4 but at levels slightly above the national rate with the exception of 1966 to 1971. When national growth in bed capacity began to level off in the early 1970's, B.C. continued to grow. From 1951 to 1966, B.C.'s bed capacity growth was concurrent with population growth but during the first half of the 1970's it was exceeding population growth by 3.3% per annum (n.2 p.54). Not until the last year of the period, was there any indication of serious interest in correcting the situation. Table 5 illustrates, however, that most of that growth was in long term care beds while reductions were occurring in acute care beds.

### Table 4

**Average Annual Growth Rates, Number of Hospitals\(^1\) and Bed Capacity\(^2\) Canada and British Columbia 1946 - 1982/83**

<table>
<thead>
<tr>
<th>Year</th>
<th>Number of Hospitals</th>
<th>Bed Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Canada</td>
<td>B.C.</td>
</tr>
<tr>
<td>1946-51</td>
<td>6.08</td>
<td>n.a.</td>
</tr>
<tr>
<td>1951-61</td>
<td>1.23</td>
<td>1.30</td>
</tr>
<tr>
<td>1961-66</td>
<td>1.47</td>
<td>1.94</td>
</tr>
<tr>
<td>1966-71</td>
<td>0.37</td>
<td>0.36</td>
</tr>
<tr>
<td>1971-76</td>
<td>0</td>
<td>0.89</td>
</tr>
<tr>
<td>1976-81-82</td>
<td>0.04</td>
<td>0.51</td>
</tr>
<tr>
<td>1981-82-82-83</td>
<td>-0.19</td>
<td>0</td>
</tr>
<tr>
<td>1951-82-83</td>
<td>0.69</td>
<td>1.02</td>
</tr>
</tbody>
</table>

1. Operating Public General and Allied Special Hospitals.
2. Rated Bed Capacity until 1975; Approved Bed Complement from 1976 to 1982-83.

### Table 5

Number of Approved Bed Complement by Type of Bed in British Columbia 1976 to 1984/85

<table>
<thead>
<tr>
<th>Year</th>
<th>Acute Care Beds</th>
<th>Extended Care Beds</th>
<th>Long Term Care Beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>1976</td>
<td>12,349</td>
<td>4,425</td>
<td>Nov./79 15,096</td>
</tr>
<tr>
<td>1977</td>
<td>12,314</td>
<td>5,325</td>
<td>Sep./80 15,757</td>
</tr>
<tr>
<td>1978</td>
<td>12,411</td>
<td>5,628</td>
<td>Sep./81 16,570</td>
</tr>
<tr>
<td>1979-80</td>
<td>12,228</td>
<td>5,694</td>
<td>Sep./82 17,626</td>
</tr>
<tr>
<td>1980-81</td>
<td>12,522</td>
<td>6,003</td>
<td>Nov./83 18,205</td>
</tr>
<tr>
<td>1981-82</td>
<td>12,562</td>
<td>6,121</td>
<td>Sep./84 18,573</td>
</tr>
<tr>
<td>1982-83</td>
<td>11,378</td>
<td>6,447</td>
<td>Mar./85 17,382**</td>
</tr>
<tr>
<td>1983-84</td>
<td>11,392</td>
<td>6,696</td>
<td></td>
</tr>
<tr>
<td>1984-85</td>
<td>11,501</td>
<td>7,019</td>
<td></td>
</tr>
</tbody>
</table>

* Long Term Care beds include personal care facilities, intermediate care facilities, family care homes, assessment and treatment centres, group homes and mental health boarding homes (until transferred to Mental Health Services Division in 1984).

** The decrease in Long Term Care beds between September 1984 and March 1985 reflects the transfer of responsibility for Mental Health Boarding Homes from Continuing Care to Mental Health Services Division.

Note also the changes in the reporting structure. For Acute and Extended Care, the years 1976 through 1978 report beds as at December 31. The remaining years report beds as at March 31 (fiscal year end). For Long Term Care, the beds are reported as indicated with March 1985 beds being fiscal year end figures.

Source: Hospital Data Support, Hospital Programs, B.C. Ministry of Health.
Prices of Hospital Services

The period of hospital growth from 1947 to 1982/83 was paralleled by national increases of roughly 11% per year in the cost per adult and child day in public general and allied special hospitals (n.2 p.80). While B.C.'s per diem rates started, in 1953, at 31% above the national average (n.2 p.80), table 6 shows steadily declining relative growth until 1976. Since then per diem growth rates in B.C. have taken an upward turn exceeding national average by roughly 1.5% to 2% per year.

Table 6

Average Annual Rates of Change in Cost Per Patient Day
Adults and Children, Public General and Allied Special Hospitals
Canada and British Columbia 1956 to 1982-83

<table>
<thead>
<tr>
<th>Year</th>
<th>Canada</th>
<th>British Columbia</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956 - 1961</td>
<td>9.15</td>
<td>7.04</td>
</tr>
<tr>
<td>1961 - 1966</td>
<td>9.32</td>
<td>6.08</td>
</tr>
<tr>
<td>1966 - 1971</td>
<td>11.30</td>
<td>11.75</td>
</tr>
<tr>
<td>1971 - 1976</td>
<td>15.36</td>
<td>14.09</td>
</tr>
<tr>
<td>1976 - 81-82</td>
<td>11.54</td>
<td>13.91</td>
</tr>
<tr>
<td>81-82 - 82-83</td>
<td>13.52</td>
<td>14.91</td>
</tr>
<tr>
<td>1953 - 82-83</td>
<td>11.00</td>
<td>9.78</td>
</tr>
<tr>
<td>1962 - 82-83</td>
<td>12.16</td>
<td>11.86</td>
</tr>
</tbody>
</table>


Increases in per diem rates may reflect servicing intensity per patient day and increased costs of hospital inputs. Because servicing intensity
involves the volume of services delivered in a patient day, the increase could reflect more intensive ambulatory care services and more difficult interventions due to more complex case mixes. Neither explanation, however, appears to be adequately supported by evidence (n.2 pp.88-89).

Due to the labour intensity of hospitals, wage levels are another factor likely to influence prices. The annual rate of change of relative hospital wages in B.C. has been particularly below average since 1981 (n.2 p.69). Neither servicing intensity nor wage levels, consequently, seem to be an adequate explanation for increased per diem rates. Another possible explanation may be that the costs of inputs such as technological equipment may be contributing to the rate.

Utilization

Beginning in 1971, table 7 indicates that patient days per capita began to fall nationally with some fluctuations. A downward turning point in patient days, however, was marked in 1980/81 which was probably associated with decreased bed capacity. This pattern varied in B.C. for when the national per capita average was falling, B.C.'s average began to rise considerably from 1971 to 1976. By 1979/80, B.C. had reached a position of 19% above the national average in patient days per capita which it sustained until 1981/82 when a period of decline was signalled. This trend is consistent with the reluctance of B.C. to join the national downsizing movement in reducing bed capacity.
Table 7

Hospital Utilization Per 1000 Population* Canada, B.C. Relative to Canada 1971 - 1982/83

<table>
<thead>
<tr>
<th>Patient Days</th>
<th>71</th>
<th>76</th>
<th>77-78</th>
<th>78-79</th>
<th>79-80</th>
<th>80-81</th>
<th>81-82</th>
<th>82-83</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>1,894.3</td>
<td>1,807.5</td>
<td>1,838.3</td>
<td>1,857.3</td>
<td>1,848.7</td>
<td>1,848.8</td>
<td>1,841.7</td>
<td>1,826.5</td>
</tr>
<tr>
<td>B.C.</td>
<td>96.0</td>
<td>116.3</td>
<td>118.5</td>
<td>119.2</td>
<td>119.1</td>
<td>119.1</td>
<td>115.4</td>
<td>109.0</td>
</tr>
</tbody>
</table>

* In Public General and Allied Special Hospitals; Operating 1971 - 75; Estimated for Operating for 1976 - 1982-83 and 1947; Utilization does not include newborns.


POLICY RESPONSES TO EXPENDITURES FOR HOSPITAL SERVICES

In comparison with national trends, clearly B.C. has been a latecomer to downsizing the hospital sector as a means of containing costs. Under increasing pressure to rationalize and contain expenditures, the MOH in 1979 initiated a process of negotiating a more rational system of funding for hospitals. As a result the Hospital Role and Funding Study were done in order to develop a rational plan for the allocation of resources to hospitals. However, this negotiation process was far too slow in evolving as mounting cost pressures demanded more immediate measures.

A change of Deputy Minister in 1980 brought a much tighter cost control orientation to the ministry and more authoritarian control over the hospital sector in particular. In addition to restrictions on capital expenditures, changes were made in hospital budgeting to move away from a cost reimbursement
base. In 1982/83, line by line budgeting for hospitals was abandoned in favour of prospective global budgets negotiated annually and monitored throughout the year by the Ministry. As well as better fiscal control, some hospitals have been merged for improved efficiency. Budget constraints and reduced capacity of acute care beds also have acted to some extent as a brake on utilization and hospital wages thus helping to contain costs.

**PHYSICIAN SERVICES**

While the portion of physician expenditures represented in the provincial gross domestic product remained stable from 1971 to 1981, the costs of physician services have steadily escalated. Increasing expenditures for the Medical Services Plan (MSP) are represented in table 8 and show that the lion's share of expenditures go to medical FFS practice. However, factors affecting the levels of these expenditures are the supply and availability of physicians, the price of their services and the rate of utilization of their services.
<table>
<thead>
<tr>
<th></th>
<th>Medical fee-for-service</th>
<th>Salaried and sessional</th>
<th>Additional benefits</th>
<th>Administration</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1972/73</td>
<td>$139,532,341</td>
<td>$6,022,920</td>
<td>$7,897,244</td>
<td>$7,320,137</td>
<td>$160,772,642</td>
</tr>
<tr>
<td>1973/74</td>
<td>159,614,356</td>
<td>7,991,062</td>
<td>8,963,080</td>
<td>8,581,794</td>
<td>185,150,292</td>
</tr>
<tr>
<td>1974/75</td>
<td>190,452,494</td>
<td>10,424,602</td>
<td>11,089,892</td>
<td>12,501,015</td>
<td>224,468,003</td>
</tr>
<tr>
<td>1975/76</td>
<td>250,026,093</td>
<td>15,437,520</td>
<td>15,045,516</td>
<td>12,659,521</td>
<td>293,168,650</td>
</tr>
<tr>
<td>1976/77</td>
<td>268,496,749</td>
<td>14,880,410</td>
<td>17,090,707</td>
<td>13,040,063</td>
<td>313,507,929</td>
</tr>
<tr>
<td>1977/78</td>
<td>298,900,495</td>
<td>17,749,957</td>
<td>17,436,161</td>
<td>13,207,188</td>
<td>347,293,801</td>
</tr>
<tr>
<td>1978/79</td>
<td>337,513,465</td>
<td>19,484,932</td>
<td>21,132,210</td>
<td>16,856,376</td>
<td>394,986,983</td>
</tr>
<tr>
<td>1980/81</td>
<td>445,734,331</td>
<td>28,368,006</td>
<td>28,567,705</td>
<td>21,435,615</td>
<td>524,105,657</td>
</tr>
<tr>
<td>1982/83</td>
<td>$671,614,777</td>
<td>$36,376,585</td>
<td>$44,791,468</td>
<td>$22,086,006</td>
<td>$774,868,836</td>
</tr>
</tbody>
</table>

Supply of Physicians

Considerable growth in the available supply of physicians has occurred in Canada since 1960 as table 9 illustrates. Although British Columbia has always been blessed with an above average supply of physicians, the level dropped to 3% above average in 1975 from 14.2% above in 1960, but it rose again to 4.9% above average by 1983. This increased availability of physicians may have implications for expenditure levels but it must be considered in relation to prices and utilization of their services.

Table 9
Population per Active Civilian Physician*
Canada, and British Columbia Physician: Population Ratio Relative to Canada** 1960 - 1983

<table>
<thead>
<tr>
<th>Year</th>
<th>Canada</th>
<th>B.C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>879</td>
<td>114.2</td>
</tr>
<tr>
<td>1965</td>
<td>779</td>
<td>117.8</td>
</tr>
<tr>
<td>1970</td>
<td>689</td>
<td>110.3</td>
</tr>
<tr>
<td>1971</td>
<td>659</td>
<td>107.3</td>
</tr>
<tr>
<td>1975</td>
<td>585</td>
<td>103.0</td>
</tr>
<tr>
<td>1976</td>
<td>577</td>
<td>103.7</td>
</tr>
<tr>
<td>1978</td>
<td>560</td>
<td>105.3</td>
</tr>
<tr>
<td>1980</td>
<td>547</td>
<td>106.0</td>
</tr>
<tr>
<td>1981</td>
<td>538</td>
<td>104.7</td>
</tr>
<tr>
<td>1982</td>
<td>523</td>
<td>104.8</td>
</tr>
<tr>
<td>1983</td>
<td>512</td>
<td>104.9</td>
</tr>
</tbody>
</table>

*Includes Interns and Residents
**Provincial relative value is inverse: values above 100.0 are above average physician-to-population ratios.

Fees

A minimum estimate of price changes for the period 1960 to 1983 can be derived from table 10 which shows changes in official fee levels, relative to the national average based on 100.00. Nationally, physicians made fee gains in the 1960s, suffered sharp losses in the early 1970s, then slower losses in the late 1970s followed by gains in the 1980s. Again, B.C. deviates from the national pattern as fees start out considerably above the national average, then lose ground in the 1960s. But, since 1971, B.C. has bounded ahead of both the national average and the inflation rate proving to be the extreme case of fee increases among all the provinces (n.2 p.32). Cost constraint measures regarding physician fees clearly have been far less prevalent in B.C. than in other provinces, at least prior to 1983.
Table 10
Physicians' Fee Indices, Canada and British Columbia
1960 - 83 (Canada. 1971 = 100.0)

<table>
<thead>
<tr>
<th>Year</th>
<th>Canada</th>
<th>B.C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>69.9</td>
<td>84.3</td>
</tr>
<tr>
<td>1963</td>
<td>74.5</td>
<td>82.9</td>
</tr>
<tr>
<td>1964</td>
<td>76.1</td>
<td>86.0</td>
</tr>
<tr>
<td>1965</td>
<td>78.7</td>
<td>86.0</td>
</tr>
<tr>
<td>1966</td>
<td>80.1</td>
<td>86.0</td>
</tr>
<tr>
<td>1967</td>
<td>86.6</td>
<td>94.5</td>
</tr>
<tr>
<td>1968</td>
<td>90.6</td>
<td>94.5</td>
</tr>
<tr>
<td>1969</td>
<td>96.1</td>
<td>100.9</td>
</tr>
<tr>
<td>1970</td>
<td>97.8</td>
<td>100.9</td>
</tr>
<tr>
<td>1971</td>
<td>100.0</td>
<td>100.9</td>
</tr>
<tr>
<td>1972</td>
<td>101.4</td>
<td>105.2</td>
</tr>
<tr>
<td>1973</td>
<td>102.3</td>
<td>112.9</td>
</tr>
<tr>
<td>1974</td>
<td>107.4</td>
<td>123.1</td>
</tr>
<tr>
<td>1975</td>
<td>114.2</td>
<td>141.7</td>
</tr>
<tr>
<td>1976</td>
<td>121.8</td>
<td>157.4</td>
</tr>
<tr>
<td>1977</td>
<td>132.0</td>
<td>164.1</td>
</tr>
<tr>
<td>1978</td>
<td>140.2</td>
<td>175.2</td>
</tr>
<tr>
<td>1979</td>
<td>150.6</td>
<td>189.0</td>
</tr>
<tr>
<td>1980</td>
<td>164.8</td>
<td>206.6</td>
</tr>
<tr>
<td>1981</td>
<td>184.2</td>
<td>241.7</td>
</tr>
<tr>
<td>1982</td>
<td>208.3</td>
<td>279.9</td>
</tr>
<tr>
<td>1983</td>
<td>227.5</td>
<td>300.0</td>
</tr>
</tbody>
</table>

Annual Average Rates of Growth (%)

<table>
<thead>
<tr>
<th>Period</th>
<th>Canada</th>
<th>B.C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960-65</td>
<td>2.40</td>
<td>0.40</td>
</tr>
<tr>
<td>1965-70</td>
<td>4.44</td>
<td>3.25</td>
</tr>
<tr>
<td>1960-70</td>
<td>3.42</td>
<td>1.81</td>
</tr>
<tr>
<td>1970-75</td>
<td>3.15</td>
<td>7.03</td>
</tr>
<tr>
<td>1975-80</td>
<td>7.61</td>
<td>7.83</td>
</tr>
<tr>
<td>1980-83</td>
<td>11.35</td>
<td>13.24</td>
</tr>
</tbody>
</table>

Utilization

In the period 1971 to 1982, table 11 shows that per capita physician utilization increased in Canada at an average annual rate of 3.65%. During this same period, the per capita physician utilization rate in B.C. lagged behind the national average, with utilization falling from roughly 8% above average in 1970 to near the national average in 1982. Therefore, the relative growth of physician service costs in B.C. appears to be the result of higher fees rather than differences in utilization. An interesting observation is that where fees have risen fastest since 1971 – B.C., Alberta, Saskatchewan and Nova Scotia, relative use rates have dropped whereas when fees have risen slowly as in Quebec, user rates have risen fastest (n.2 p.37). This observation highlights the apparent use of physicians' discretion to adjust income levels and supports the "target income" view of physician behavior (n.2 p.37). Such behavior has serious implications for expenditure levels in an open-ended medical care system.
Table 11
Per Capita Apparent Utilization of Physicians' Services, Adjusted for List Fee Differentials, Canada and British Columbia, 1960 - 1982 (1971 $)

<table>
<thead>
<tr>
<th>Year</th>
<th>Canada</th>
<th>B.C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960</td>
<td>28.35</td>
<td>33.52</td>
</tr>
<tr>
<td>1965</td>
<td>35.20</td>
<td>39.56</td>
</tr>
<tr>
<td>1970</td>
<td>49.91</td>
<td>58.11</td>
</tr>
<tr>
<td>1971</td>
<td>57.91</td>
<td>61.79</td>
</tr>
<tr>
<td>1975</td>
<td>73.75</td>
<td>69.57</td>
</tr>
<tr>
<td>1976</td>
<td>75.02</td>
<td>72.82</td>
</tr>
<tr>
<td>1978</td>
<td>77.10</td>
<td>76.59</td>
</tr>
<tr>
<td>1980</td>
<td>82.80</td>
<td>81.24</td>
</tr>
<tr>
<td>1981</td>
<td>83.35</td>
<td>81.56</td>
</tr>
<tr>
<td>1982</td>
<td>85.94</td>
<td>85.69</td>
</tr>
</tbody>
</table>

Annual Average Rates of Growth

<table>
<thead>
<tr>
<th>Year</th>
<th>Canada</th>
<th>B.C.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960-65</td>
<td>4.42</td>
<td>3.37</td>
</tr>
<tr>
<td>1965-70</td>
<td>7.23</td>
<td>7.99</td>
</tr>
<tr>
<td>1970-75</td>
<td>8.12</td>
<td>3.67</td>
</tr>
<tr>
<td>1975-80</td>
<td>2.34</td>
<td>3.15</td>
</tr>
<tr>
<td>1980-82</td>
<td>1.88</td>
<td>2.70</td>
</tr>
<tr>
<td>1960-82</td>
<td>5.17</td>
<td>4.36</td>
</tr>
<tr>
<td>1971-82</td>
<td>3.65</td>
<td>3.02</td>
</tr>
</tbody>
</table>

POLICY RESPONSES TO EXPENDITURES FOR PHYSICIAN SERVICES

The high costs for physician services in B.C. appear to be attributed to high fees plus high numbers of physicians. What policies, then, have been implemented by the MOH to address these issues?

Given a fee schedule 30% higher than the rest of the country as of 1983, it would appear that the B.C. Ministry has avoided holding fees within reasonable limits due to the equally high political costs of such action. This pattern, however, is beginning to show signs of change. Table 12 chronicles fee schedule changes from 1970 to the present, demonstrating that from 1972 to 1982 fees have been steadily increasing annually. A shift occurred in 1982 when half of the fee schedule increase was rolled back for a seven month period. From that time, there have been no actual fee increases although a small increase was granted for overhead in 1983. The current year has witnessed a further change, with a cap being placed on global medical care expenditures so that the first 4% of utilization that exceeds the negotiated global level will be absorbed by the MOH and the next 4% by the medical profession as a fee decrease. The capping mechanism is an attempt not only to limit the price of services but also to begin to put some control on utilization levels that are influenced by the clinical and economic discretion of physicians.

The supply of physicians, on the other hand, is not totally within the control of the MOH. The Ministry of Universities, Science and Communication controls the number of medical school placements which increased from 88 in 1978 to 130 in 1984 although there has been a drop to 121 in 1985. Likewise, federal immigration policies affect physician supply but changes implemented in 1975 have decreased the in-migration of foreign physicians.
Table 12

B.C. Physician Fee Schedule Changes 1970-1985

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Fee Increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 1, 1972</td>
<td>Moratorium on fee increase</td>
<td>5.9%</td>
</tr>
<tr>
<td>April 1, 1973</td>
<td></td>
<td>6.5%</td>
</tr>
<tr>
<td>April 1, 1974</td>
<td></td>
<td>7.56%</td>
</tr>
<tr>
<td>June 1974</td>
<td></td>
<td>7.78%</td>
</tr>
<tr>
<td>January 1, 1975</td>
<td></td>
<td>0.92%</td>
</tr>
<tr>
<td>April 1, 1975</td>
<td></td>
<td>3.09%</td>
</tr>
<tr>
<td>April 1, 1976</td>
<td></td>
<td>12.167%</td>
</tr>
<tr>
<td>October 1976</td>
<td></td>
<td>8.13%</td>
</tr>
<tr>
<td>April 1, 1977</td>
<td></td>
<td>5.53%</td>
</tr>
<tr>
<td>April 1, 1978</td>
<td></td>
<td>7.22%</td>
</tr>
<tr>
<td>April 1, 1979</td>
<td></td>
<td>8.11%</td>
</tr>
<tr>
<td>April 1, 1980</td>
<td></td>
<td>9.70%</td>
</tr>
<tr>
<td>April 1, 1981</td>
<td></td>
<td>14.5%</td>
</tr>
<tr>
<td>August 1, 1981</td>
<td></td>
<td>8.3%</td>
</tr>
<tr>
<td>April 1, 1982</td>
<td></td>
<td>14.0%</td>
</tr>
<tr>
<td>September 1982</td>
<td></td>
<td>7%</td>
</tr>
<tr>
<td>April 1, 1983</td>
<td>No negotiations. 7% rollback ended.</td>
<td></td>
</tr>
<tr>
<td>April 1, 1984</td>
<td>4.2% increase given to compensate for overhead.</td>
<td></td>
</tr>
<tr>
<td>April 1, 1985</td>
<td>Cap placed on global medical care expenditures</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>1.5% increase for population changes; just under 2% increase for expected utilization, compounded for a total of 3.5%.</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Should medical care expenditures rise above these limits, the first 4% above the limit will be absorbed by MSP and the next 4% will be absorbed as a fee decrease by the medical profession.</td>
<td>0%</td>
</tr>
</tbody>
</table>

Source: Stephen Kenny, Executive Director, Medical Services Plan, B.C. Ministry of Health
As part of the B.C. restraint program in 1983, the government decided to restrict the issuance of billing numbers to physicians in an effort to influence the supply and distribution of physicians. In principle, this did not interfere with medical care practice, as the physician could be licensed and could practice but neither the physician nor his patients would be reimbursed for services by the MSP. This policy was challenged in the courts by members of the medical profession and the Medical Services Commission was found to have no legislative authority in the matter. Subsequent to this, Bill 41 was passed on May 15, 1985 providing legislative support for the restriction of the issuance of billing numbers.

The MOH has begun to take a more aggressive stand with respect to both fee increases and the supply of physicians in order to gain better administrative control over medical care expenditures. Areas previously viewed as "untouchable" because of the political costs of medical profession resistance now seem to be fair game for intervention as a result of a change of climate in the province.

**PROBLEM SITUATION**

In comparison to national trends, B.C. has been a relatively reluctant participant in cost control until the 1980s. In an attempt to catch up, the MOH has used "blunt instrument" policy measures such as budget constraints and reduction in bed capacity to bring expenditures in the hospital sector under control. These measures have proven politically feasible and have achieved some success in curbing utilization and controlling costs. Nonetheless, they are
relatively short term solutions to physician generated costs. Constraints on physician supply and fee schedules, on the other hand, have higher political costs and may show results only in the long term.

What has emerged from implementing these "blunt" measures is disequilibrium in the system causing strain and dissatisfaction in all sectors. An abundant supply of physicians is now competing for the use of fewer hospital resources. The clinical discretion of physicians is being threatened by bureaucratic decisions limiting their range of treatment options. Restricted use of hospital facilities indirectly affects physicians' economic discretion and, hence, their incomes. The usual internal political struggles between administrative and medical staff in hospitals have become exacerbated over the use of limited resources.

Tension building in the system may be forecasting a crisis in the not too distant future. The need for alternative solutions to control costs within the context of an oversupply of physicians and a leaner hospital sector is becoming increasingly critical. One possible alternative may be to consider some restructuring to better integrate physician and hospital services in order to influence more cost-effective styles of medical care practice.


5. Personal communication with Glen Benjamin, Financial Administration, Hospital Programs, B.C. Ministry of Health.

6. Figures quoted by Student Affairs, Faculty of Medicine, University of British Columbia.


SECTION II:  STAGE 3 IDENTIFYING RELEVANT SYSTEMS

Section I has outlined the problem situation from the client's point of view and has clarified certain problem areas associated with increased health care expenditures. This expression phase of the methodology is intended to convey the climate of the situation from an understanding of how structure and process relate to the problem situation. Stage 3 focuses on identifying systems relevant to the problem situation, then developing explicit statements about the nature of each system. The purpose is to understand the different perspective that each system has on the problem situation and what the implications might be of having a particular perspective.

Checkland emphasizes that stages of the methodology do not represent rigid boundaries. Rather, he sees fluid interaction between stages as long as the primary task of each stage is respected. Consequently, order may be secondary to the objective of accomplishing the primary task designated for each stage.

From the problem situation described in section I, relevant systems were identified as: the medical profession system, the hospital system and the B.C. Ministry of Health system. Each system is assessed according to the six criteria outlined in chapter 2. In the assessment of each system, elements of structure and process are evident. Technically, these likely should be located in section I but it seemed more germane to this discussion to locate them here. This placement is consistent with accomplishing the tasks of each stage and is not widely variant from the chronological sequence of the methodology.
CHAPTER 5  SYSTEMS RELEVANT TO THE PROBLEM SITUATION IN B.C.

The selection of the medical profession, the hospital and the Ministry as systems relevant to the problem situation in B.C. places certain limitations on how the situation is perceived. All of these systems in different ways are concerned with provision or arranging for provision of health care services and each has some power to influence expenditure levels. Conspicuously absent from these choices is the perspective of consumers of health care services. From the problem situation described, consumers, generally, have not emerged as a constituency concerned about the levels of health care expenditures. Therefore, the consumer perspective will be mentioned in the discussion of individual systems only as applicable. In addition to the views acknowledged here, there may be many other possible perspectives on the problem situation. The purpose of identifying these particular systems is to make their perspectives explicit so implications can be developed for the feasibility of change in the problem situation.

THE MEDICAL PROFESSION SYSTEM

Customers or Beneficiaries of the System

The customers of the medical profession system are individuals seeking medical care in order to improve their health. As a result, they make demands on members of the medical profession who assess the validity of their demands and determine whether medical care is necessary. The health of individuals is presumed to be improved by bringing specialized knowledge to bear in the medical
treatment of individual cases. Physicians benefit economically from using their specialized knowledge to act as gatekeepers of the system and to provide medical care services.

Since the province has delegated self-regulating authority to the medical profession in return for its regulation of standards of practice of its members, it also has benefited from the medical profession system with respect to quality control of minimum standards of service and in the reduction of certain costs. However, as the context of health care has changed over the years to a third party system of payment, the benefits to the province have been increasingly questioned as the monopoly power of the medical profession has been associated with enormous growth in health care expenditures.

Actors in the System

The actors in the medical profession system are distinguished by two levels of operation. On the individual level, physicians, both generalists and specialists, apply their specialized knowledge in the delivery of medical care services. At the collective level, the organized profession applies its specialized knowledge to protect the public by enforcing standards of practice among its members and also acts on behalf of its members in relations with government.

Transformation Process of the System

At the individual level, a professional relationship operates to give patients access to information necessary to make decisions about their health care. The physician, ideally, acts as an agent for patients assuming decision-making authority and accepting responsibility for promoting their interests (n.l
p.49). The delegation of decision-making authority is based on an information gap between physicians who possess highly specialized knowledge about health care and patients who are largely ignorant of such knowledge. Due to the complexity of the technology of health care, it would be difficult and expensive in time and money for patients to attempt to acquire such knowledge. Because of the unpredictable onset of health problems, the mental state of patients could inhibit their acquisition of knowledge or cause acquired knowledge to be used erroneously which might have serious and potentially irreversible consequences for their health. The asymmetry of information present in the physician-patient relationship erodes the principle of consumer sovereignty normally operative in decisions to consume services, leaving patients vulnerable to exploitation by physicians and unable to protect their own interests.

Furthermore, the provision of medical care services assumes that patients' health, subsequently, will be improved. The art and science of medicine, however, are practiced under considerable uncertainty and often no clear or immediate outcomes of treatment are evident. The resultant situation creates ample latitude for the application of discretion in medical practice which adds to patients' vulnerability.

In any decision to consume goods or services, the following elements can be identified: benefit-receiving, cost-bearing and decision-making (n.1 p.52). In the market for health care services, the natural integration of these three elements breaks down. The decision-making function performed by the physician becomes separate from the benefit-receiving function experienced by the patient and the cost-bearing function which largely is assumed by third party reimbursement through the provincial administration of the health insurance
program. If the agency relationship were complete, the physician would take on entirely the patients' point of view considering their preferences and circumstances in the decision-making process in order to maximize the benefit received from medical care. But a number of barriers militate against the re-integration of these elements and make the agency relationship incomplete.

The most important of these is the conflict of interest that exists between the physician acting as an agent for the patient and simultaneously acting as an economic principal on his own behalf supplying medical care services. Distortions arise depending on the extent to which the physician's interests as a supplier of medical care services enter into the agent's decision-making process. Consequently, regulation becomes a necessary institutional response to safeguarding exploitation of patients in an incomplete agency relationship.

At the collective level as well, an agency relationship occurs between the organized profession and the provincial government. Tuohy and Wolfson have argued that this is analogous to the individual practitioner-patient agency relationship and that the relationship between the two levels is interdependent and mutually reinforcing (n.l p.67). The delegation of self-regulating authority to the medical profession is based on the premise that its specialized knowledge enables it to enforce regulation more efficiently by strengthening the likelihood of voluntary compliance of its members. The medical profession protects the public against unqualified practitioners by controlling entry to practice through a licensing mechanism and by setting standards of technical competence and ethical behavior that are enforced through somewhat weaker mechanisms of peer review and chart audits. However, the agency relationship is as incomplete at the collective level as it is at the individual level. Thus,
the potential remains for the medical profession, as an imperfect agent, to use its increased political and economic power to promote its own self interests, increase costs to consumers or misperceive the public interest and offer an inappropriate mix of services (n.1 p.61).

Perspective of the System

The perspective embraced by the medical profession system finds its roots in medical ideology. Professional ideology originates from the technical role of professionals applying specialized knowledge in individual cases (n.1 p.64). While specialized technological roles necessitate the creation of a professional relationship, ideology defines and defends the boundaries of the relationship in the interests of the group. Thus, ideology acts as a bonding device among members of the profession and derives its power from group consensus which serves to distinguish the profession from other occupations. Professional ideology is not static and will change over time with the introduction of new technologies.

The core of values central to medical ideology are objective rationality, altruism, individualism and professional autonomy. The rationalistic orientation leads to an emphasis on quality of care as defined by the medical profession in terms of technical competence. During their professional training, physicians are taught to apply their specialized knowledge without regard to their own interests; the patients' needs always take precedence. Similarly, they are indoctrinated that no two cases are alike and that individuals are the true units of service (n.6 p.934). Thus, the delivery of their professional services involves the unique application of specialized technical
knowledge to highly personal individual cases that require the individual judgement of physicians who take individual responsibility for their treatment decisions. While medical ideology promotes the interests of patients, it also biases the perception of those interests by stressing the technical quality of care rendered in individual encounters. Consequently, the medical profession perceives the public interest as an aggregate of the interests of individual patients— not all the potential beneficiaries of professional services (n.1 p.65).

Professional autonomy is a reward associated with the achievement of professional status. For physicians, this status is accompanied by certain freedoms— freedom to set their own income within the boundaries of fee schedule's and time, to set their hours of work, to practise in their own style, to choose the location of their practice and to whom they will provide service. Over time, the independent autonomous FFS practice has become the organizational arrangement that best embodies the values articulated by the ideology. Fee-for-service remuneration is a crucial organizational element as it symbolizes the maintenance of professional autonomy and control while other methods of remuneration imply some loss of professional control and autonomy. Furthermore, the ideology defends the entrepreneurial as well as clinical discretion of the autonomous FFS practitioners while discrediting any outside interferences perceived to threaten the professional control of medical care practice.

Resistance to change and the preservation of independent and autonomous FFS practice are dominant themes of medical ideology. Blishen's comments summarize these themes:
"Under the present system, many physicians have achieved success or recognition, change may require new professional roles or changes in existing ones and generate new competition. The physician is emotionally committed to a career under the existing system, and from it derives many of life's satisfactions... There is thus a built in resistance to change within the profession particularly when the impetus for change comes from outside with the possibility of outside control of professional activities" (n.7 p.1974).

Due to the medical profession's emphasis on the technical quality of care and its individualistic perspective, the likelihood of misperceptions of the public interest leading to the provision of an inappropriate mix of services is entirely possible. This situation is complicated further by resistance to change. Therefore, the introduction of alternative concepts of medical care delivery by any external group is bound to arouse the medical profession's opposition and distrust.

Ultimate Power in the System

The ultimate power or ownership of the medical profession system lies in the self-regulating authority delegated to it by the province. Because of the costliness of information collection and analysis, error, and enforcement, the province delegates regulatory authority in return for the medical profession policing its members and protecting the public against incompetence (n.1 p.70). This authority is upheld to the extent that trust is placed in the medical profession to honour its responsibilities. Trust is maintained and reinforced by the interdependence of the two levels of the profession. The collective level provides the ideologic framework and parameters for the functioning at the
individual level but, at the same time, it depends on the trustworthiness of the individual practitioners to maintain its trustworthiness with the public and government.

The right of individual practitioners to use their specialized knowledge is dependent on their relationship with the collective level of the profession. The medical profession has the authority to grant, withhold, suspend or revoke licenses to practise. Licensure not only defines the scope of technical competence and ensures the maintenance of certain technical standards but also confers the right to economic rewards conditional on the performance of technical tasks. On one hand, licensure constrains individual practitioners from profiting at the expense of patients; on the other hand, it can act in the self interest of the profession by limiting the number of licenses which then enhances the monopoly profits of those licensed in practice (n.1 p.70).

Remuneration of practitioners is both a collective and individual matter which involves the price and volume of services. The establishment and enforcement of a minimum fee schedule is accomplished at the collective level but is based on the experience of individual practitioners. If individual practitioners are unable to raise prices, they pressure the collective level to increase the fee schedule. If this effort is unsuccessful, they may resort to using their entrepreneurial discretion to change the various quantities of services that they provide, thus increasing the total number of these services and/or the ratio of more expensive to less expensive services. This illustration shows that relevant decisions which serve to reinforce and strengthen the power of the entire group are made at all levels of the medical profession. However, the interdependence and mutual reinforcement of these
levels similarly poses questions about how well the public interest is served by a self-regulating profession.

Environmental Constraints

The medical profession system may be constrained by a number of factors outside of its control. The quality of medical care can be affected by the supply, distribution, knowledge and skills of qualified physicians plus the availability of medical care facilities at the disposal of the physician. The rapid growth of complex and sophisticated health care technology has challenged medical ideology and altered the boundaries of clinical discretion. Likewise, technological change has necessitated patients having a number of encounters with a variety of new personnel and has tended to weaken the sense of trust in the individual practitioner-patient relationship (n.5 p.190).

Although financial barriers to people seeking medical care were removed with the introduction of publicly funded universal health insurance, the provincial government, as the consequent cost-bearer has become acutely aware of the costs of medical care services. The MOH has gradually moved towards attempting to contain medical care expenditures through fee schedule negotiations. More recently it has become involved in issues of the supply and distribution of physicians. Since these measures threaten the autonomy and control of the profession, considerable tension and distrust have been generated between the medical profession and government, often culminating in bitter public confrontation and conflict between the two groups.
Root Definition

The medical profession is a self-regulating body that provides medical care services according to the discretionary judgement of autonomous individual practitioners who act as gatekeepers distributing health care resources relative to their professional norms and their assessment of the needs of persons seeking medical care.

THE HOSPITAL SYSTEM

Customers or Beneficiaries of the System

Physicians are the primary customers of the hospital system and use its institutional facilities, technical equipment and specialized staff to provide medical care for their patients. The economic incentives of FFS practice encourage physicians to utilize hospital facilities as they can see a greater volume of patients for diagnostic and treatment services more conveniently in a shorter period of time, thus reducing overhead practice costs. Patients, obviously, also benefit from the hospital system but the extent of their use of the system is determined by their physician. Other health care professionals such as nurses, physiotherapists, radiologists and an array of other technical staff gain as well from the hospital system as it provides a place of employment for them to utilize their skills.
Actors in the System

Under the requirements of the B.C. Hospital Act, each hospital must have a board of trustees that can be elected, appointed or some combination of both. In general, the boards are composed of lay members of the community and may assume the stance of being a vehicle of consumer participation or that of strictly a management board. Since the board is legally responsible for the administration and management of the hospital, it appoints an administrator accountable for overseeing the general operation and management of the institution. The board obligations also include a legal and moral responsibility for providing a satisfactory level of care to patients.

Physicians are held in high esteem by board members as their services are essential for the board to meet its obligations. Whether membership on a hospital medical staff is a right conferred on physicians who hold a valid license or a privilege granted by the hospital has long been a matter of debate. Acceptance of the latter argument seems to prevail in practice. Physicians, then, are not employees of the hospital, but are entrepreneurs with privileges to use hospital facilities.

Being members of a self-regulating profession, physicians find it difficult to accept accountability to any body outside of their profession. As a result, regulations have been added to the Hospital Act which stipulate a separate medical staff organization be formed in each hospital with by-laws specific to the particular hospital and subject to the approval of the MOH. Under these regulations, the board accepts responsibility for applying the medical staff by-laws in its institution. The resulting structure gives rise to two lines of authority: an administrative line and a medical/technical line.
Numerous other health care professionals employed by the hospital must also meet professional standards of qualification. Many of these groups have become unionized over time and have made demands for higher wages; thus unions have become significant actors in the current hospital system.

Transformation Process

Hospitals originally developed, for charitable reasons, as places to house the indigent and ill. However, as scientific advances increased the complexity and cost of medical technology and contributed to increased specialization in medicine, hospital facilities were used more and more as diagnostic and treatment centres. Concurrent with these trends, hospital capacity was considerably increased during the 1950s due to the federal National Health Grants programs for hospital construction. Physicians began, increasingly, to link the availability of hospital resources to quality of care.

The introduction of the Hospital Insurance and Diagnostic Services Act of 1957 spread the cost of hospital services from the individual to society and substantially improved the financial position of hospitals. Having increased the supply of hospitals, government then subsidized the demand for hospital services based on principles of equity. The use of hospital services was encouraged and hospital intensive styles of medical care practice, lucrative to physicians, were reinforced. The financial involvement of government, also raised questions of accountability for expenditures.

However, the provincial MOH could not control efficiency and effectiveness in hospitals as authority had been delegated to hospital boards for administration and management. Similarly, administrators did not have control of the
technical core within hospitals, as physicians acting as entrepreneurs initiated the use of technical services on behalf of their individual patients, not patients collectively. The Task Force Reports on the Cost of Health Services in 1969 pointed out the need to improve hospital organization in order to link the provision of resources and services to the real needs for care\textsuperscript{10}.

Prior to this hospitals had become concerned with quality of care and had moved towards the adoption of some standards of care through the voluntary acceptance of accreditation programs. Initially, accreditation was concerned with the self-evaluation of institutional standards of medical care but, while this was welcomed by board members, it was resisted by physicians\textsuperscript{11}. However, physicians managed to seize this opportunity to strengthen their hand in asking for more equipment or facilities to improve standards. Although accreditation standards were not linked to cost or demographic need they did help to encourage the development of some comparative data for assessing hospital performance.

Perspective

Hospitals began as autonomous voluntary non-profit associations concerned with serving community interests by raising money for the establishment and expansion of facilities. They were viewed as an oasis where those suffering and in need would not be turned away and where physicians could use the resources of the facilities to help those requiring medical care. This benevolent attitude proved financially difficult to manage as often hospital revenues did not cover expenditures. The introduction of universal publicly funded hospital insurance
provided financial support, but served to reinforce the existing structures of these services.

Furthermore, the insurance program placed the hospital in a partnership with government signalling a shift in the role of the hospital from an autonomous voluntary association to a government subsidized agency. Agnew has commented that this was not a static relationship bounded by legal contract or incorporation but a flexible ill-defined relationship changing all the time with the province controlling the purse strings (n.11 p.177). As a result, provincial hospital associations often assumed the role of buffer groups attempting to interpret the hospital perspective to government.

With the introduction of third party payments, the provincial MOH needed to gain administrative control over hospital expenditures but the hospitals had no incentives for improved productivity and efficiency. The hospital was reimbursed for the cost of services rendered. If it produced those services more efficiently, the savings did not usually accrue to the hospital but were reclaimed by the Ministry. The main area of leverage available to the Ministry was funding so it gradually intervened to alter hospital funding patterns and incentives as a means of reducing expenditures.

The provincial MOH has used this leverage to implement control strategies such as restrictions of global budgets and capital expenditures. These strategies have proven politically acceptable and successful in containing hospital expenditures in the face of incentive structures that do not promote cost consciousness on the part of physicians or patients. Tuohy points out that while physicians continue to exercise discretion over the use of a leaner hospital system these control strategies increasingly threaten to
constrain their clinical as well as economic discretion. In addition, Evans has described this approach as "sitting on the lid" which creates a build up of pressure in the system that in the longer term could lead to an explosion. A change in policy direction may need to consider the integration of organizational as well as funding mechanisms to create incentives for efficiency.

Ultimate Power

The Hospital Act allows the MOH to take over any hospital in B.C. and impose its own public administrator if it finds the hospital management to be ineffective. Only on rare occasions, in extreme circumstances, has it been necessary to use this authority. Otherwise, within the hospital system, the board, given its mandate for financial accountability and administrative and management responsibility, has ultimate authority. While this authority is accepted by the administrator and most hospital staff, it may be challenged by the medical staff.

The administrative and medical/technical lines of authority facilitate a dual system of values which makes the hospital vulnerable to conflict and power struggles between these systems. Should the bureaucratic values of the board and administration concerned with efficiency and financial control dominate? Or should professional values relating to service delivery and quality of care take precedence? Perrow suggests that power shifts occur in relation to the influence of technology on the hospital's stage of development. Furthermore, Harris has commented that:
"Resource allocation decisions in hospitals are made not by administrators or financial intermediaries, but in reality by physicians who are motivated by a 'technological imperative' to expand the quality of services without constraint"\(^{17}\).

In the past, medical authority was reinforced by a funding structure based on cost reimbursement. The current constraints on hospital expenditures and changes in budgeting have altered this situation, threatening their authority and exacerbating conflict with the hospital administration.

Environmental Constraints

The hospital clearly has little latitude for negotiation with the MOH and is compelled to accept the Ministry's funding policies if it is to survive as an organization. While these policies reduce expenditures, they, also, create considerable dissatisfaction and anxiety among the hospital's primary customers - the physicians and the patients, due to cutbacks in services and resources. In this restrictive atmosphere, the hospital remains under pressure from new developments in technology and medical research. Advances in these areas continuously manufacture demands for new technology which are based on the assumption that there is a relationship between attractive new inputs into the production of health care services and the output of "quality" care. Since new technologies are largely unevaluated, their effect on quality may be of questionable value.

Since constraints on hospital expenditures in turn mean constraints on incomes and jobs, and since the hospital is a labor-intensive institution, tension has developed between unions representing hospital employees and hospitals. Threats of strikes or work cutbacks may hold the possibility of
adversely affecting patient care. Strains from external constituencies, consequently, make managing the hospital system increasingly challenging.

Root Definition

The hospital system represents a government subsidized institution that serves the community by supplying a facility equipped with technological resources and staff and by granting privileges to physicians to use hospital facilities for the diagnosis and treatment of their patients.

THE B.C. MINISTRY OF HEALTH SYSTEM

Customers or Beneficiaries of the System

The taxpayers of B.C. are the consumers of health care services and are the primary customers of the MOH system. They pay taxes, premiums and hospital user fees; in return, they expect that the Ministry will arrange and pay for the provision of necessary health services for their use. Physicians are beneficiaries of the system as they receive their incomes through fee payments made by the MSP. Indirectly, they also benefit from the facilities, technical equipment and staff of hospitals which are financed by the MOH. Health care institutions which are mainly acute care hospitals, benefit from the MOH, as well, by receiving funding for their services and the maintenance of their facilities. Finally, health care professionals and technical personnel gain from employment created in institutions as a result of government funding.
Actors in the System

The senior actors in the MOH system are the Minister, who is an elected official, the Deputy Minister and the senior ADM of Management Operations. As mentioned earlier, the latter two appointments are susceptible to political influence and likely to be sympathetic to Social Credit policies and the corporate objectives of government. The ADMs comprise the next level of actors. (Refer to B.C. Ministry of Health Organization p.23). Since hospital programs account for approximately 50% of the MOH budget, the ADM of institutional services is the most dominant actor at this level. Similarly, at the executive director level, the Executive Director of the MSP is a prominent actor as its budget is roughly 25 to 30% of the total MOH budget (n.18 p.43). As well, the Executive Director of Planning, Policy and Legislation plays a significant role in advising senior staff on policy directions.

Transformation Process

Since the MOH is the largest spending sector of the B.C. government, it is not surprising that the issue of financial control of expenditures has become a central concern for ministry managers. Increased attention to financial control can be linked to changes in federal legislation, provincial government structures and recession in the B.C. economy.

The introduction of publicly funded universal health insurance extended the federal role in shaping the health care system and placed the burden for operation and administration of the plan on the provinces because of their jurisdictional responsibility. Both the Hospital Insurance and Diagnostic Services Act, 1957, and the Medical Care Act, 1966, offered a 50% federal cost sharing
arrangement with the provinces for services provided in hospitals or by physicians. With the removal of financial barriers to health care, a concurrent rise in patient-initiated utilization or demand for health services was not experienced. However, expenditures did escalate after 1968 suggesting perhaps that provider-initiated utilization was an important component. Reasons for increased costs and expenditures were attributed to increased wages, inflation, increased technology, more hospital beds and more employees. As well, the number of physicians in Canada increased almost 75% between 1966 and 1975. What had occurred was that the open-ended cost-sharing agreement, while equalizing the plan across the country, had inadvertently reinforced distortions in the existing structures of health care delivery and had diluted incentives for economy.

Pressure to control costs and rationalize the system became evident by the proliferation of federal reports within a five year period. The Task Force on the Costs of Health Services in 1969 pointed to the misallocation of resources in the health care system, then, among other things, the Community Health Centre Project in 1972 advocated structural reform. The Lalonde Report in 1974 raised questions about value for money and implied that increased expenditures on health care services had little effect on the underlying causes of mortality. The Established Programs Financing Act of 1977, consequently, abandoned cost-sharing in favour of a block funding arrangement that linked federal contributions to changes in GNP. Increases in expenditures, from then on, would have to be met by increases in provincial taxes or reductions in benefits. These changes transferred not only greater accountability and responsibility to the provinces but promoted greater flexibility to employ...
alternative structures.

The Hall Commission, Health Services Review, 1980, the Parliamentary Task Force on Federal-Provincial Fiscal Arrangements Report, 1981, and the Canada Health Act, 1984, all reaffirmed the principles of the national health insurance program - accessibility, comprehensiveness, universality, portability and public administration. The Canada Health Act ensures that provinces violating these principles by permitting user fees or extra billing will be penalized dollar for dollar in their federal grants. While the provinces have objected to interference of this Act with their discretionary powers, they are left, nonetheless, with a narrow range of options for controlling expenditures for health services.

Within B.C., the Social Credit government, elected in 1975, implemented structural changes in government, such as cabinet committees and a Treasury Board, which created a highly centralized bureaucracy with increasing administrative control concentrated in the Cabinet. Consequently, MOH expenditures became subject to scrutiny by the Treasury Board to ensure their consistency with the corporate objectives of the government. The MOH was no longer able to set its own priorities and financial control over its operation had been considerably tightened (n.19, p.34).

The effect of federal legislation to centralize funding and changes in provincial government structure to centralize control have made the MOH increasingly accountable. At the same time, the Ministry's options for gaining control of health care resources have been limited as the problems of increased expenditures are rooted in the structures and incentives of the hospital and medical care systems. Because authority has been delegated to these groups
through legislation, the MOH has little influence over their activities. Leverage available to the Ministry over these groups has been confined mainly to moral suasion or intervention in funding. Under economic pressures from recession and slow recovery, the interventionist approach has gained popularity, as few substantial effects have resulted from moral suasion.

Perspective in the System

Given the constraints on federal health funding imposed by legislation and the current recession, B.C. has chosen to raise revenue through taxation and to "downsize" the present system. This perspective is consistent with the restraint and privatization ideologies of the Social Credit government that preaches that everyone must share the effects of economic discomfort and that much of what is being done in the public sector could be done in the private sector. A special income tax has been levied on taxpayers purportedly to cover penalties paid to the federal government for hospital user fees. Similarly, those employed in the health care system will feel the effects of downsizing as attempts are made to bring the system under control.

Crichton (n.27 p.10) suggests that downsizing in B.C. appears to take three main courses:

1) considering restructuring government and the health service delivery system;
2) considering how to improve management practices within the two related systems;
3) reviewing inputs into the health system, particularly manpower production, control and use.
Concurrent with the noted changes in government structures, the MOH has undergone reconstruction "from a clerical machine, which picked up grants from Ottawa, into a more professional managerial organization" (n.27 p.15). Old informal networks of medically-oriented bureaucrats have been replaced with new proactive power structures\(^2^8\) of professionally trained managers oriented towards supply side dynamics of conservation, rationing and control (n.19 p.33). The new managers may be less sensitive to the underlying issues of health care associated with powerful professional interests and societal attitudes towards health and illness (n.19 p.34). However, they are very much in tune with the corporate objectives of government and are comfortable bringing MOH objectives into alignment with those objectives.

The role of the MOH has been transformed from that of an insurance agency bill payer to an interventionist agency struggling to increase public accountability (n.28). The provincial government has taken a business-like approach of corporate rationalization in order to gain control over the resources of health care. Success has been achieved in limiting expenditures through control strategies in the hospital sector. The introduction of Bill 41 to limit billing numbers to physicians as well as the placement of a global cap on funds allocated for medical care indicate stronger interventions into the medical care system. As these regulatory strategies may eventually reach practical and political limits, a longer term view of vertical integration strategies may be on the horizon.
Ultimate Power in the System

The ultimate power in the MOH system is vested in the Minister and the Deputy Minister. The power of these positions is determined by their ability to manage effectively the MOH operation and to satisfy, at least minimally, the expectations of constituencies strategic to ministry functioning.

The Minister, who is kept informed of ministry operations by the Deputy Minister, decides policy direction, but a major thrust of his position involves the maintenance of relationships with both internal and external constituencies. As an elected official, he has allegiance to constituents in his riding as well as to members of the Social Credit party. Being a cabinet member, he must be sensitive to general issues of government in addition to those directly concerning his Ministry. He must be able to advocate the MOH position in Cabinet, with Treasury Board and with other Ministries competing for resources. In negotiations with the federal government, similarly, he must present the position of the province and the Ministry. The maintenance of his credibility with powerful interest groups, such as the medical profession, is also critical to gaining support for new policies.

The Deputy Minister, on the other hand, has more managerial responsibility for ministry operations and advises the Minister on policy matters. Although this is not an elected position, political influence is involved in the appointment. It is critical, therefore, that the Deputy Minister maintain a high degree of credibility with both his political and bureaucratic constituencies to assure effective functioning of the Ministry. He treads a fine line, gaining the full support of staff for the Minister while, simultaneously, smoothing the way for staff to carry out their duties without political interference.
Minister's credibility, as well as that of the Ministry, depends a great deal on the quality of policy advice offered by the Deputy Minister. Consequently, the interdependence of these positions, as well as the incumbents' ability to assess the strategic importance of internal and external constituencies, is crucial to their acquisition and maintenance of power.

Environmental Constraints

Federal-provincial relations regarding health services have been notoriously contentious. While health is jurisdictionally a provincial matter, federal legislation has imposed financial arrangements and standards that constrain the discretion of provincial governments and ministries. Furthermore, within the provincial government, constraints can be placed on the MOH, by Cabinet, by Treasury Board, and by other ministries. Due to competition for limited resources, intense rivalries can develop between ministries as they attempt to minimize expenditures and maximize revenues in order to gain a more favourable position with Treasury Board. Powerful interest groups, as well, can thwart the implementation of MOH policies. For example, a recent court case challenged the policy of restricting billing numbers to physicians although that situation has now been remedied with the passing of Bill 41. The press, increasingly, act as watchdogs on the Ministry, publicizing reactions to new policy in addition to the positions of lobby groups vis-a-vis the Ministry. The public exercise the ultimate constraint on the Ministry, for if they become dissatisfied with policies, they hold the power in a democratic society to elect a new government. Environmental constraints likely to affect MOH functioning have been merely highlighted here in order to illustrate the treacherous path
that the MOH must walk in order to achieve its goals.

Root Definition

The MOH system is a political and bureaucratic organization that is publicly accountable for seeking value for money in the provision of quality and accessible health care services for the population of B.C.
Once a province determines that regulation is necessary for the protection of consumer interests, it has the choice of exercising regulatory authority directly or delegating it to an institution representing providers of the service. Like a consumer, it will seek to maximize its benefits subject to cost constraints.

To regulate effectively the province would have to access the specialized body of knowledge of the provider group and incur the costs of mastering such knowledge. Then, it would need to establish institutions and hire expensive personnel to enforce the regulations which may create difficulties for gaining compliance from the group. Consequently, the costs incurred from delegating self-regulating authority may be more attractive than those of direct regulation to a provincial government.


8. Hospital Act, R.S.B.C., 1979, c.176.


18. Province of British Columbia, Ministry of Health Annual Report 1983, p.43. This figure is derived from the detailed expenditures by principal categories in the Ministry of Health for the fiscal year 1982/83. Since premium revenues are excluded, the figure represents expenditures without adjustment for revenues.


SECTION III: STAGE 4 MODEL BUILDING

Section I has described the problem situation of increased expenditures for health care services in B.C. from the Ministry perspective in addition to clarifying the client's roles in that situation. Section II then identified systems relevant to the problem situation and attempted to understand their particular perspectives. The purpose of section III is to assimilate this information and develop a model for change, as outlined in Stage 4 of the methodology, that should improve the problem situation.

Within the frame of reference of this study, the client has expressed specific interest in the HMO model as a possible solution to the problem situation. Therefore, rather than developing a model from the problem solving process which is unique to this situation, the HMO model will be explored in Part A: Understanding the HMO Model which includes chapters 6 through 11. Since this exploration will necessarily be a description of the HMO model in its American context and since this study is concerned with the possible application of this model in B.C., Canadian experience with alternate forms of medical care practice relevant to the HMO model will be interspersed throughout the discussion. Part B: Accommodating the HMO Model involves stage 4B of the methodology which considers modifications of the model to facilitate accommodation to the particular problem situation. Thus, chapter 12 looks at various aspects of the HMO model and issues surrounding its accommodation to the health care structures of B.C.
PART A: UNDERSTANDING THE HMO MODEL

CHAPTER 6 THE HMO MODEL

INTRODUCTION

Health maintenance organizations, as noted earlier, evolved from the concept of PGP. The report of the Committee on the Costs of Medical Care in the early 1930's was the first official legitimation of this concept. It argued:

"that the union of prepaid financing with physicians' group practice was the most rational response to the economic uncertainties of the Depression and to the powerful forces of specialization and technological development in medical science".

The medical profession, historically, has viewed PGP as a contentious deviation from the traditional FFS practice of medicine. Despite this resistance, PGP gradually gained social acceptance during the 1950's and 1960's, often by providing services in underserviced areas. Experience, in general, showed that PGP's were able to provide good quality medical care for lower than prevailing average costs of FFS practice.

Following the introduction of Medicare and Medicaid legislation in 1965, the U.S. federal government became a purchaser of health care services, thereby becoming acutely aware of the increasing costs of such services. As a result, a report on The Federal Role in Health, in 1970, called for the government to rationalize resources in the health sector, and criticized the lack of a national health policy. Momentum was building for a "health care crisis".

Baumann has commented that the pressures of rising costs, the growing politically articulated perception of health "as a right" by the public, and the widespread recognition that more dollars would do more harm than good unless
channelled to affect the organization of resources, led to the creation of a critical mass supportive of activism and change in the health care system. Given the immediate need to respond to this challenge, the HMO strategy introduced in President Nixon's 1971 health message to Congress was both timely and practical. Dr. Paul Ellwood had coined the phrase "health maintenance organization" in 1970, as a way of recasting the logic of PGP and giving it political viability. The term intentionally emphasized prevention and health maintenance in order to deter the wrath of the medical profession associated with PGP. As the cornerstone of a national health strategy, Ellwood felt HMOs would re-orient the health industry, due to their largely self-regulating nature which was based on the market principles of competition and pluralist choice. The strategy had enormous ideological appeal to political conservatives anxious to decrease regulation. Consequently, the HMO Act of 1973, gave legitimacy to HMOs as a structure in the American health care system.

What emerged from this process were two distinct issues. First, a discussion developed of the HMO concept as an efficient form of organization for delivering quality health care services at lower costs developed. Second, the challenge of responding to a crisis placed the HMO strategy on the political agenda as a possible catalyst for restructuring the health care system. The process, however, caused a blurring of these issues, since the political rhetoric about HMOs often clouded and confused an understanding of the reality of the functioning of an HMO. Therefore, the following discussion will try to sift rhetoric from reality by describing, first the structure and performance of the HMO, and then the policy strategy of using HMO's as an instrument for
restructuring. The selection of factors included in the discussion will be prejudiced in favour of factors likely to be relevant to the Canadian context.

PROBLEMS OF DEFINITION

Health maintenance organization is a vague term that challenges precise definition. The term is an attempt to clarify a highly complex organization that links a financial mechanism with a particular mode of health care delivery that facilitates the vertical integration of medical and hospital care services. In theory, the HMO is able to place greater emphasis on preventive care because it offers different financial incentives to providers. The lack of specificity in the term, however, has made it vulnerable to a variety of interpretations.

Some would equate the term with PGP, as characterized by the Kaiser Health Plan. Others would refer to the legislative definition in the HMO Act, but this was so restrictive initially that it excluded many organizations considered as HMOs and required successive amendments. The origins of the term, in political rhetoric, reflected an emphasis on meeting political objectives rather than defining a form of organization. Depending on the perspective, be it political, economic, legal or professional, the definition is likely to differ. In an attempt to gain an objective perspective on HMOs, generic elements common to all HMOs and the relationship between these elements will be described, and then their variant characteristics will be identified.
GENERIC ELEMENTS

A. The HMO assumes contractual responsibility to provide or assure the delivery of a stated basic range of health services. This includes at least ambulatory care and inpatient hospital services.

B. The HMO services a population defined by enrolment in its health plan.

C. Subscriber enrolment is voluntary.

D. The consumer pays a fixed annual or monthly payment that is independent of the use of services. (This does not exclude the possibility of minor charges related to utilization, e.g. deductibles or co-payments).

E. The HMO assumes at least part of the financial risk or gain associated with the provision of services.

These basic elements provide the grounds from which an HMO can be distinguished from other forms of health service delivery. At the same time, there may be variation above these minimal expectations across HMOs. For example, some HMOs may provide more than basic services, if there is a demand in the area or some may vary the degree of financial risk they assume.

RELATIONSHIPS BETWEEN GENERIC ELEMENTS

Having established some baseline criteria, it is important to understand the relationships between these elements. In this case, risk is the theme that gives meaning to these relationships, as illustrated in figure 4. Risk in this sense is defined as the possibility that revenues will not be sufficient to cover expenditures incurred in the delivery of services specified in the contract with the enrollee (n.4 p.125).
Figure 4

Relationship Between the Generic Elements of an HMO

<table>
<thead>
<tr>
<th>Risk Pooling</th>
<th>Risk Transfer</th>
<th>HMO Risk Management</th>
<th>Underwriting</th>
<th>Incentive/Risk Sharing</th>
<th>HMO Management Control</th>
<th>Financial Planning</th>
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</thead>
<tbody>
<tr>
<td>Voluntarily enrolled population</td>
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RISK POOLING - THE ENROLLED POPULATION

The voluntarily enrolled population chooses the HMO as a source of health care during a period of open enrolment conducted by the HMO. Individuals or families can enrol directly with the HMO. Most frequently, however, enrolment is done through an employer who has a group contract with the HMO to provide services to employees and their families. Under the HMO Act, an employer with twenty-five or more employees must offer an HMO as an alternative to other health programs funded by the employer. The Act requires this only if there is a federally qualified HMO in the area. But if there is a federally qualified group practice HMO and an Individual Practice Association (IPA) HMO in the same area, regulations require that both be offered as options to employees. It is possible that federally non-qualified HMOs could be included in this choice, in certain circumstances. Accordingly, the employee is assured of at least a dual choice situation and, conceivably, multiple choices. With a group contract, the employer often pays part or all of the premium, making the enrollee less sensitive to the cost of purchasing HMO services.

For the individual or family, enrolment means that they have a legal right to expect necessary health care services to be provided by the HMO, whereas under the FFS system, the provider is under no obligation other than an
ethical responsibility to provide service. Enrollees, then, are assured access
to health care services within the boundaries of their benefit package. While a
comprehensive benefit package is likely to cover the greater majority of health
risks, there may be some residual risks that will remain the responsibility of
enrollees. They may need to self-insure against such risks and, if necessary,
assume the costs of out of plan services.

With some HMO services, there may be co-payments or deductibles requiring
enrollees to pay out-of-pocket costs above the basic premium. These additional
payments are made on the receipt of services and are set in accordance with
regulations of the HMO Act. These payments would not be permitted under the
regulations of the Act if they were viewed as a deterrent to seeking health care
services (n.4 p.53). Co-payments and deductibles charged by HMOs tend to be
lower than those charged by traditional insurers although this situation may be
rapidly changing due to more intense competitive pressure on HMOs.

In general, enrollees would receive the majority of their health care from
the HMO, but Medicaid recipients may be exceptions. When Medicaid recipients
choose HMO enrolment, they normally forfeit their eligibility to see FFS
practitioners. Often bureaucratic complications arise so the Medicaid recipient
may be simultaneously eligible for both FFS and HMO services. Until the
situation is corrected, these enrollees may use out of plan FFS practitioners in
addition to HMO services at no cost to themselves (n.7 p.324).

Having an enrolled population, the HMO knows for whom it is obligated to
provide service. The risks of the population are pooled, combining both high
and low risk factors such as age, sex, socio-economic status, occupation and
disease risk. The dual choice provision of the HMO Act requires that an HMO be
offered as a health care alternative to employees in certain circumstances. This option may bias HMO enrolment in favour of employed populations as it facilitates their marketing to industry. Since employed populations are likely to be healthier than unemployed populations, the risk assumed by the HMO may be reduced. In 1983, 12,490,780 Americans were enrolled in HMOs, of that number, the elderly and poor were significantly under-represented with 492,035 Medicare enrollees and 258,272 Medicaid enrollees. To be fair to HMOs, problems of retrospective cost reimbursement from the Medicare and Medicaid programs have contributed to the low numbers. Nonetheless, a bias in population composition may have implications for the evaluation of HMO performance.

In any event, the defining of a population through enrolment allows the HMO to plan financially, since it can estimate to some extent the demand for service. Furthermore, voluntary enrolment places the HMO under competitive pressure to meet the demands of its consumer population while containing costs so that premiums can remain competitive in the marketplace. Unless these conditions are met, enrollees may be encouraged to seek services elsewhere.

RISK TRANSFER – THE CONTRACTUAL RESPONSIBILITY

The Policy

By enrolling in an HMO, consumers transfer their risk of incurring costs through occurrence of illness to the organization, expecting some guarantee of service delivery in such an event. This risk transfer is formalized in a policy outlining the obligations of both the policy holder and the HMO. It describes the coverage to be provided by the HMO and the premium level to be prepaid by
the consumer for the availability of a certain range of services that may be needed at some future date.

If consumers enrol directly with the HMO, they are the policyholders. But, if enrolment occurs through a group, such as an employer or union, representatives of that group are the policyholders. In this case, the individual consumer is not the policy holder but has a signed enrolment agreement and is given a brochure detailing benefits and exclusions. Problems can arise here, if benefits and exclusions are not fully described or adequately communicated to the enrollee. This kind of situation can result, among other things, from overly aggressive marketing techniques.

Benefits

The following discussion regarding benefits and premiums will focus on the requirements of the HMO Act. Since 59% of HMOs in the United States are federally qualified\(^1\), it was felt that the federal guidelines would offer the most representative picture. Nevertheless, it is acknowledged that non-qualified HMOs may deviate from these norms.

The HMO Act requires a very comprehensive benefit package as a prerequisite to qualification. It lists basic health services that must be provided by every HMO, in addition to a broad range of supplemental services to be offered at the option of the HMO. When basic services (and supplemental services if contracted for) are medically necessary, they must be available and accessible twenty-four hours a day, seven days a week. If enrollees become ill outside their HMO area they must be reimbursed by their HMO for any expenses incurred for medically-necessary services obtained in that location before they are able to return to
their HMO for service. These regulations are intended to assure that consumers will obtain needed services in an appropriate and convenient manner. The basic health services defined by the HMO Act are:

1. Physicians' services (including consultant and referral services by a physician)
2. Inpatient and outpatient hospital services
3. Medically necessary emergency health services
4. Short-term (not to exceed 20 visits) outpatient evaluative and crisis-intervention mental health services
5. Medical treatment and referral services (including referral services to appropriate ancillary services) for the abuse of or addiction to alcohol and drugs
6. Diagnostic laboratory and diagnostic and therapeutic radiologic services
7. Home health services
8. Preventive health services (including immunizations, well-child care from birth, periodic health examinations for adults, voluntary family planning services, infertility services, children's ear examinations, and children's eye examinations to determine the need for vision correction)

If the necessary health manpower is available and if enrollees contract for such services, the following supplemental services may be included as part of the basic package, at the option of the HMO (n.11 p.53).

1. Services of intermediate and long-term care facilities
2. Vision care not included as a basic health service
3. Dental services not included as a basic health service
4. Mental health services not included as a basic health service
5. Long-term physical medicine and rehabilitative services, including physical therapy
6. Drugs prescribed in connection with the provision of basic or supplemental health services

Premiums

Premiums are fixed payments made annually or monthly to the HMO by enrollees, independent of the use of services and exclusive of co-payments or
deductibles. This fixed pre-payment reduces the financial barriers to enrollees seeking care. The HMO Act requires that premiums for both basic and supplemental services be determined uniformly under a community-rating system in an HMO.

Community rating is a system that accounts for the total experience (or projected use level) of the enrollees and uses such data to determine a capitation rate that is common to all groups, regardless of the utilization experience of an individual or of any one group (n.4 p.324). This system spreads costs over the total membership of the HMO. Thus, each person or family enrolled under a specific benefit package should pay exactly the same premium. Under this system, the capitation rate is equivalent to the premium, whereas other rating systems might adjust the capitation rate by adding load factors and charging premiums based on previous utilization experience. Some non-qualified HMOs may use an experience-rating system.

This is not to say, however, that every enrollee in an HMO pays the same premium. Premiums vary according to the benefit packages available. In addition, the legislation allows for small nominal differentials in premiums among the multiple groups to which HMOs market to encourage HMO enrolment.

Owing to the fact that HMOs operate in a competitive marketplace, premiums between HMOs may vary as well. Similarly, HMOs compete with traditional health insurers who can offer lower premiums for less comprehensive benefits but add co-payments and deductibles. Young, healthy consumers, with lower health risks may be attracted to these plans with restricted benefits and lower premiums. As a result, the HMO may absorb a remaining consumer population with possibly higher risks. Evidence suggests that total medical care expenditures which
include premiums and out of pocket costs are lower for HMO enrollees than for people with conventional insurance\textsuperscript{12}.

**RISK MANAGEMENT - UNDERWRITING AND RISK SHARING**

Health maintenance organizations are not only health service delivery mechanisms but also insurers for those who seek their services (n.4 p.166) as illustrated below.

**Figure 5**

HMO Insurer - Provider Relationship

- **HMO**
- **INSURER & PROVIDER**
  - RECEIVE A CONTRACT FOR A COMPREHENSIVE BENEFIT PACKAGE
  - PAY A FIXED PREMIUM
  - ENROL THROUGH EMPLOYER GROUP OR DIRECTLY WITH HMO
- **HEALTH CARE SERVICE DELIVERY**
  - HOSPITAL CARE
  - ANCILLARY SERVICES
  - MEDICAL CARE
- **NEEDED SERVICES ACCORDING TO BENEFIT PACKAGE**
- **INDIVIDUALS & FAMILIES**

**Underwriting**

The insurance functions of risk management are necessary for the HMO to attain financial stability. Like other health insurers, an HMO offers indemnity or protection to its enrollees against loss due to the costs of health care services in the event of illness\textsuperscript{13}. Having assumed this risk, an HMO seeks to arrange the distribution of risk among its various components in order to exert control over the degree of risk that it is willing to assume. Underwriting is the process by which risk in the enrolled population is determined and evaluated. Actuarial analyses which involve the calculation of
premium rates are associated with the underwriting process. However, HMOs may choose to contract out actuarial analyses to insurance companies with expertise in this area, rather than bringing actuarial expertise into the HMO. The choice tends to depend on the stage of development of the HMO.

The central activities of the HMO associated with underwriting are marketing, and financial planning which involves the analyses of need, demand, capacity and flow of funds. Each HMO board determines several underwriting assumptions or rules that describe the general acceptability of risks. These rules govern the selection of target groups to which the HMO markets its services. The rules might consider such things as size and composition of the group, industry or type of company, location, or previous coverage experience of the group. Like the actuarial function, some HMOs may contract out marketing to an insurance company rather than perform the function itself.

Through marketing to selected target groups and setting premium rates, the HMO strives to manage the risk associated with its enrolled population. The HMO Act, moreover, recognizes the need to protect the consumer and the HMO from financial disaster caused by large and unusual expenses or losses. Hence, it provides for a reinsurance mechanism, in order to avoid any temptation to the HMO to provide less or lower quality service as a means of protecting its reserves.

Reinsurance permits any organization serving an insurance function, which an HMO does through its financial obligations to provide services for a fixed premium, to purchase insurance from another company to protect itself against excessive losses (n.7 p.9). For example, the HMO might reinsure to cover expenses above $5,000 per enrollee per year or it might reinsure for certain
groups such as Medicaid enrollees. Reinsurance may be more a necessity for new developing HMOs than for established ones. Older HMOs are likely to have larger reserves and to pool more risks so that they are less vulnerable to a few large losses. To self insure against such losses is probably preferential to their paying expensive reinsurance premiums to outside insurers which then would have to be factored into premium rates. Since a generic element of an HMO is to accept at least part of the overall financial risk or gain, risk cannot be shifted totally to an external third party through reinsurance. The HMO Act specifies limits for reinsurance coverage for federally qualified HMOs.

Risk Sharing/Incentives

The fixed prepayment made to the HMO could offer an incentive for enrollees to use services as it reduces financial barriers to seeking care. The HMO, however, operates on a fixed budget derived largely from premiums, so providing more service will not increase revenue. Thus, the HMO has an incentive to reduce service utilization and contain costs. To ensure the achievement of these objectives, the HMO can structure internal incentives for risk sharing among its major provider components: the insurance plan, the physicians, and the hospital. Each of these components may be a separate legal entity with which the HMO contracts, or it may be part of the HMO structure. The particular organizational arrangements do have some impact on risk sharing.

Incentives and risk-sharing formulae serve to increase the integration of these components. For example, some risk is shared with enrollees through the cost of premiums but the insurance plan must be able to market competitive premiums to maintain enrolment. The most expensive service offered by the HMO
is inpatient hospital care, which, in other structural situations, is known to be a significant area of unnecessary utilization (See n.4 and n.7). If physicians use hospital services unnecessarily for enrollees, hospital costs to the HMO will increase. In turn, the cost of premiums will be forced up, making the HMO less competitive, whereby it will lose enrollees and its financial position will be weakened.

One of the key philosophical issues that has been associated with HMOs has been risk sharing through provider incentives to control excess utilization and encourage the efficient use of facilities and resources. These incentives take the form of payment mechanisms which give physicians a financial stake in the operation of the insurance plan. The payment mechanisms will be discussed later at length. Suffice to mention at this point that capitation and salary, often in combination with a formula for profit sharing, are the most common methods.

While physicians are given incentives to control hospital use, the HMO, similarly, provides incentives to hospitals to contain costs through payment mechanisms and competitive pressure. In general, HMOs contract with independent hospitals for the use of inpatient facilities and, in some cases, for outpatient diagnostic and treatment services. If possible, the HMO strives to reach a fixed cost payment agreement for hospital services, then, the hospital accepts the risk for excessive costs or inefficiencies in so far as these fall within its domain. Again, these specific hospital payment mechanisms will be discussed later in detail. Also, should the price of hospital services not remain competitive, the HMO might transfer its contract to another hospital or might
choose to provide the service itself. These incentives, accordingly, tie the hospital to the financial operation of the HMO.

MANAGEMENT CONTROL

The primary method of administrative control in the HMO is financial management that addresses both the short and long term. The financial tools of budgeting, actuarial analysis, underwriting, cash flow, and ratio analysis bring the various components of the HMO together, giving the manager a basis to control as well as evaluate HMO activities. However, financial planning assumptions, consistent with the HMO's objectives, need to be developed as guidelines to controlling risk. Frequently, these include: decisions about staffing ratios, for example, the numbers of physicians or nurses relative to the number of enrollees; assumptions about level, type and sharing of risk; projected utilization rates; and assumptions about local morbidity, mortality, and disability rates (n. 4 p. 340).

Several models of financial planning are available to the HMO. Figure 6 outlines one possibility. Each model, essentially, develops estimates of costs, including medical care, hospital care and administration. Costs are then compared with revenue from various sources: premiums, fees-for-service, co-payments, sales of drugs and supplies, and government loans or grants. This process facilitates a cash flow analysis to determine the financial solvency of the organization. With this type of analysis, the administrator is able to gain greater control over resources so that they can be allocated in such a way as to
Figure 6
An Example of a Financial Planning Process in an HMO

optimize organizational performance within the constraints of a relatively fixed revenue base.

In summary, the HMO creates a health care delivery system bounded by financial imperative. Because of a defined population with a contract for a specified range of services, staff resources, for example, physician availability and bed capacity in facilities, can be more efficiently allocated. In addition, the incentives offered to providers may improve the technical efficiency of the provision of necessary care to the enrolled population. Furthermore, the tight integration of the financial insurance mechanism with the service delivery components encourages stronger administrative control of resources and greater accountability for performance.

COMPARABLE CANADIAN MODELS

The HMO model developed in the context of a largely private and competitive market for health care services. Entrepreneurs, challenged by competition and pluralism, took the initiative to develop HMOs in response to expressed needs and demands for alternative forms of health care delivery to the traditional FFS system. The market structure created by the Canadian publicly funded universal health insurance program, in contrast, offers few incentives for experimentation with alternate forms of health care delivery to providers or consumers. Although the program has substantial public and political support, it has become increasingly costly. This has prompted government interest from time to time in alternate forms of health care delivery as a means of controlling costs.
The Community Health Centre Project in 1972 was a federal government initiative towards support for alternate forms of health care delivery. It proposed the restructuring of primary care medical services through the development of CHCs as non-profit organizations linked with the hospital and other health services in a fully integrated health services system. Centres were to receive global or block funding and citizen boards would be accountable for these funds. The concept advocated a multidisciplinary team approach to service delivery but recognized the need for alternative payment mechanisms to FFS to make this viable.

Stimulated by this climate of reform, the NDP government elected in B.C. in 1972, initiated the development of four CHRHCs that closely resembled the model described by Hastings in the Community Health Centre Report. The goal of these centres was to integrate primary medical care, public health nursing, social and mental health services at the local level in order to facilitate community participation and decision-making. They were to be the cornerstone of the Foulkes plan for restructuring health care services in B.C. but this plan dissolved with the NDP government in 1975.

The thrust of the CHC model generally was toward improving accessibility to services and altering the style of medical care practice. The belief was that by changing the payment mechanism to physicians, in combination with a team approach to delivering care, incentives would be offered to provide preventive care and decrease hospitalization, thus costs would be reduced. The HMO had similar beliefs but the context of a competitive health care market caused it also to have a strong interest in financial management and cost control.
The closest Canadian comparison to an HMO is the Sault Ste. Marie and District Group Health Association (CHA) in Ontario, established in 1962 by the steel workers union on a PG model similar to Kaiser plans in the United States. At that time, the universal medical care insurance program had not been introduced but the hospital insurance program was in effect. Union members had the choice of enrolling in a pre-paid medical plan that entitled them and their families to receive medical care from physicians employed by the health centre. Unless referred by centre physicians, enrollees were responsible for the costs of out of plan use. Initially, the centre operated successfully on a prospective financial base derived from pre-paid premiums. Despite evidence showing decreased hospitalization rates for its population, the centre did not share these savings as a result of no linkage to the hospital insurance program.

After the introduction of publicly-funded medical care insurance in 1969 in Ontario, the centre shifted to a capitation rate paid prospectively by the provincial health Ministry. Because of the principles of universality and accessibility upheld by the insurance program, enrollees could now use out of plan services with no penalty. However, the organization had to pay for unauthorized out of plan use from its capitation rate. Lomas has documented the torturous process of negotiations between the Ministry and the centre over the years which has eventually resulted in improved arrangements. Today, the centre is part of a health service organization (HSO) program of the Ontario Ministry of Health. Medical practices that choose to participate in this program are reimbursed at a capitation rate for rostered patients rather than by FFS. The HSO capitation rate for individual patients can be negated, if rostered patients...
use outside services without referral but there is no penalty to individual patients.

Within the context of a publicly funded health insurance program, the HSO program appears to move somewhat in the direction of an HMO. In general, these Canadian models are characterized by emphasis on the style of medical care practice with significantly weaker concern for integration with hospital services than is evident in the HMO. The funding of these models is derived essentially from ministry coffers and is disassociated from revenue paid through premiums and taxes by consumers who use that particular service. While the insurance mechanism is well integrated with the service delivery components of the HMO, the linkage is very loose in the Canadian models, particularly linkage with hospital care.


Briefly, the legislation details the requirements of an HMO with respect to the provision of basic and supplemental services, the manner in which these services will be provided and the specifications of organization and operation.

The generic HMO elements discussed in this chapter are consistent with the legislative requirements. Also, the basic and supplemental HMO health services outlined later in the chapter are those specified in the legislation.


10. Ibid p.4. Also, it should be mentioned that the HMO generic elements listed on p.80 are consistent with those used by the National HMO Census to select their HMO population. In fact, the generic criteria used here were originally developed for the HMO census. See also note 5, Wetherville and Nordby, A Census of HMOs.


13. A distinction must be made between an HMO and indemnity carriers and insurance companies. Indemnity carriers and insurance companies reimburse against the expense of health care services after the insured person has used a service. Their contractual responsibility is with the patient only, thus, they have indirect involvement with service provision. The HMO not only provides indemnity to enrollees but also it is directly involved with contractual arrangements with providers to arrange for the delivery of services as necessary to its enrollees.


CHAPTER 7 VARIANT CHARACTERISTICS OF THE HMO: SPONSORSHIP

INTRODUCTION

Having explored the generic elements and their relationship in the HMO, this discussion will focus on variant characteristics in HMOs. Two general types of HMOs are referred to in the literature: the PGP which is a closed panel practice that means only group member physicians can practice in that setting and the IPA which is an open panel practice that means any physician is free to practice with the organization.

The organizational structures and financial incentives in both models are widely diversified. Hester has argued that an arbitrary conceptualization of the HMO in terms of the dichotomy between the PGP and the IPA is greatly oversimplified and neglects key characteristics of internal structure. Similarly, Wolinsky has commented that studies of HMOs have failed to isolate the individual effects of different structural incentives and disincentives of each HMO on its own performance.

Since this study is concerned with feasibility, it seemed important to attempt to identify specific organizational features that may have an influence on HMO performance. The literature suggests that structural variation in HMOs occurs in relation to sponsorship, physician organization and method of payment, and arrangements for hospital care. However, there is considerable variation within each of these general categories. Figure 7 attempts to depict graphically the possible range of structural variation in HMOs according to these three characteristics.

The diagram allows for forty-five structural variations in HMOs, each as a combination of sponsorship, physician organization and hospital arrangements.
Figure 7

Range of Structural Variation within HMOs according to Sponsorship, Physician Organization, and Arrangements for Hospital Care
From a selected review of the literature, a sample of twenty-six HMOs cited fit into nineteen of forty-five cells, with a maximum of three HMOs in each of two cells. This indicates the considerable diversity in the structural organization of HMOs. But even this fails to capture it fully. Also, variation within a cell of similar HMOs is likely to occur, for example, due to the size or age of the organization. Consequently, the following discussion will elaborate on each characteristic and its sub-categories, with the goal of understanding the implications of this variability for HMO performance and feasibility for B.C.

The sample of 26 HMOs cited in the literature reviewed was not randomized and represents slightly under 10% of the 280 HMOs operating in 1983 as listed in the HMO census. The literature reviewed was by no means exhaustive. Older or larger established HMOs tend to be better represented in the literature than new or smaller HMOs. Because of size and variability observed in the sample, generalizations beyond those described here are limited.

**SPONSORSHIP**

One of the essential ingredients of HMO development, mentioned by many researchers, is an adequate population base. Sponsorship of an HMO reflects the interests and values of a particular constituency of a specific size, and can have a critical influence on the establishment of a population base. The sponsor may create an organization that can serve only a portion of its constituency or, alternatively, that may serve a population greater than its constituency. It is, however, important to realize that the relationship between sponsor and constituency is not absolute, but rather a dynamic process of satisfying the needs of the participating actors (n.4 p.1).
The sponsor's direct role in HMO development is concerned with setting up the organization and the assumption of initial financial risks. The HMO Act, then, requires that the sponsor form a separate legal organization with a governing board. According to the legislation, one third of this policy making body must be enrollees, and the medically underserved population serviced by the HMO must have equitable representation on the board. Despite these legal constraints, board composition, to a large extent, reflects the interests of the sponsor. For instance, HMOs sponsored by community groups, consumers or industry, will have boards dominated by lay people, probably using professionals in an advisory capacity, whereas, the reverse is likely to hold true with HMOs sponsored by physicians.

While the sponsor and the board have a predetermining effect on the structure of the organization, they do not unilaterally control the organization. Sponsorship tends to weigh the needs and demands of the various participating actors. The board, on the other hand, is more sensitive to the needs and demands of its constituents than to those of the relevant actors. The board must consider also other forces likely to affect the organization, such as the legal constraints on medical care organization, the availability of health care resources, and the attitudes of consumers and physicians. All these factors combine to influence the decision-making process that determines the structure of the organization for delivering services.

Sponsorship affects the delivery of services indirectly and, accordingly, would be expected to have little effect on the economic performance of the organization. However, it does affect the goals and objectives of the HMO as to whether it is a profit or non-profit organization. The trade-offs that the HMO
has to balance regarding a decision on profit orientation lie between the tax advantages of non-profit status and the access to capital markets facilitated by profit status. Since the termination of federal government grants for HMO development in 1982, there has been vigorous growth in for-profit HMOs mainly because of the need to raise private capital. Sponsorship of these HMOs is leaning increasingly towards multistate firms owning several HMOs. (A discussion of federal involvement in HMO development is located in Chapter 11.)

In 1983, fourteen multi-state firms, both profit and non-profit, accounted for 129 of 280 HMOs and served 8.7 million members or 73% of the total HMO enrolment at that time. The largest non-profit multi-state firm is Kaiser which dominates with almost 50% of the multi-state firm enrolment. Some of the multi-state firms are subsidiaries of larger firms, for example, the parent company of PruCare is the Prudential Insurance Company; others such as Maxicare Health Plans Incorporated are independent firms. The number of for-profit multi-state firms, however, is increasing and causing a shift in the HMO movement, from largely non-profit organizations towards for-profit firms.

Many questions, consequently, are being raised about what effects this will have on service delivery.

A discussion of types of HMO sponsorship follows, and considers five major sponsoring groups: consumers, industry and unions, physicians, hospitals, and insurance companies. Although it is recognized that there is a current trend toward sponsorship by for-profit multistate firms, relevant literature, at this time, is very limited. For this reason, such firms will not be included in the following discussion. Because there has been a national health policy of public funding in Canada, for-profit health care services are not the norm. This
exclusion, therefore, is not likely to be relevant to feasibility in B.C. Although the B.C. government has shown some interest in privatization of services as part of a downsizing policy, health services, to date, seem to have been exempt from this influence.

Another point of clarification to be mentioned here is that some sponsors, such as physicians, hospitals, and insurance companies, being themselves HMO components, may have dual roles. For example, they may be sponsors and at the same time be service providers within a particular HMO. This, of course, could raise questions regarding conflicts of interest in the motivation for sponsorship. This discussion, however, will endeavor to focus on the sponsorship role rather than the service provision role.

**CONSUMER SPONSORSHIP**

From the sample of 26 HMOs in the literature reviewed, consumer sponsorship ranks as second most frequent, representing 23% of the sample. Although the literature described different types of sponsorship, no literature reviewed offered any information on the distribution of different types of sponsorship. For instance, the HMO census in 1983 did not designate sponsorship in its listing of operating HMOs. Many consumer sponsored HMOs tend to be older and that may bias upward, to some extent, their representation in the literature. Consumer associations, community groups, and co-operatives are among some of the sponsors in this category. Frequently, their interest in HMOs has been a response to problems of accessibility to health care services. Thus, enrolment is drawn from a designated catchment area and is open to any resident. As a result, the policies of these HMOs tend to be tailored to consumer needs and
largely reflect a non-profit orientation. Schwartz found that consumer co-operatives had more favourable individual enrolment practices, eligibility policies, and medical benefits. In addition, these HMOs have well established vehicles for consumer participation in decision making and grievance procedures for complaints but these mechanisms may contribute to increased costs (n.9 pp.223-24).

With consumer sponsorship, there may be susceptibility to a lack of financial expertise, resulting in some loss in control over the basic HMO components. Although the HMO remains ultimately responsible for providing or arranging services, and assumes the majority of financial risk, risk-sharing with outside fiscal agents or medical groups is not common with this type of sponsorship (n.5 p.74). Since risk sharing with outside fiscal or marketing agents is unlikely, the integration of the insurance plan with the other HMO components may be weakened which could affect financial control in the HMO. Similarly, there may be less control over physicians, for example, contracting with part-time physicians on a FFS basis, may dilute their commitment to the organization. Also, physicians in this type of organization may be apprehensive about lay interference in medical care practice. The physicians at the Group Health Association, Inc. in Washington D.C., a consumer-sponsored HMO, have an independent union and in 1978 had a strike over salaries and physician independence. As well, this type of HMO may use staff-admitting privileges in lieu of formalized contracts for services, perhaps due to some difficulties of consumer groups negotiating with hospitals. Consequently, the enrollee contract could be jeopardized as this arrangement does not guarantee the availability of beds, if needed to HMO enrollees (n.5 p.74). Because of
possibly looser integration of the basic components, administrative and financial control may be more difficult than with other models.

However, there are some successful consumer-sponsored HMOs that have overcome the pitfalls described here; the Group Health Co-operative (GHC) of Puget Sound in Seattle, Washington is a prime illustration. Developing as a result of the co-operative movement, GHC was formed in 1947 as a consumer-sponsored non-profit PGP. Today, it is an HMO serving over 300,000 enrollees in Seattle and surrounding area where it owns and operates a hospital in addition to eighteen medical centres. Individual and family enrollees have always been eligible for co-operative membership, but in 1983, membership was extended to include consumers enrolled under employer groups. The co-operative membership elects a governing board and all board actions are subject to review, ratification or rejection at annual membership meetings. Consumer members have always taken an active part in working committees of the board, thus policies tend to reflect consumer interests. Increasing HMO competition in the Seattle area is forcing some changes in policy less favourable to their membership. Until now, GHC has taken pride in offering first dollar coverage for comprehensive health care services with low co-payments under certain contracts. Since enrolment has dropped as a result of competition, they are now introducing significantly higher co-payments and age rating as mechanisms for reducing their premiums to competitive levels in order to regain their market share.

**INDUSTRY/UNION SPONSORSHIP**

Fifteen percent of the HMOs in the literature review sample fall into this
category. Like the consumer-sponsored organizations, these HMOs generally developed in response to some identified problem of access to health care services.

From an industry perspective, the goal of developing an HMO has been to improve the health of the workers in order to enhance productivity and reduce absenteeism. An HMO may hold the line as well on insurance costs paid to employees, especially those resulting from hospitalization, yet industry sponsorship of HMOs has not been widespread. The dual choice option of the HMO Act appears to encourage employers to support established HMOs, although it does not preclude their initiative in establishing an HMO. A more important reason perhaps, is the shift in the industry objectives of HMO involvement, from ensuring access to services, as a means of improving productivity, to containing the costs of employee health benefits.

The most famous example of industry sponsorship, and indeed HMO development, is the Kaiser-Permanente Medical Care Program established in 1945. Originally, it developed as a PGP to provide medical care to Kaiser Industries construction and shipyard workers. Today the program dominates the HMO industry by virtue of commanding the largest share of the market. The program is not a single legal entity but consists of several Kaiser developed organizations, the most important of which are: the Kaiser Foundation Health Plan Inc., the Permanente Medical Groups, and Kaiser Foundation Hospitals. The Kaiser Foundation Health Plan is an administrative and contracting organization that enrolls members, collects premiums, maintains membership records and arranges for health care services by contracting with the medical groups and
hospitals. The Permanente Medical Groups consist of six independent legally separate medical groups which contract with the health plan. They assume responsibility for providing or obtaining physician services and other paramedical services in order to deliver medically appropriate services in the office and in the hospital in accordance with enrollee benefits. The Kaiser Foundation Hospitals contract with the health plan to provide hospital care which includes room, dietary services, nursing care and use of hospital facilities. Also, they have responsibility for providing medical centre facilities which include inpatient hospital facilities, outpatient office facilities and all other facilities and equipment necessary in a modern medical centre. The Kaiser program is strongly decentralized to six regional non-profit organizations with ties to a central office in Oakland, California. The central office is a co-ordinating mechanism for policies on legal and governmental affairs and personnel management, as well as offering assistance with rate setting and benefit packages. Each region is responsible for operational management, with primary decision-making authority vested in the medical director of the regional Permanente Medical Group and the regional manager responsible for the health plan and hospitals. The decentralized structure allows for regional adaptations in service delivery and administrative structure. The key to Kaiser success lies in good management facilitating the unification of its various structural elements, and the close co-operation of physician management and administrative management working within a framework of mutual acceptance and common objectives (n.15 p.32).

Union sponsorship of HMOs, on the other hand, has resulted from ideological concerns, in addition to the problems of access to services. Union interests
in forming HMOs have been that the unions can claim this as their solution to a fragmented medical care system (n.13 p.38). Like industry sponsorship, union sponsorship has been limited. Some union sponsored HMOs, such as the Community Health Association, originally sponsored by the United Auto Workers in Detroit[^16], eventually became replaced by insurance company sponsorship and is now known as the Metro Health Plan of Detroit (n.5 p.77). Due perhaps to a lack of managerial expertise plus improved health related benefits in union contracts, the interest of union membership in HMO sponsorship has waned.

Whether sponsored by industry or union, the boards of these HMOs tend to be dominated by laymen, who may not necessarily represent the interests of the enrollees. Both profit and non-profit HMOs emerge under this type of sponsorship. A unique feature is that enrollee premiums are usually paid in whole or in part by a third party. In contrast to consumer sponsorship, many of these HMOs may perform the functions of self-insuring, marketing, enrolment, underwriting and administration, rather than contracting them out. Risk sharing with providers for both inpatient and outpatient care also occurs, but the HMO retains the major responsibility for the risk of contracted benefits (n.5 p.80). While these HMOs were sponsored initially by and for special interest groups, with time most of them became extended to serve the surrounding community.

**PHYSICIAN SPONSORSHIP**

According to the literature reviewed, physician sponsorship was the most common form, accounting for 27% of the HMOs in the sample. In general, physician sponsorship has been stimulated by the needs of the provider rather than those of the consumer or an interest group. Financial stability, life
style, style of practice, competition, and quality of care seem to be some of
the more frequent reasons for physician sponsorship. In the view of Havighurst,
professional sponsorship of an HMO is merely an extension of the medical
monopoly. As a result, he feels that it presents "an obstacle to the emergence
of a satisfactorily competitive health care marketplace".17

Three prevalent models of physician sponsorship will now be discussed: the
group practice model, the IPA or Foundation for Medical Care model (FMC), and
the medical school model.

Group Practice

The most commonly accepted definition of group practice is provided by the
American Medical Association (AMA):

"Group medical practice is the application of medical services by
three or more physicians formally organized to provide medical
care, consultation, diagnosis, and treatment through the joint use
of equipment and personnel, and with income from the medical practice
distributed in accordance with methods previously determined by
the group members."18

Furthermore, the HMO Act describes requirements for medical groups in HMOs
measuring requirements for federal qualifications as:

"'Medical group' means a partnership, association or other group
which is composed of health professionals licensed to practise
medicine or osteopathy and of such other licensed health profes-
sionals (including dentists, optometrists, and podiatrists)
as are necessary for the provision of health services for which
the group is responsible." (n.5 Appendix I p.358)

Partnership seems to be the most predominant form of group practice. Since
the group has a legal structure and is a small organization, it is not usually
necessary to form a separate legal entity for the HMO. However, depending on
the particular legal structure and the desire to achieve federal qualification,
there may be a need to form a board to meet the requirements of the HMO Act but
physician domination of the board is a highly probable occurrence. As a rule,
an outside insurance company will have a contract to provide the insurance and
marketing functions to this type of HMO. The group may choose to be at risk for
inpatient hospital care or to share that risk with an insurance company. What
may emerge is an HMO with a dominant physician component, creating an imbalance,
with weaker administrative control and integration of the insurance and hospital
components. The Ross-Loos Clinic in Los Angeles, and the Western Clinic of Tacoma, Washington, are examples of HMOs sponsored by physician partnerships.

This discussion has tried to focus on aspects of group practice relevant to
sponsorship. A fuller discussion of the organization of group practice and the
associated methods of payment will follow in the section on physician
organization.

Individual Practice Associations

The term IPA is frequently used interchangeably with the term FMC. While
both concepts are similar, it is important to understand the subtle differences.

Defined by Carolyn Steinwald

"a Foundation for Medical Care is an autonomous
corporation sponsored and organized by a local (state or
county) medical society concerned with the quality of
medical care. It is governed by a Board of Directors,
nominated and elected by the Board of its sponsoring
Medical Society. Membership consists of physicians and
sometimes osteopaths, belonging to the Medical Society,
who voluntarily apply annually to enlist in the foundation."19
There are basically two types of FMC: a comprehensive type, and a claims-review type. While both are concerned with providing some regulation of physician fees within the profession, they are fundamentally different. The comprehensive type has two principal functions: to design and sponsor a prepaid health insurance program and to carry out peer review of quality\textsuperscript{20} (see figure 8). The San Joaquin Foundation for Medical Care in California, sponsored under this model, was organized to protect FFS solo practices threatened by the expansion of the Kaiser Permanente Medical Care Program (n.5 p.89). On the other hand, the claims review type only provides peer review by physicians to fiscal intermediaries and does not sponsor a pre-paid health plan. Thus, it could not be considered for conversion to an HMO model.

Following the comprehensive FMC approach, a medical society could form an HMO rather than a FMC. Then the HMO could contract with an IPA, which is a medical management organization, to arrange for the provision of medical care services, as illustrated in figure 9. The final stage of this evolution is that the IPA becomes the HMO, assuming not only medical management but also the added role of health plan management, as illustrated in figure 10. Although these three models are referred to almost interchangeably in the literature, it is only the IPA model as HMO that is recognized by the HMO Act (n.5 p.93).

Involvement of the medical profession in sponsorship of an IPA model HMO is based on the belief that physicians must retain responsibility and leadership in the design, administration, and delivery of medical care services. The principal explicit objectives of this type of sponsorship, in the view of physicians, include: the accessibility of care through a prepaid health insurance program, and the careful monitoring of the quality of services, the
Figure 8
The Comprehensive FMC Model

COMPREHENSIVE TYPE

Medical Society

Foundation for Medical Care

Health Plan

Subscribers

Hospitals

Participating physicians

Insurance companies

Figure 9
The HMO Contracts with the IPA for the Provision of Medical Care Services

INDIVIDUAL PRACTICE ASSOCIATION (IPA) MODEL

Medical Society

HMO

Subscribers

Hospitals

IPA

Insurance companies

Participating solo practicing physicians

Figure 10
The IPA-HMO Model Recognized by the HMO Act

MODIFIED IPA MODEL

Medical Society

IPA/HMO

Subscribers

Hospitals

Participating solo practicing physicians

Insurance companies

appropriateness of delivery point, and the reasonableness of cost. The implicit objectives, alternatively, are well expressed by Havighurst, who views this form of sponsorship as

"a device for curbing the excesses of some physicians as a means of maintaining the monopolies and profits of the cartel members as a group against new competition and/or government intervention" (n.17 p.377).

The most attractive feature of this form of sponsorship for the medical profession is the preservation of the traditional characteristics of solo FFS practice as a barrier to economic competition and ideological challenge, posed by alternate forms of medical care organization.

Risk-sharing with physicians, although possible in this type of HMO, is minimized by contract or subcontract to an insurance company. While the HMO assumes full financial risk, a large portion of that risk, in this case, may be transferred to an insurance company. In addition to sharing a significant portion of the risk, the insurance company could also have a contract to provide the insurance functions normally associated with an HMO. Customarily, this type of HMO does not assume the risk for inpatient hospital services, which again decreases the total risk to the organization. However, its patients are usually required to have hospital coverage through another source. Physician interaction with the hospital occurs through the traditional convention of staff privileges rather than a contract. While the local medical society appoints physicians to the IPA board, federal regulations require that one-third of the board be consumers, if the HMO is to be federally qualified. Nevertheless, the locus of control in this type of sponsorship clearly rests with the physicians.
In fact, the similarities with traditional FFS medical care practice considerably dilute the strength of the HMO under this type of sponsorship. The geographic dispersion of physicians in solo practices, combined with minimal risk-sharing, raises barriers to the administrative control of physicians. Shifting a significant portion of the burden of risk to an insurance company is likely as well to debilitate control over provider behavior. In conclusion, this type of HMO weakens the integration and administrative control of the HMO components which are the strengths of the HMO concept, thus making it fallible to the inefficiencies of traditional FFS medical care practice.

This discussion has tried to accent aspects of IPAs relevant to sponsorship. A description of the internal organization and methods of payment used in IPAs follows in chapter 8 on physician organization.

Medical Schools

Medical school sponsorship of HMOs has had very limited success, due to the dilemmas posed by trying simultaneously to meet educational and economic objectives within an HMO structure. Since medical schools have been traditionally supportive of the FFS ideology of medical care practice, involvement in an HMO may antagonize some of its strategic constituencies such as its academic teaching staff and its alumni. The HMO, however, does offer some opportunities for upholding the classic triad of medical school objectives—service, research and teaching\textsuperscript{22}. The achievement of these objectives may be costly and thus contradictory to the financial objectives of an HMO which emphasize cost containment in order to keep premiums competitive with other health plans.
Given these inherent conflicts, the logistical complexities of a medical school, inexperienced in administrative and financial matters, setting up the basic HMO components could be formidable. First, it would need to form a medical group distinct from the university, that could legally accept financial risk. The university teaching hospital often provides the hospital component, but its involvement may be conditional on hospital objectives being met. An outside insurance company likely would be engaged to handle the financial management and insurance function, or perhaps even to raise capital (n.22). The insurance company, nonetheless, will want to see financial stability in the HMO operation, in order to protect its interests. What may result is that each HMO component may have strong objectives which each is determined to meet, but the components may be in conflict with each other over their objectives. Frequently, the solution is a joint management arrangement equally representing the interests of each component and sharing risks. Yet, this structure may only exacerbate conflicts and power struggles undermining administrative and financial control in the HMO.

Despite these difficulties, some successful HMOs have been sponsored by medical schools, for example, the Columbia Medical Plan, sponsored by Johns Hopkins medical school, was set up with this type of arrangement (n.22).

**HOSPITAL SPONSORSHIP**

In the literature reviewed, 15% of the HMOs mentioned were sponsored by hospitals. American hospitals, in recent years, have moved from a position of dominance in the health care field to a position of vulnerability. This change can be attributed to problems caused by excess capacity, changing population
trends, an oversupply of physicians influencing practice patterns, and increased government regulation, followed by a shift to a competitive market policy. Survival in this context meant that the hospital had to be able to gain control of its long run operating costs in order to maintain a competitive market share (n.23 p.65).

One strategy for controlling long run operating costs is vertical integration through HMO sponsorship. The objective of this strategy is to control the resources needed to run the main business of the hospital and to move as close as possible to the user of its services (n.23 pp.71-72). While it is recognized that different degrees of vertical integration are possible between the hospital and an HMO, a higher degree of vertical integration - sponsorship will be discussed here. Further discussion of the relationship between the hospital and the HMO, reflecting other aspects of integration, is addressed later in chapter 9 on arrangements for hospital care.

Superficially, HMO sponsorship may appear to be an answer to hospital problems. The HMO could guarantee a captured market share of patients that could possibly increase the volume and predictability of admissions, as well as increase the use of ancillary and technological services. The apparent financial stability offered by the HMO through prepayment could help to improve the hospital's cash flow, thus aiding in clearing bad debts.

Despite these possible advantages, the two organizations have quite divergent perspectives, which could prove to be an impediment to sponsorship. Mackie and Biblo have discussed the different organizational dynamics of the HMO and the hospital from the point of view of consumer relations, physician relations, and financial incentives. The hospital defines itself in terms of
physicians' needs and values, thus assuming the identity of "physicians' workshop", and believing that the public interest is served by accommodating to physicians. The HMO, because of competitive pressure, must focus on the needs of actual or potential enrollees, which makes it more sensitive to the public's needs, values and desires.

Customarily, physicians have resisted close integration into the hospital structure, and dual lines of authority have developed, resulting in professional goals often taking precedence over organizational goals. In the HMO, however, organizational goals have priority over professional goals because physicians are more integrated into the operational and policy-setting functions of the organization. Until recently, American hospitals have been reimbursed retrospectively on the basis of cost experience which has encouraged the maximum use of services and fostered inefficiency, although trends toward prospective funding are increasing. The HMO in contrast, must live within a prospective fixed budget, regardless of enrollee use of services. Thus, the HMO has an incentive to incorporate efficiency and cost-effectiveness into its basic decision-making process as a means of reducing the future need or demand for expensive services.

Can differences in organizational perspectives be reconciled through hospital sponsorship of an HMO? Shortell describes three models of hospital sponsorship: the primary corporate model, the shared corporate model, and the contractual model. The primary and shared corporate models are relevant to the sponsorship discussion; the contractual model will be more appropriately discussed in chapter 9 on arrangements for hospital care.
In the primary corporate model, the hospital assumes responsibility for financing, marketing and general management. Physicians are either taken on staff or there is a contract with a group of physicians. An insurance company may provide actuarial services or sometimes marketing. Since some hospitals are large enough to self-insure against major loss, reinsurance may not be necessary. However, the HMO is a separate legal entity and not a department of the hospital. Although a separate board would need to be formed, part of its membership is likely to be drawn from the hospital board. This model facilitates the greatest penetration of hospital objectives into the HMO operation and also offers good financial and administrative control.

Alternately, the shared corporate model allows the hospital, physician groups and other groups such as insurance companies, industry or consumer groups to jointly develop an HMO similar to a consortium model. The board is composed of representatives from all the corporate parties, and it contracts with hospitals, physician groups, and insurance companies to provide the basic HMO components. This approach was used with the Columbia Medical Plan in Columbia, Maryland, and often has been associated with medical schools (n.22). This model offers weaker financial and administrative control but less influence of hospital objectives on HMO operations.

Hospital sponsorship of HMO has not been popular. Strong resistance from the FFS hospital medical staff has been a major stumbling block. Furthermore, as the HMO matures, it is increasingly difficult for the hospital to remain influential in its operation. For in order to be successful, the HMO would have to remain loyal to its cost containment objectives of reducing the use of expensive services.
INSURANCE COMPANY SPONSORSHIP

In the literature review sample of HMOs, insurance company sponsorship accounted for 20% of the HMOs. As major sponsors of HMOs, insurance companies include both the indemnity insurance companies and Blue Cross/Blue Shield.

In the late 1960s and early 1970s, national health insurance seemed imminent in the United States, and HMOs were often associated with that debate (n.13 p.44). Anxious about their future, and sensing that cost containment would be part of a federal health policy, insurance companies saw many benefits in HMOs. They allowed insurers to diversify their product line and explore possible new directions of consumer taste. As well as potential money savers for insurance companies, HMOs could provide them with a more flexible response to federal cost-containment measures.

Originally, the plan was to keep the HMO under the wing of the insurance company with the company acting as a broker and arranging contracts with providers for services. The insurance company would provide the usual insurance services necessary to an HMO, plus it would assume the overall financial and administrative management of the HMO. By controlling the finances, the insurance company believed that it would be able to dominate the operation, thus limiting input from physicians and hospitals. When attempts at implementation were made, the benefits of such a plan were rapidly counterbalanced by costs.

Insurance companies had been traditionally involved in the financing side of health care, having little experience with the delivery side. First, salesmen found difficulties marketing the HMO as the payroll deduction was often higher than that of other plans because of slightly higher premiums, even though the dollar value of HMO benefits was likely to be less due to fewer copayments.
and deductibles (See n.13 p.44 and n.5 p.77). The fact that choosing an HMO meant choosing a delivery system, made potential enrollees reluctant to sever established relationships with providers.

In addition to marketing problems, the HMO raised a variety of internal political difficulties for insurance companies (n.13 p.45). Federal regulations required that the HMO be a separate legal entity not sheltered under the wing of the insurance company. The formation of a board composed of one-third enrollees, was another requirement that made insurance companies shudder.

While, in theory, HMOs should reduce costs, in practice the insurance companies, lacking in experience with service delivery, found it difficult to confront providers in order to get the desired outcome. Being profit oriented, the commercial companies have responsibility to their shareholders, thus they were very sensitive about the lack of results immediately forthcoming from an HMO.

Governmental and public expectations that insurers should take some action about rising health bills had forced the HMO onto the organizational agendas of insurance companies. Some insurance sponsored HMOs were able to surmount their early difficulties and thrived, while others languished and faded from existence (n.13 pp.45-46). As a consequence, insurance companies have now adopted a generally more cautious approach to HMO sponsorship since their trials had exposed the fact that an over-emphasis on business skills, in the complex operation of an HMO, was not necessarily conducive to producing the desired results. As well, they became concerned that the fear of failing at such a venture could tarnish their public reputation and credibility.
Consumer Sponsorship

Prior to the introduction of publicly funded health insurance in Canada, consumers showed some interest in sponsoring health services as a means of gaining accessibility to services. The CHC concept was pioneered by Saskatchewan in the 1920's to 1940's with its Municipal Doctor Plan which was a way of attracting physicians to underserved communities. Later, government planning reports such as the Sigerist Report of 1944 and the Saskatchewan Health Survey of 1951 lent further support to the development of CHC's. Under the Union Hospital Act, centres eventually were established and influenced the organization of ambulatory care services. After that, consumer interest in developing health services waned until the doctors' strike of 1962, when interest was dramatically revived by the formation of consumer sponsored community clinics.

Co-operatives have played a major role in the economic and social development of Saskatchewan. Concepts of tax-financed medical care and close working relationships between providers and consumers of medical care have been closely associated with this philosophy. Thus, it is not surprising that during the Medicare crisis of 1962, consumer initiated Community Health Services Associations emerged as pressure groups offering to provide facilities for physicians wishing to practise under the Medical Care Insurance Act. The Saskatoon Agreement ended the Medicare crisis but limited the role of these associations to landlords renting premises, equipment and possibly support services to any physician choosing to work in their community clinics. Community clinic sponsorship in Saskatchewan, therefore, became strongly linked to socialized medicine and socialist ideals.
Union Sponsorship

During the 1960s in Ontario, unions took some initiative in sponsoring health centres to provide pre-paid medical care services to their members. Their impetus came from membership concerns about accessibility and cost of medical care services. The steel workers union sponsored the Group Health Association in Sault Ste. Marie in 1962 and the auto workers union sponsored a centre in St. Catharines in 1969. Both centres were based on concepts of PGPs developed in the United States. However, the introduction of universal medical care insurance in 1969 in Ontario dealt a stern blow to their operation. Since the Sault Ste. Marie centre had been in operation six years prior to this, it weathered the blow and continues to operate on the basis of capitation funding under the provincial insurance program serving the local community under the leadership of a citizen board. The St. Catharines centre, however, began operation only three months before implementation of the insurance program and all the centre's physicians were new to the community. As a result, the lack of constraints on out-of-plan use imposed by the universal insurance program plus subscriber ties to physicians established in the community led to the financial ruin of the centre.

Provider Sponsorship

Provider interest in sponsoring alternate forms of health care delivery has been limited as the economic incentives offered by the national health insurance program discourage such interest. Following the introduction of local community health and social service centres (CLSCs), however, Quebec physicians launched a counter attack encouraging the extensive development of private FFS group
practices, known as polyclinics, to compete with CLSCs. In 1977, when approximately eighty CLSCs were operative, an estimated four hundred polyclinics had been established\(^{30}\). This suggests the responsiveness of physicians to the threat of economic and ideologic competition.

In Ontario, the HSO program offers physicians the opportunity to alter practice styles by choosing capitation reimbursement rather than FFS. In addition, they received extra incentive payments for hospitalization rates below the provincial average. Although growth of these organizations has not been extensive, physicians have been the primary sponsors. Also, medical schools have been involved in sponsoring five organizations as placements for family practice residents\(^{31}\).

Insurance Company Sponsorship

With a publicly funded national health insurance program, insurance companies have minimal incentives to be interested in health service delivery other than where it involves extended health benefits not covered by the national program. In B.C., the CU & C Health Services Society, an organization whose primary activity is extended benefits health insurance, financed and developed the Mount Pleasant Community Health Centre in Vancouver. This centre serves the general community and pays its physicians on salary although its revenue is generated by billing the MSP on a FFS basis. Also, the health centre comes under the CU & C board rather than being a separate legal entity with its own board. Based on the success of this centre, CU & C apparently plans to expand and develop the concept elsewhere in the province\(^{32}\).
FOOTNOTES


26. See note 13 Brown, *Politics and Health Care Organization,* p.44. Although U.S. federal interest in national health insurance had waned, insurance companies felt that the writing was on the wall. Federal policies of cost containment were coming and were likely to be linked with HMOs because of federal interest in these organizations. Therefore, insurance company sponsorship of HMOs could increase their flexibility to respond if federal cost containment measures tampered with established financing patterns.


32. Interview with David Schreck, General Manager, CU & C Health Services Society, Vancouver, 13 April 1984.
Since the HMO is at financial risk for providing a contracted range of health services for its enrolled population, decisions made by physicians about the use of services play a crucial role in the financial viability of the organization. Despite ethical considerations, physicians are widely held to respond to their own economic interests, and their consequent behavior affects treatment decisions. The major HMO objective, therefore, is to modify physician practice towards more efficient decision-making. Motivating forms of organization and methods of payment are some vehicles for creating incentives for physicians to achieve this objective.

The following discussion will explore three forms of physician organization evident in HMOs: a staff model, group practice, and individual practice association. A different method of payment is associated with each type of organization. Since the incentives affecting physician decision-making vary in each case, the discussion will try to assess their individual impact on the accomplishment of the HMO objective.

At the outset, it is important to clarify some relevant points. In each case, a distinction must be made between the method of payment to the organizational unit, that is the practice or, in economic terms, the firm, and the method of payment to the individual physician for his labour in producing medical care services. Payment, in all cases, originates from a prospective base of funds prepaid by the consumer to the HMO.

With regard to group practice and individual practice association models, the discussion will proceed from the premise that the HMO has a contractual
agreement for service with these organizations. At the same time, it is acknowledged that each of these types of physician organization could be sponsors of the HMO as well as providers of service to the HMO. It was noted earlier, however, that sponsorship has only an indirect effect on service delivery, through influencing the goals and structure of the HMO. Once the type of physician organization and method of payment have been established, sponsorship is likely to have little effect on their operation.

STAFF MODEL

In this model, the HMO is the owner of the practice, which corresponds to an economic firm. As such, it uses inputs which may be classified as labour services, capital services, materials and supplies, and entrepreneurship. Accordingly, the HMO employs physicians to supply labour to the firm, and this is combined with the other inputs listed above in the production of health care services.

Internal Organization

In the selection of physicians, the HMO is likely to consider an individual's potential for compatibility with organizational goals, as well as his professional qualifications. Although both primary care physicians and specialists are hired individually, they are organized in a group practice that is self-governing and autonomous concerning medical matters. Usually, there is a medical director to whom the physicians relate and who represents their interests to HMO management.
This group structure facilitates the centralization of capital equipment for ancillary diagnostic and treatment services plus auxiliary personnel used by physicians. Gains in efficiency may be achieved through better co-ordination of services and some economies of scale, and hence costs may be reduced. The mixing of specialists and primary care physicians in a group structure encourages a more intense climate of consultation and peer review. Since the group has a collective stake in the quality of care, the production of a different mix of services may occur, often resulting in improved efficiency.

Method of Payment

The HMO, as practice owner, is reimbursed for medical care services prospectively through fixed payments in the form of premiums, supplemented by co-payments when a service is delivered. Under the staff model, the HMO reimburses the physician by payment of a salary. A salary, in an HMO as in other medical care structures, represents a fixed payment to the physician for his time and labour, irrespective of the number of units of service rendered or the number of persons cared for. Usually, the salary is adjusted to account for the physician's professional qualifications, experience, special skills, level of responsibility and/or other factors.

Since the salary method of payment relieves the physician of any direct economic interest in the patient, some members of the medical profession argue that this weakens the doctor/patient relationship. Glaser has commented that "salaried systems may be vulnerable by not providing enough incentive for extra effort and by omitting effective penalties for neglecting patients' needs." However, the structure of the HMO can offset the vulnerability associated with
salary as a method of payment, by implementing utilization reviews or reviews of physician performance, as well as rewarding or penalizing certain types of physician behavior through bonuses. While paying a physician by salary may raise questions about quality of care, it should be noted that medical schools and other "islands of excellence", such as the Mayo Clinic, historically have paid physicians by salary yet have gained reputations for high quality care. However, there may be other advantages associated with these situations such as prestige.

Advantages to Physicians

Physicians may be attracted to HMO employment for professional reasons and because of working conditions and economic considerations. Since their income is not dependent on the volume of service rendered, and since the organization has the responsibility for financing and managing the practice, physicians are free of some of the constraints of traditional FFS practice. The financial structure of the organization, however, creates incentives for efficient clinical decision-making and encourages the practice of preventive medicine. Furthermore, access to consultants and ancillary services can help physicians achieve optimal performance levels. The team approach, precipitated by the group structure, encourages them to strive for the respect of their colleagues, which concurrently affects the quality of care. Some physicians, for professional reasons, may be ideologically opposed to FFS practice and thus find this type of practice compatible with their values.

Economic considerations can be a major drawing point. Employment in an HMO means immediate income, plus fringe benefits such as malpractice insurance,
life insurance, and retirement plans. The economic security offered by
the HMO is very appealing when contrasted with the capital investment of setting
up a practice then waiting for the practice to grow before receiving any return
on their investment. In addition, schedules set by the HMO allow physicians to
have regular time off. Educational leave without loss of income is another
advantage. Regardless of the positive attraction, many physicians are likely to
find the restrictions on their autonomy imposed by employment in a staff model
HMO unacceptable.

Disadvantages to Physicians

Brown has listed four major disadvantages that are perceived about salaried
physicians working in HMOs. First, their freedom to schedule work tasks
and manage patients as they see fit is restricted by HMO procedures. Second, in
an HMO, review by peers and reviews by the organization's medical director and
executive directors is thought necessary to properly reconcile cost and quality.
Most physicians would feel that they were practicing medicine "in a goldfish
bowl" under such stringent accountability. Third, due to the contractual
responsibility of the HMO, there is a legal obligation to treat clients. Many
physicians would have difficulty tolerating "bureaucratic clients" who demand
their rights to treatment. Finally, HMO physicians are likely to earn less than
their FFS counterparts.

Local medical societies are notorious for their opposition to both PGPs and
HMOs. Consequently, physicians employed by an HMO are likely to bear the brunt
of negative peer pressure from local physicians. Political pressure may also be
brought to bear through the blocking of staff privileges for HMO doctors in
local hospitals. The prevailing image of HMOs, as vast medical complexes based on large multispecialty practices like Kaiser, does not reflect the norm. Thus, pressures on HMO physicians from the local medical establishment may be considerable. As a result, young physicians and foreign physicians from outside the area may be employed by HMOs as they are attracted by the economic security and may be unaware of local medical resistance. However, Brown has speculated that the growing surplus of physicians in the United States may make HMOs more attractive to physicians and may even force some to flee FFS practice (n.6 p.58).

Advantages to the HMO

In terms of meeting the HMO objective of modifying physician practice toward more cost-effective decision making, the staff model has a great deal of potential. The employer/employee relationship with physicians, plus the salary method of payment, increases the probability of HMO objectives being internalized by physicians. The salary method of payment facilitates better financial planning and better control of costs. The HMO is able to plan knowing what the fixed cost for physician services will be, even though there may be some variable costs, due to bonus incentive payments based on cost saving criteria, such as decreased hospitalization rates. The salary plus incentive payments gives the physicians strong motivation to hospitalize patients only when necessary and to substitute ambulatory care when possible. It also encourages physicians to provide preventive services. These incentives are the reverse of those offered by FFS, where hospitalization is a means of augmenting income.
and preventive services are poorly reimbursed by the fee schedule if at all. As well, the salary method of payment is simpler than other methods of payment and it reduces administrative costs.

Since the physicians' income is not dependent on the number of services rendered the introduction of lower cost substitute labour, such as nurse practitioners may be less threatening. Thus the staff model HMO has a greater incentive to use substitute labour to offer a lower cost mix of services. But, the professional regulation of paramedical personnel as well as the attitudes of other professionals may pose obstacles to implementation. For example, the GHC of Puget Sound, which is a staff model HMO, has had problems increasing the use of nurse practitioners because of physician resistance. At the same time, its medical staff has steadily increased. With increased competition in the Seattle area and pressure to reduce costs these balances of staff are now being carefully reviewed. But, another pressure that may also impinge on the situation is a surplus of physicians available to the public in the Seattle area.

Disadvantages of the HMO

However, creating an organizational structure to compensate for the weaknesses inherent in salary reimbursement, such as possible low productivity can add to costs and must be balanced against savings. Also, the bad publicity directed at HMO physicians working in a staff model and perpetuated by the local medical establishment can have adverse effects on HMO enrolment.

In conclusion, the staff model organization, combined with salary payment, would appear, on balance, to offer the HMO good administrative and financial control of physician decision-making. However, the HMO is clearly the entre-
preneur in this model, shouldering the financial risk and risk transfer to physicians is minimal through bonus incentive payments.

GROUP PRACTICE CONTRACT

The literature reviewed showed that about 60% of the HMOs in that sample used the group practice contract model for physician services. In 1983, 65% of 280 operating HMOs in the United States used a group practice model. This figure includes both the staff model of group practice discussed above and the group practice contract model. Clearly, group practice is a dominant form of medical care organization in HMOs.

The Contract

A medical group practice is an autonomous legal entity that negotiates a formal contract with an HMO, outlining the duties and obligations of both parties. In this case, the group owns the practice and is most likely a partnership of more than two physicians. As the owner of a practice or firm, the physician group may be both entrepreneur seeking to maximize the return on its capital investment, and supplier of labour input to the firm. Alternatively, the physician group may only supply labour services to the firm and the capital investment may come from another source. These distinctions are critical to understanding the contract with the HMO. For, in some situations, the HMO may be contracting only for the physicians' labour services from the group and the HMO will provide the physical facility and auxiliary personnel necessary to the physicians' work. In other cases, the HMO may be contracting with the physician group for both physician labour and other inputs.
supplied by the practice, such as physical facilities and auxiliary personnel, that are necessary for the production of medical care services.

Some physician groups may contract with an HMO to provide services exclusively to the HMO enrolled population. This arrangement has considerable advantage for the HMO, in terms of achieving its objective of modifying physician practice towards more cost-effective decision making. The group, however, may contract to serve HMO enrollees and serve FFS patients as well but this situation may be less conducive to meeting the HMO objective.

The central focus of contract negotiations is on financial compensation for the group practice, which is most often a capitation rate but could be based on a FFS schedule. Other terms of the contract might include the number of enrollees to be serviced, acceptable utilization rates, and staffing ratios. On the other hand, areas of conflict between the group and the HMO may arise over such issues as standards of quality, utilization levels, the use of HMO facilities and personnel, and the mix of FFS patients to HMO enrollees (n.5 p.123).

The group contract model refers to an HMO contracting with one group exclusively for service (n.7 p.37). Another form of HMO, a medical group network model contracts with two or more multispecialty groups (n.7 p.37). In the staff model, the group contract and the network, enrollees are usually free to choose a primary care physician from within the group who manages their care. The network model allows enrollees to change groups, if desired, only at specified times. The Kaiser plan is a group contract model that does not allow the enrollee free choice of a primary care physician. In all these models, the HMO has to purchase the specialty services of physicians not available in the
group from outside physicians in order to maintain its contractual responsibilities to enrollees.

For the purpose of clarity, this discussion has attempted to present a somewhat simplistic view of these arrangements. However, contracts and arrangements with physicians are highly complex and variable within an HMO and between different types of HMOs. The situation might be summarized as there is an exception to every rule due to the multiplicity of possible arrangements. Discussions with staff at the GHC of Puget Sound indicate that the current trend is to view HMOs as managed health care systems. Less emphasis is being placed on distinct models due to an increasingly competitive market for HMO services. The goal appears to be for the HMO to obtain the most flexible arrangements at the most reasonable rate so that it can maintain its competitive position.

Internal Organization

Group practice environments have been known to be conducive to the efficient delivery of medical care services in HMOs. The cost-effective behaviour of the group may be related to external competition for patients, the size of the group, economies of scale or other factors. However, Meier and Tillotson feel that

"group practice itself, through the goals and orientation the medical group has adopted, the physician practice patterns reflecting those goals and the formal and informal controls imposed by the group to ensure individual physician compliance with those goals, can serve as the overriding influence over physician practice decisions" (n.1 p.74).

While each group practice may have somewhat different goals, it will have some objectives indicative of its attitudes towards the practice of medicine.
The group, for instance, may be interested in income-increasing production, more leisure time, expansion of patient population, or cost-effective practice (n.l p.74). For the group to be successful in maintaining a contract with an HMO, it must be oriented towards cost-effective styles of practice. Consequently, the group tends to select physicians with desirable practice habits. The most likely candidates are geared towards ambulatory care practice and are able to accept peer and administrative review of their practice decisions.

Typically, the group is a multispecialty practice composed of both primary care physicians and specialists. However, in a network model, it could be all primary care physicians, or all specialists, or all one type of specialty, such as obstetrics and gynaecology. Physicians can either be employed by the group or be partners in the group. A period of employment is a common rule before partnership. In addition to the appropriate selection of personnel, the group seeks to modify physician styles of practice through both formal and informal sanctions.

Cohesive interaction among physicians can be encouraged informally through the physical structure of the facility, staff meetings, and frequent consultations. As a result, informal peer review can evolve which can affect patterns of utilization. Formal medical leadership, nevertheless, is a powerful tool for setting the tone for physicians to maintain desirable standards of cost-effective practice. In most group practices, there is an executive committee that generally appoints a lay administrator to be responsible for the non-medical aspects of the group, such as legal problems, accounting, the plant, and equipment. Depending on circumstances, the group will either elect a physician to be the medical director or work closely with a medical director appointed by the HMO. The medical director plays a critical role in maintaining
group morale, monitoring compliance with rules, overseeing formal peer review and any corrections of deficiencies, making arrangements with outside specialists for services not provided by the group, recruiting and selecting physicians, and scheduling staff (n.5 p.131).

To encourage more cost-effective decision making by physicians, the medical director can be instrumental in designing staff education programs and administrative policy to raise cost consciousness. Often, information feedback of utilization and cost data is employed to educate physicians about cost-effective practice patterns. Similarly, staff education can be directed at less costly treatment methods that can substitute for more expensive inpatient hospital care. Also, administrative policies may be implemented for the formal review and authorization of physician decisions about admission to hospital and referrals to outside specialists (n.1 pp.75-76). Because the group practice is at financial risk in the provision of medical care services to HMO enrollees, these organizational mechanisms are necessary since the group is dependent on the decisions of individual physicians for its financial viability.

Methods of Payment

The HMO shares the risk for the provision of medical care services with the group practice, through reimbursement of the practice by a negotiated capitation rate. In theory, risk placement or risk sharing ought to fall to the party with the greatest control over the desired outcome. In reality, risk sharing is often a function of the bargaining power of the respective HMO components. Since physicians control decisions about the utilization of services, and since the HMO objective is to modify physician practice toward more cost-effective
decision making, it is logical then that risk be shared with the physician group as an incentive to achieving the desired outcome. Most commonly in this model, the group is at risk for both inpatient and outpatient medical care. However, this could vary in relation to the bargaining positions assumed by the HMO and the group practice.

The capitation rate, normally is based on a per member per month payment to the group practice in return for the provision of necessary medical care (n.12 p.69). The capitation rate is averaged across all enrollees and assumes average utilization of services, average unit costs, and average composition of the enrolled population, according to age and sex distribution (n.12 p.76). The risks then are shifted to the group practice with respect to any deviation from the average in utilization, unit cost, and age-sex distribution in the population. For instance, the group practice has no control over the mix of enrollees so it bears the financial gains or losses for any deviation from an average age-sex population distribution that results in non-average patterns of utilization. Therefore, its incentive is to provide necessary service and, where possible, eliminate excessive or expensive services. Other methods of capitation payment may adjust the rate according to the type of contract sold by the HMO to the enrollee or to the utilization characteristics of the enrolled population. Both methods involve different placement of risk-sharing.

According to Glaser, many administrators view the capitation method of payment as a favourable compromise between salary and FFS (n.4 p.254). It is believed to foster the practice of good medicine since it facilitates continuity in the doctor/patient relationship in times of sickness or health. Compared with FFS payment, the turnover of patients is lower. Since the physician stands to gain no added income from treatments, he has an incentive to practice
preventive medicine. There is an incentive, likewise, to discourage the use of unnecessary or ineffective treatment procedures. Under this method of payment, physicians' treatment decisions are more likely to favor the selection of the least cost mix of resources and procedures to maintain a standard of health for the beneficiary population (n.2 p.13).

No payment method, however, is without weakness. The capitation method can encourage the group practice to sign up a large roster of patients in order to increase income. Then, it may be motivated to avoid serving or underserving the needs of that population. An alternative incentive might be to accept only patients who are likely to require minimal care, thus screening out high risk groups such as the elderly. Checks and balances such as utilization reviews or quality assurance programs, consequently, need to be built into the organizational structure in order to offset the weaknesses mentioned.

While the group as practice owner is reimbursed by the HMO, on a capitation rate, it is rare that an individual physician is reimbursed by capitation. As a rule, the group members pool their income from all sources, including capitation payments, FFS payments, and return on capital investment, if applicable; then, after expenses are deducted, net income is distributed on the basis of a pre-arranged schedule developed by the physicians themselves. One method of dividing income might be to consider each member of the medical team of equal value to the group. More frequently, however, the schedule is not one of even distribution but is rather based on a formula that considers length of time in the partnership, total bookings or number of patients served, professional training and experience, specialty, and other subjective factors (n.5 p.123). Furthermore, it is important that incomes for the group be competitive with FFS
practice in order to attract and retain well qualified and competent physicians.

Evans (n.2 p.8) has remarked that the total income of self-employed practitioners, such as group partners, has three derivative sources. The physicians earn a salary or wage for their labour input into the practice. Insofar as there has been a capital investment in physical plant and equipment, they earn a return on their invested capital. Finally, they receive entrepreneurial profits equal to the amount by which the net practice income exceeds the above-mentioned amounts. Entrepreneurial profits need not necessarily be positive and indeed could be negative if the practice has not been able to meet its objectives of cost-effective decision making. In this case, the losses would be shared by the group members.

Advantages to Physicians

Physicians interested in working in group practices with a significant pre-payment population have basically the same considerations that were mentioned in the staff model: professional reasons, working conditions, and economic considerations. The team approach allows physicians to share knowledge and responsibilities, thus encouraging the best utilization of skills, particularly for specialists. The group provides an atmosphere for keeping up with the latest medical knowledge and a stimulus for high standards of practice, in order to retain the respect of colleagues in the group. The availability of ancillary services and personnel through economies of scale facilitated by the group, complements the group concern for quality of care and standards of practice.
Usually, the group considers funds and time for further study and training as part of physicians' remuneration. Due to professional development activities, physicians may spend less time in actually seeing patients (n.5 p.106). However, they tend to see as many patients in a shorter time period than their FFS counterparts in a longer time period. Physicians seem to enjoy the co-operative spirit of the group which enhances a sense of professionalism.

The regular scheduling of time off and vacations is controlled by physicians in this model rather than by the organization as in the staff model. In sharing after-hours emergency calls, physicians feel a sense of comfort knowing that continuity of patient care is provided by team members whom they know and respect. While reaping these benefits, physicians still retain the entrepreneurship of private practice. The capital risks involved in partnership, however, are less than those of setting up a solo practice. The group structure, also, relieves physicians of many of the business aspects of the practice, for which they are not trained. Despite some financial risks, their income, supplemented by fringe benefits, is often immediately available. In solo practice, it may take longer to develop a practice so income may be limited for some time. Because of these conditions, PGPs tend to attract younger physicians, who tend to work fewer hours than FFS physicians and correspondingly earn somewhat lower incomes than FFS (See n.13 and n.14 Goodman and Swartwout).

Disadvantages

On the other hand, some physicians would not find prepaid group practice inviting. The co-ordinated effort required by the group could threaten their
autonomy or individuality. They would find it restrictive to have to conform to standards of practice and quality of care reviews and to submit to administrative and peer review. Since the control of a patient may reside with the group, many physicians would object to not having "their own patients" and resent sharing liability with the group. Also, patients themselves may protest at not having "their own doctor".

Mechanic's study suggests that many PGPs achieve additional economies by limiting the resources available for ambulatory medical care relative to demand. This situation forces physicians to process patients more rapidly, in an assembly line fashion. Other side effects might include the rationing of services through long waiting periods or a possible dependence on urgent care facilities provided by the HMO to meet acute needs of patients. Thus, he concludes that the situation precipitated by limiting resources does little to promote continuity of care or patient perception of the responsiveness of medical care (n.13 p.204) which in the long term could be detrimental to HMO enrolment. Since PGPs seem to attract younger physicians and incomes are slightly lower than FFS practice, this situation might be further complicated by a high turnover rate of physicians.

Advantages to the HMO

Contracting with a group practice for the provision of physician services is one means available to the HMO for providing medical care services to its enrolled population. The capitation rate negotiated with the group is a way for the HMO to share some of its risk while, at the same time, offering an incentive for cost-effective decision making by physicians. The capitation rate, like the
salary in the staff model, represents a fixed cost to the HMO which allows for better financial planning and lower administrative costs.

However, the extent to which the HMO cost-reducing objectives are internalized by group practice physicians may not be as pervasive as in the staff model. In this model, the HMO has less control over the organization and management of physician activities and, therefore, it is more dependent on the incentives offered by the method of payment to achieve its objectives. Furthermore, the cost-reducing behaviour of the group can be affected by the ratio of HMO to FFS patients or by refusal of the group to accept the risk for inpatient hospital services. Ideally, the HMO would choose a group willing to accept the risk for hospital care and to see only its enrollees, but its choices could be limited by the availability of groups in the community or by its bargaining position with a group. Over time, the HMO may be eventually able to negotiate a contract more favourable to its objectives. The effectiveness of a group practice contract also is conditional on individual circumstances, such as the age of the HMO, the size of the group or the external competitive environment.

If the group practice skims on resources as a means of achieving cost reduction, the effects outlined by Mechanic could have a negative impact on HMO enrolment. The scepticism of local medical societies about HMO affiliation could reinforce this negative effect although medical resistance is often more related to the fear of change to an alternative system of medical care, and the fear of loss of income due to increased competition.

All things considered, the potential for the HMO to meet its cost-effective objectives, while simultaneously assuring access to service and necessary care
appears to be stronger in the staff model than in the group practice contract model. Evidence seems to indicate, nevertheless, that the group practice contract is the dominant model, perhaps because of greater acceptability to physicians.

INDIVIDUAL PRACTICE ASSOCIATIONS

Individual practice associations are the most recent development in physician organization in HMOs. Of the 280 HMOs in the United States, in 1983, 99 used the IPA model of physician organization (n.7 p.2). Since 1980 the IPA model has been employed consistently by approximately one-third of all HMOs (n.7 p.2). The following discussion will take the perspective of the HMO contracting with an IPA for the provision of physician services. Even though it acknowledges that the IPA might offer other health services, it recognizes that physician services predominate.

The Contract

The HMO negotiates a contract with the IPA, which is a separate legal entity having as its primary objectives the delivery, or arrangements for the delivery of health services, and which has entered into a written services arrangement or arrangements with persons who are licenced to practise medicine or with other health professions, such as dentistry or optometry. Individual physicians, or occasionally small groups of physicians, in private practice, voluntarily enlist with the IPA. This signals their willingness to accept HMO enrollees as patients. The HMO's contract with the IPA allows its
enrollees to choose a physician from the IPA's list. The enrollees receive medical care services from these physicians in their respective offices.

These physicians individually are owners of their practice or firm. Thus, as entrepreneurs, they have invested capital to obtain and equip an office. Also, they may consider that they have made an investment in human capital with respect to their professional education and training. As inputs into the production process of the practice, they may hire the labour of auxiliary personnel, such as secretarial staff or nurses. Their own labour then is combined with the other inputs of capital investment, hired labour, and materials and supplies, to produce medical care services received by the HMO enrollee. The HMO, therefore, in contracting with the IPA, receives not only the labour services of physicians but also all the other inputs contributed by them to the production process of medical care.

Internal Organization

A local medical society usually forms an IPA and then appoints physicians from its membership to the board of directors of the association. The board, subsequently, appoints a lay administrator, who reports to the president of the board and is responsible for: accounting and finance, consumer relations, marketing, enrolment and that part of the medical program concerned with claims' review (n.5 p.132). Instead of selecting a medical director as the group practice model does, the president of the board, who will be a physician, is responsible for the medical and administrative functions of the organization. However, many of the medical administrative functions, such as standards, fees, and utilization review, are delegated to physician committees that are directly
accountable to the board. Thus, the president of the board, in addition to board responsibilities, assumes the role of both medical director and executive director for the IPA.

Individual practice associations face organizational problems similar to those of group practices. They must be able to offer services to the HMO at a cost low enough to keep the HMO premium competitive, otherwise enrollees will be attracted away to alternative plans. The financial viability of the IPA, like that of the group practice, is ultimately reliant on the cost-effective practice decisions of individual physicians. Ironically, an outside threat of competition, such as a group practice HMO, usually forces IPA physicians to focus on cost-effective goals. At the same time, their behaviour tends to closely resemble the inefficient characteristics of traditional FFS practitioners and poses a significant internal threat to the attainment of cost containment goals by the IPA.

The IPA has an incentive to enlist as many physicians as possible in order to be attractive to the HMO. Since it is an open panel practice, any licensed physician is free to enlist with the organization. Thus, the IPA is not able to select physicians with practice habits conducive to its goals. Meier and Tillotson point out that "whereas a group can match medical resources to the needs of the population, an IPA is usually forced to accommodate whatever specialty mix occurs from voluntary participation of the community's physicians - with obvious cost consequences if that mix is skewed towards higher priced specialty care. This inflexibility makes the modification of physician behaviour extremely critical to the IPA" (n.l p.78).
This situation is further complicated by the geographical dispersion of physicians and the variation in practice orientation among physicians. Physicians must reconcile the cost-effective expectations of the IPA with the demands of FFS patients who may constitute the greater majority of their practice. Brown estimates that only about 10% of IPA physician practices are HMO enrollees (n.6 p.53). The likelihood, then, of their altering their practice patterns towards IPA standards is low. Also, because of its association with the local medical society, the IPA is politically constrained from imposing sanctions on transgressors. Given this context, the IPA must turn to formal organizational mechanisms in an effort to achieve its goals.

Peer interaction is fostered largely through formal utilization review programs. The effectiveness of these programs lies in raising awareness that physician practice decisions are under scrutiny, but interaction is usually restricted to a few physicians, relative to the number of participating physicians. Similarly, restricted peer interaction occurs on various policy and administrative committees. This weak cohesion among participating physicians may be attributed to geographical dispersion or perhaps a lack of commitment to the organization for fear of losing some of the autonomy associated with independent practice. Medical leadership, likewise, is ineffective in promoting and enforcing cost-effective practice standards, as medical leaders are perceived as first among equals rather than a superior authority (n.1 p.78). The IPAs, consequently, lean heavily on administrative procedures to control utilization, such as preadmission certification of elective surgery, authorization of referrals to non-IPA specialists, second surgical opinions, and preadmission testing (n.1 p.78). For physicians accustomed to the independence
and autonomy of private practice, these procedures are often cumbersome and distasteful.

Method of Payment

The IPA is reimbursed by capitation, negotiated with the HMO, which places some risk on the IPA and gives it an incentive to deliver services within that fixed amount. However, the IPA reimburses physicians on a FFS basis, which provides them with little incentive for either economy or efficiency.

Evans (n.2 pp.11-12) has proposed that this traditional method of payment encourages each practice to produce large numbers of reimbursable procedures and to stress those yielding the highest dollar return per unit of provider time. Because these procedures are valued and paid for independent of their impact on the patient's health, unnecessary, wasteful and duplicative services may be performed. In addition, this method could encourage the wrong mix of procedures; for example, hospital care rather than ambulatory care. Physicians have no incentive to minimize treatment costs; on the contrary, in as much as treatment costs represent income, physicians have an incentive to maximize them.

These incentives are in direct opposition to those of the IPA and the HMO, since the capitation rate provides an incentive to contain costs in order that the organization may remain financially solvent. As a result, most IPAs guard against financial deficits by withholding a percentage of physicians' fees (n.1 p.80). The amount withheld, however, is critical: if it is too low, it may not produce an incentive to alter decision making; if it is too high, some physicians may leave the IPA. An alternative approach is the imposition of a ceiling to control physician fees (n.1 p.80). While this may have a desirable
effect on bringing high cost physicians under control, it could encourage other physicians to increase their fees to allowable levels.

Financial incentives, like the organizational mechanisms in the IPA, may not necessarily be successful in modifying physician practice patterns. Financial deficits incurred by the IPA are passed on to physicians by not remitting a portion of the withheld fee. Instead of adapting more cost-effective decision making to compensate for financial loss, physicians may either leave the IPA or attempt to retrieve lost income by adding more services to treatment regimens. Given the weaknesses of internal financial and organizational mechanisms for modifying physician practice patterns, the threat of an external force such as competition seems to be the only remaining possibility to stimulate change in the practice patterns.

Threat of Competition

In general, IPAs which are established in response to group practice HMO development, seem to have stronger competitive incentives to contain costs. In Minneapolis-St. Paul, for example, two IPAs, HMO Minnesota and Physicians' Health Plan, were a competitive response by traditional FFS physicians to five other group practice HMOs in that area. Christianson and McClure found that this competition helped to reduce hospitalization, contain costs, and improve access to medical services. At the same time, it focused attention on consumer satisfaction with medical care services, increased the range of consumer choice, and gave consumers better information about providers. The degree of competitiveness in a particular market area, therefore, may be an important determinant of IPA performance. For the IPA to be competitive, it
must eventually model the practice standards adopted by group practice HMOs, since those standards are reflected in the relative costs of the two programs (n.l p.80).

Without competition, the IPA has the potential to dominate or monopolize the delivery of health services in its market area. Some IPAs, in fact, may have been consciously designed to monopolize medical care services in an area, in order to ward off the entrance of group practice HMOs into the market.\(^\text{18}\) Monopoly control in a market area, however, could have severe adverse effects on capitation rates, or the quality of care, or both.\(^\text{19}\)

Advantages to Physicians

The IPA allows physicians to practice traditional FFS medicine that is consistent with the prevailing ideology of the medical profession. Indeed, the development of IPAs was a strategy employed by local medical societies to preserve these values and thwart the economic competition of closed panel group practice HMOs. The medical profession perceives the group practice HMO as shifting some of the control of physicians to the organization. In its view, any reduction in autonomy represents a loss of prestige and poses a threat to the status of the profession, as well as a loss of identity as entrepreneurs.\(^\text{20}\) Consequently, physicians dominate the management accountability of the IPA and the loosely-integrated structure does not infringe on their individual autonomy or identity as entrepreneurs.

The open panel practice of the IPA allows any physician the freedom to join the organization whereas closed panel group practice HMOs select physicians according to their needs. Subsequently, the open panel allows the patient the
freedom to choose the physician who will be responsible for his care. Although the thrust of peer review of utilization and standards practice in IPAs tends to be voluntary and educational in focus, it allows individuals physicians more control over the definition of quality of medical care. On the other hand, the group practice HMO tends to influence the quality of medical care towards the perspective of the organization, rationalizing the physician's role in an attempt to eliminate expensive or unnecessary practices (n.20 p.618). The IPA, also, permits physicians to practice in the settings of their choice rather than in a centralized location of the group practice HMO. The geographical dispersion of physicians is felt to be advantageous to accessibility for patients. Finally, the IPA supplies physicians with a source of clientele which may be particularly appealing if they are building a practice.

Disadvantages to Physicians

Withholding of a portion of their fees and possibly sharing in any financial losses of the IPA may be objectionable to some physicians. Others may have difficulty complying with the administrative procedures for the review of their utilization decisions. However, physicians can either become more involved in the organization, in order to act on their concerns, or they can withdraw from the IPA with little difficulty.

Advantages and Disadvantages to the HMO

Of all the models of physician organization discussed, the IPA model is likely to be the least effective in modifying physician practice towards cost-
effective decision making. Due to its many similarities to traditional FFS practice, it has the probability of emulating the inefficiencies of that system. Why then, would an HMO choose this model?

In a market area with several competing HMOs, the IPA model may offer an HMO the opportunity for product differentiation. Some consumers who have established a relationship with a physician may be reluctant to forfeit that relationship to join a closed panel HMO. Others may value highly the freedom to choose a physician and thus resent the limited choices offered in a closed panel HMO. HMOs, in general, are known to be sensitive to consumer preferences, often having formal grievance procedures to ensure consumer satisfaction with services. The choice of an IPA model by an HMO may indicate a desire to meet a consumer preference expressed in the population. This sensitivity to consumer preference may prove to be a very effective marketing tool for attracting enrollees.

The geographic dispersion of physicians in an IPA may be more convenient for enrollees than having to travel to a central location. However, lack of centralization could mean that an enrollee might have to travel to several locations to get required services. Mechanic's study (n.13 p.203) found that FFS physicians spend more time with each patient even though they may work longer hours. Although this may be economically advantageous to the physician, enrollees may also be more satisfied than if they receive assembly-line processing in a group practice model. Resistance from local medical societies, that has been prevalent in other models, would be greatly reduced with this model, which might constitute a positive effect on enrolment.
The main disadvantage of this model to the HMO is the probability of higher costs which could present difficulties in keeping premiums competitive. The HMO pays a fixed cost to the IPA for medical care services just as it pays a fixed cost in the other models. However, the efficiencies achieved in the other models, through centralization and economies of scale in the use of equipment and personnel, may largely be absent in the IPA. Also, the economic incentives of the FFS method of payment and weak organizational control in the IPA are likely to contribute to higher costs, which would then have to be reflected in the capitation rate. As a result, the HMO is more dependent on external variables, such as competition, over which it has little control, in order to achieve its objectives. Another external variable which may fluctuate is the number and type of physicians joining the IPA. If the IPA is small, with a mix of physicians appropriate to the needs of the population, the chances of achieving cost containment are higher.

In conclusion, the HMO must balance the tradeoffs of attracting enrollees by differentiating its product to meet with their preferences against the possibilities of higher costs and dependence on external variables to influence cost containment.

CANADIAN EXPERIENCE WITH ALTERNATE FORMS OF PHYSICIAN ORGANIZATION

The Community Health Centre Model

The CHC model in Canada has operated essentially on a staff model of physician organization, as described for the HMO. In British Columbia, Ontario and Quebec, centres have been funded through global budgets from their
Physicians who are largely general practitioners are hired as employees of the centre and are paid salary and fringe benefits. The centre provides facilities, support staff and arranges for or provides ancillary services. The global budget usually allows these centres to provide services for those not currently covered under the health insurance program, for example, new immigrants or the unemployed. Depending on the number of physicians employed, there may be a medical director or one physician designated to represent medical profession interests in the centre. A team approach to health care delivery is common in these centres which involves the integration of physicians and other health and social service professionals in delivering care to patients. Physicians are equal members of such a team but may not necessarily be the team leader.

Just as HMO staff model physicians met resistance from their medical profession colleagues, similar experiences happened in Canada. In all provinces, the medical profession demonstrated strong resistance to CHCs, from provincial level professional organizations to local physicians. They worried that accountability to citizen boards and the team concept would interfere with their authority to make medical decisions. Also, the use of alternate methods of payment other than FFS was perceived by the medical profession as an inherent threat to quality of care, although there was no evidence to suggest that CHC patients received inferior care.

The atmosphere in Sault Ste. Marie, Ontario was particularly hostile. Group Health Association physicians were rejected for membership in the local medical society. As well, there was great difficulty over acquiring admitting privileges in one of the local hospitals, and referring patients to local
specialists. The physicians in this setting formed a partnership that contracted with the board in order to side step issues of accountability and decrease local hostility about their being employees of the board.\(^{22}\)

In Quebec, the professional associations representing specialists and general practitioners were critical of CLSCs and the productivity of their physicians. For a time, a union of CLSC physicians was refused affiliation with the Quebec Federation of General Practitioners. As a result of the Saskatoon Agreement, community clinics in Saskatchewan were restricted to using FFS remuneration as a method of payment to physicians.\(^{23}\) Also, the role of Community Health Services Associations in relation to physicians was limited by the Agreement to that of landlord/tenant rather than employer.\(^{24}\) The progress of community clinics as well was impeded by the College of Physicians and Surgeons in Saskatchewan which used its power to prevent advertising and to constrain the granting of hospital privileges (n.22 p.133).

Protestations of the Ontario Medical Association to the Minister of Health, similarly, were influential in slowing CHC development and prompting a provincial task force\(^{25}\) that was to recommend a plan for evaluating the provision of primary care services which may be alternatives to normative or conventional means of services.\(^{26}\) In B.C., the expressed view of the medical profession that CHCs may well have a place in isolated and special areas\(^{27}\) was influential in the selection of remote areas as locations for CHRHCs.
The Health Service Organization Model

The Ontario HSO program with its capitation funding base is the most similar Canadian model to the HMO group practice contract. Although there are some substantial differences, the HSO, for instance, has a contract with the MOH to provide services under this program rather than being an organization providing prepaid health care services. Stoddart provides a pertinent description of the program's funding.

"Capitation funding as applied to the HSO program is a total dollar amount paid monthly for all eligible Ontario Health Insurance Plan (OHIP) insured persons who have enrolled in the HSO. Capitation-negation is the term used to describe an amount of money subtracted from the monthly capitation payment based on the number of eligible enrollees in a given month who received health services from sources other than the HSO, despite the fact that the HSO agreed to provide and be accountable for those services. The amount subtracted (negated) is equal to the payment which otherwise would have been made for those roster members in question."

The capitation rate paid to the HSO is determined by the Ministry and is based on the current OHIP fee schedule plus an adjustment for the age and sex of the population. In addition, the Ambulatory Care Incentive Program provides an incentive payment to HSOs which have demonstrated a reduction in hospital utilization for their rostered patients compared to a specified comparison population (n.28 p.10). From this revenue, the HSO pays for its facilities, equipment and staff and determines its own formula for reimbursing its physicians.

In the twenty-one operating HSOs, there are one hundred and thirty-nine physicians practising, of which roughly two-thirds are primary care physicians and one-third are specialists. These HSOs, also, employ a total of thirty-one nurse practitioners and one hundred and twenty-seven health related
staff (excluding secretarial, administrative and maintenance staff) (n.29). The composition of non-medical staff in these organizations suggests perhaps a different style of medical care practice associated with a different method of funding. For services not available in the HSO, patients are referred to appropriate outside sources of care which are covered through OHIP and are not charged against the HSO capitation rate (n.29).

The HSO program appears to attract physician practices that have invested their initial capital and have an established clientele. Thus, they join the program in order to be able to experiment with different styles of practice not lucrative in the FFS system. The HSO program seems to be more acceptable to the medical profession and has had less resistance than the CHCs. On the other hand, there are some British physicians who immigrated to Canada in order to avoid capitation who would be very resistant to this form of reimbursement being introduced here. While in general, HSOs have not developed in significant numbers to make an impact on FFS physicians, approximately half the population of Sault Ste. Marie are rostered in its HSO (n.29).

There is no Canadian counterpart to the IPA model HMO. In general, alternate forms of medical care practice have not developed extensively enough to seriously threaten FFS practice. The response of physicians in Quebec to the economic and ideologic threat of CLSCs was to encourage the development of FFS polyclinics which were basically group practices. This experience shows that Canadian physicians can make a competitive response that might, like an IPA, be conducive to reducing some costs.
FOOTNOTES


2. Robert G. Evans, "Paying the Dentist: How, To Whom and For What?", paper prepared for the Dental Health Care Services and Epidemiology Research Unit, Faculty of Dentistry, University of Toronto, Toronto, March 1975, p.7.


9. This type of contract differs from the staff model as the group is paid a negotiated sum by the HMO. Then, the group makes decisions about how physicians within the group will be paid.


25. Interview with Ray Berry, former Director of the Program Development Branch, Ontario Ministry of Health, Toronto, 29 April, 1985.


CHAPTER 9 VARIANT CHARACTERISTICS: ARRANGEMENTS FOR HOSPITAL SERVICES

As mentioned earlier, the relationship between the hospital and the HMO can be described as one of vertical integration, which varies in degree relative to the specific arrangements made between the two organizations. Although both organizations differ in their perspectives, they share a common goal, which is the desire to survive in a competitive health care market. Since the HMO is responsible for ensuring comprehensive health care services to its enrolled population, it must have a range of services available to it. The role of the hospital in this spectrum is to offer technical facilities for the use of HMO physicians in the provision of inpatient and, in some cases, outpatient services. While the HMO needs the hospital in order to fulfil its contractual obligations to enrollees, the hospital needs the HMO to be able to gain and maintain a market share for hospital services. The degree of need, in each organization, governs the relative bargaining position of each in negotiating an agreement for the use of services.

In the past, when the hospital was losing its market share, it often responded by increasing operating costs through the introduction of new diagnostic and treatment services or renovations, in order to attract new medical staff. However, when competition replaced regulation as a health policy in the U.S., an increased awareness of costs became a factor that led to improved efficiency. These old strategies, which induce high operating costs, make prices too high to be competitive. If the hospital cannot remain competitive, a reduction in capacity may be necessary for survival. While hospitals historically have perceived HMOs as a threat to their market share, the failure
of conventional strategies for maintaining their market shares in a competitive health care market has gradually been modifying their view of HMOs.

Mackie and Biblo have described some strategies adopted by hospitals to meet the potential threat of an HMO in their area and possibly convert it to an opportunity. Such strategies are filibustering, passive acceptance, direct sponsorship, and accommodation or strong support. The use of these strategies has guided the HMO into basically three types of arrangements for hospital services: hospital ownership, contracts with hospitals, and medical staff privileges. Each arrangement represents certain trade-offs made by the HMO, in terms of its ability to meet its contractual responsibility to enrollees and its goal of providing cost-effective quality health care services. The following discussion will outline the relationships between the hospital strategies and the subsequent effectiveness of HMO arrangements for hospital services.

**HOSPITAL OWNERSHIP**

From the literature reviewed, 26% of the HMOs represented in that sample provide hospital services through ownership of the hospital. However, hospital ownership seems to be more common with older, more established HMOs, for example, Kaiser Permanente Health Plan, Group Health Co-operative of Puget Sound, and Ross Loos Clinic in Los Angeles. Due to their age, these HMOs tend to be more represented in the literature.

The contrasting operational incentives and financial mechanisms of the hospital and the HMO, combined with competition for shares of the health care market, invite conflict between the two organizations and could lead to bitter rivalry in some communities (n.2 p.36). Mackie and Biblo suggest that in these
circumstances, the hospital is likely to employ a filibustering strategy where it attempts to place as many obstacles as possible in the path of the HMO. Traditionally, this has taken the form of excluding HMO physicians from membership in local medical societies, and the denial of hospital privileges to HMO physicians. More recently, hospitals have included political obstruction tactics by trying to influence Health Service Agencies, which are local health service planning bodies, to deny certificates of need to HMOs for the development of ambulatory care facilities (n.2 p.37). While this strategy may bring the hospital effective short term results, the long term repercussions may be serious.

Such active resistance was the stimulus for Kaiser to build its own hospitals rather than rely on local facilities used by FFS physicians. This approach by Kaiser and other large established HMOs is very significant, as it allows the HMO not only to compete economically with the traditional system but also in terms of product differentiation, based on the style of medical care practice (n.3 p.197). For example, the hospital bed population ratio used by Kaiser is 2 per 1000 which is significantly lower than the American national average of 4.4 per 1000. The HMO is in a better position to affect the length of stay of patients, particularly if hospital ownership combined with a staff model of physician organization. Since inpatient hospital services are the most expensive provided by the HMO, ownership puts it in better control of these resources and costs. Finally, the threat of external interference deterring the HMO from fulfilling its contractual obligations and its cost reducing objectives, is eliminated to a large extent with hospital ownership.
A myopic filibustering strategy can place the HMO in the long term in a stronger competitive position for achieving its objectives and the hospital in a weaker position. But, it is unlikely, in the initial stages of development, that the HMO would have the resources to build its own facility. The higher costs of hospital services generally associated with the use of medical staff privileges and contractual arrangements may nudge the HMO towards hospital ownership in an effort to control its costs. However, these higher costs may be a reflection of market prices and not necessarily a form of resistance from local hospitals. In conclusion, hospital ownership by an HMO represents a high degree of vertical integration where the HMO is in greater control of hospital resources, which enhances its ability to contain costs and efficiently deliver health care services.

**MEDICAL STAFF PRIVILEGES**

Thirty-two percent of the HMOs in the literature review sample used medical staff privileges as a means of providing hospital services. Medical staff privileges means that the HMO physicians are given permission by the hospital to practise in that facility but must compete with FFS practitioners for the use of facilities. The HMO may be quite vulnerable with this arrangement since the hospital does not guarantee the availability of beds and this could place the HMO's contractual agreement with enrollees in jeopardy. However, as an alternative to forthright obstructionism, this strategy of passive acceptance may be palatable to both parties as it minimizes any deviations from traditional health care delivery relationships. Very little mutual commitment is required of either organization as the medical staff rather than the organizations per se, by virtue of their privileges, are the focus of the interaction (n.2 p.38).
Under this arrangement, the hospital makes no special concessions to the HMO in reimbursement. The HMO is likely to pay charges least favourable to its enrollees and comparable to insurance carriers or self insuring patients. Generally, this means that the HMO reimburses the hospital its price for services, which does not provide any incentive for the hospital to reduce costs or be efficient in delivering services to HMO enrollees. In most instances, the HMO would not find this arrangement attractive other than when perhaps there was a limited choice of hospitals in a community. Because of its similarities to FFS practice, the IPA type of HMO is usually associated with the use of medical staff privileges. Frequently, IPAs lack the bargaining power of other types of HMOs in extracting more favourable arrangements from the hospital (n.2 p.38).

The hospital, like the HMO, gains few benefits from this type of arrangement as it does not restrain HMO development in the area nor does it encourage a constructive partnership with the hospital. Furthermore, the hospital is not in a position to increase its market share at the expense of other hospitals. Over the long term, the hospital may be susceptible to greater risks, as the unfavourable reimbursement arrangements may lead the HMO to establish its own hospital or use a more competitive hospital (n.2 p.38). Medical staff privileges, therefore, constitute a low degree of vertical integration between the two organizations and give the HMO the least control over the management of hospital resources.

CONTRACTUAL AGREEMENTS

Contractual agreements are the most common arrangements between hospitals and HMOs, comprising 42% of the HMOs mentioned in the literature reviewed.
type of agreement represents a middle ground for both organizations between the extremes of HMO sponsorship or hospital ownership on one hand, and medical staff privileges on the other. Within the scope of a contractual agreement, however, each organization may vary its strategy from a position of mutual accommodation to strong support, depending on the motivation for the association. In any event, the formal contract defines mutual obligations, such as the reimbursement formula and the availability of beds and ancillary services, among other things.

Due to different structures and goals plus conflicting financial incentives in the two organizations, contract negotiations are likely to begin with a mutual accommodation strategy. However, the stage of organizational development and competitive circumstances facing each organization are likely to influence the process as well. For example, Federa has outlined a life cycle concept for HMOs, illustrated in figure 11. During the start-up and drive to maturity stages, the HMOs' interests may centre more on gaining a market share than controlling costs. At these stages its behavior is likely to show some similarities to the traditional health care system. Thus it may use more hospital services and be more willing to accommodate the hospital. Once its market share becomes more secure in the maturity stage, the HMO will probably place greater emphasis on efficiency, intensely reviewing utilization with the goal of cost containment and cost reduction. Then, the HMO will look for more accommodation to its needs from the hospital, and if this is not forthcoming, will use other hospitals or develop its own.
* Maturity is defined as breakeven enrolment.


Since the hospital is in a strong bargaining position during the early stages of HMO development, the reimbursement formula is likely to favour its interests. But if the hospital is anxious to develop a relationship with the HMO as a means to gaining a greater market share, the HMO may have the financial advantage, perhaps negotiating discounted rates. In return, it may offer the hospital rapid payment of claims, which might relieve some of the hospital's bad debts. Similarly, as the HMO matures, it may seek to have its medical care standards influence patient care in the hospital, for example by altering practices such as preadmission workups and lengths of stay (n.2 p.44). Although the mutual accommodation strategy may be useful in the initial stages of interaction between the two organizations, it offers little assurance that the relationship will continue.

Depending on the strength of the motivation for the relationship between the two organizations, the strategy may shift to one of strong support to ensure
the continuance of the relationship. The goal of this strategy is to facilitate greater integration of the hospital and the HMO. The hospital board, for example, may give strong backing to the contractual agreement. In return, the hospital may be offered a seat on the HMO board (n.2 p.45). In addition, the hospital is likely to be open to participation in risk sharing with the HMO, where the reimbursement formula is based on a fixed price that may include only inpatient services or inpatient services plus the use of ancillary outpatient services. While many versions of this method of payment are possible, following are two common possibilities: a fixed reimbursement per patient per day or a predetermined fixed payment for an entire unit or floor reserved solely for HMO use, or a capitation system whereby the hospital is paid a fixed amount for each HMO enrollee, regardless of use of the hospital (n.2 p.46). The hospital assumes the risk for costs exceeding the fixed payment or it may share in the savings from the HMO's effective system of utilization control. Also, it provides the hospital with an incentive to improve the efficiency of its services. The implicit assumption in risk sharing is that the hospital will be guaranteed the bulk of HMO admissions (n.2 p.46).

Once a strong support strategy has been adopted, it may be necessary to improve physician relations and smooth patient flow between the two organizations. Hospital affiliation can be beneficial to the HMO in recruiting physicians, as it can assure hospital privileges, facilitate referrals to hospital specialists and, in some cases, offer a teaching affiliation (n.2 p.46). However, the community-based FFS hospital medical staff may be highly resistant to a strong HMO support strategy, due to the competitive threat to their incomes. The hospital has to actively buffer this opposition and may need board
involvement to allay the fears of medical staff. Similarly, the hospital needs to make some adjustments from its physician orientation to the consumer orientation of the HMO, which means seeing the patient as a customer. Since marketing is a vital factor in HMO success, the hospital environment must be conducive to encouraging continued enrolment in the HMO.

Table 13 summarizes the main advantages and disadvantages of HMO affiliation for the hospital. However, it assumes a strong support strategy and also that the hospital is the sole hospital with which the HMO affiliates.

Table 13
HMO Affiliation Factors Considered by the Hospital

<table>
<thead>
<tr>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Captive enrollee market.</td>
<td>1. Lower per capita utilization rates for inpatient and ancillary services.</td>
</tr>
<tr>
<td>2. Potential improved market share position.</td>
<td>2. Risk sharing through fixed payment reimbursement.</td>
</tr>
<tr>
<td>3. More predictable and increased volume of inpatient services.</td>
<td>3. Medical staff resistance.</td>
</tr>
<tr>
<td>4. Expanded use of outpatient ancillary and technological services.</td>
<td>4. Potential influence or &quot;control&quot; of hospital procedures by the HMO.</td>
</tr>
<tr>
<td>5. Captive referral base for hospital specialists and sub-specialists.</td>
<td></td>
</tr>
<tr>
<td>6. Improved payment mechanism stabilizing cash flow position.</td>
<td></td>
</tr>
</tbody>
</table>

The captive enrollee market, plus the fixed cost prepayment form of reimbursement, enables the hospital to improve its financial planning and gain better control of operating costs, and consequently develop a better competitive
position. In addition, the current and potential enrolment of the HMO, relative to other prepaid plans in the area, helps the hospital to predict what utilization might be expected and what its market share might be. On the other hand, because of the financial incentives of the HMO, a reduction in inpatient utilization is a strong possibility. This is likely to be a particular problem for the hospital, the greater the extent to which the HMO enrolled population overlaps with the hospital's natural service or catchment area. Also related to the HMO's incentives, is the fact that patients admitted to hospital may, on average, be somewhat more ill than other hospital patients.

In early stages of development, the HMO usually needs to purchase ancillary services plus specialized technological services from the hospital. But as the HMO moves towards maturity, it may prefer to have its own ancillary services if hospital prices for these services are not competitive enough for it to meet its objectives. However, the HMO will continue to need certain specialized technological services offered by the hospital. Despite the advantages of HMO affiliations for the hospital, nagging fears persist that the HMO will use the leverage of its captive enrollee market to attempt to change hospital procedures and policies in a manner beneficial to the HMO's goals.

Table 14 outlines the primary advantages and disadvantages of hospital affiliation to the HMO. Again, it assumes a strong support strategy and also that one hospital is the sole source of hospital services for the HMO.
Table 14
Hospital Affiliation Factors Considered by the HMO

<table>
<thead>
<tr>
<th>ADVANTAGES</th>
<th>DISADVANTAGES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Assurance of the use of hospital facilities to meet its contractual</td>
<td>1. Danger of domination of the hospital philosophy and orientation over</td>
</tr>
<tr>
<td>responsibilities to enrollees.</td>
<td>that of the HMO.</td>
</tr>
<tr>
<td>2. Opportunity for risk sharing</td>
<td>2. Hospital medical staff resistance.</td>
</tr>
<tr>
<td>through fixed cost reimbursement.</td>
<td>3. Possibly less attention to consumer satisfaction.</td>
</tr>
<tr>
<td>3. Asset in recruiting physicians.</td>
<td>4. Depending on the terms of a contract for a fixed payment for services, the</td>
</tr>
<tr>
<td>4. Access to specialists and sub-specialists.</td>
<td>HMO may have less financial control than with ownership.</td>
</tr>
<tr>
<td>5. Opportunity to possibly influence hospital policy towards more</td>
<td></td>
</tr>
<tr>
<td>efficient and cost-effective delivery of services.</td>
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</table>

The assurance of the use of hospital inpatient and ancillary and technological services has benefits for both HMO enrollees and the medical staff. Since the HMO is at risk for providing specialist services, it must make outside arrangements for these if the specialty or sub-specialty is not included in its medical group. Access to specialists and sub-specialists through the hospital may facilitate more favourable and convenient arrangements, enhancing continuity of care. Nevertheless, resistance from hospital medical staff could seriously hamper these arrangements. Furthermore, the financial incentives of the HMO cause emphasis to be placed on prevention and health maintenance, thus hospital services are used only when medically appropriate alternatives are unavailable. Hospital affiliation, then, creates some apprehension for the HMO that the
hospital philosophy of maximizing the use of its services might permeate the HMO operation.

CANADIAN HOSPITALS AND ALTERNATIVE PRIMARY CARE STRUCTURES

The medical staff privileges model of HMO arrangements for hospital care is the type of relationship between alternative primary care structures and hospitals prevalent in Canada. The model is not deviant from traditional FFS practice and provides a low level of vertical integration between the hospital and medical care practice.

In general, the response of hospitals and hospital associations towards CHCs was lukewarm. Since the legitimacy of the hospital was tied to being the centre of medical care, the emphasis of the CHC on primary care and prevention challenged this image. Hospitals feared that CHCs would take away their work, thus they felt if funds were allocated to them they could do the job just as well as CHCs. This perspective, combined with physician resistance and the difficulties of CHC physicians acquiring privileges, did not provide a conducive atmosphere for improving the integration of CHCs and hospitals. In most provinces, CHCs were dependent on the privileges of their physicians and other voluntary arrangements for the integration of their services with those of local hospitals.

The new primary care structures in Quebec, CLSCs, were to act as a point of referral to specialized health and social services at the secondary level of care (Refer Appendix B). Bill 65, the legislation implementing health care reforms in Quebec described in detail the internal organization CLSCs but failed to define linkages for these centres with other parts of the health care
system. In rural under-populated areas of Quebec, however, attempts were made to organizationally integrate the CLSCs with hospitals in the secondary level of care. The CLSCs came under the hospital boards with only two user representatives on that board and the CLSC administrator became a director under the hospital administer. While fusion of these organizations seemed highly desirable both socially and economically in these areas, it created considerable conflict.

Begin studied these centres and found that different objectives, values, technology and social organization in the CLSC and the hospital hampered integration. These findings show some similarities to those of Mackie and Biblo on the different organizational perspectives between HMOs and hospitals (n.2). For Canada, this represents an elementary attempt at vertical integration but medical staff participation was a major stumbling block. Since physicians concentrated most of their services in the hospital and since their attitude towards CLSCs was very reserved, the CLSC was often placed in a compromising position. For example, it might have to accept part-time rather than full time physicians on their staff (n.13 p. 13).

Other CLSCs in more populated areas were similar to CHCs in other provinces which had to depend on hospital privileges of physicians and voluntary arrangements as mechanisms for integration with hospital services. Although, there was some encouragement for the local hospital board to have a CLSC representative and likewise for the CLSC board to have some hospital and other health care organization representatives, experience seemed to indicate a generally low level of integration. Consequently, the Canadian experience with vertical integration of hospital and medical care has been very limited indeed.


5. Hospitals in the United States may operate on a for profit or a not for profit basis. Those operating on a for profit basis may increase the ratio of charges per service relative to actual costs depending on insurance coverage or the ability of patients to pay. See for example a discussion in Robert G. Evans, Strained Mercy: The Economics of Canadian Health Care, (Toronto: Butterworths, 1984) pp. 231-33.


CHAPTER 10 EVIDENCE OF HMO PERFORMANCE

The foregoing discussion has explored the generic components of the HMO and their relationships as well as its variable characteristics. What has emerged is a conceptually intriguing and administratively complex mode of health care delivery. Since the purpose of this study is to assess feasibility of HMOs for B.C., it is important to understand the effects of HMO performance.

From the structure outlined in figure 7, it would appear that the literature reviewed might be slotted simplistically into appropriate cells, and then the cells with the best performance outcomes might suggest models with certain organizational characteristics worthy of emulation. However, this method is fraught with difficulties due to the diversity of HMOs and variations in the data. Criteria would need to be developed to standardize conditions for comparison across cells and within all cells. Such a process would be time consuming and inevitably would eliminate some studies unable to satisfy the necessary criteria. Consequently, it was decided that while such an approach would be desirable, from the point of view of better assessing feasibility, it was beyond the scope of this study. As an alternative approach, aggregate trends in HMO performance will be identified, then an attempt to understand some of the reasons underlying these performance trends will be made.

While there is a proliferation of studies on HMOs, they vary in objectivity, depth, breadth and quality, and by and large have concentrated on sizable relatively stable HMOs, such as the Kaiser Permanente Health Plan. As well, there has been a conspicuous lack of randomized controlled experiments (n.2 Luft 1980 p.507), the latest exception being the recent Rand
Corporation study on health insurance\(^3\). In general, research efforts addressing HMO performance have encountered a series of interrelated problem areas of particular importance, namely: comparability of populations studied, control of exogenous variables, the assignment of causation and the impact that HMOs have on the entire delivery system\(^4\). Despite these limitations, common themes persist among empirical studies which indicate that HMOs are a less expensive means of providing care than the FFS system, that hospitalization rates, on average, range from 20 to 40% lower and are the primary source of HMO cost saving, and that enrollees probably receive comparable quality of care\(^5\).

Since HMOs are known to be a less expensive means of providing care, a brief overall picture of HMO cost performance will be presented first. Then, because lower hospitalization rates have been identified as a primary source of cost saving, an attempt will be made to understand the reasons underlying these differentials. Unless these reasons can be understood, it will be difficult to assess whether the same results might feasibly be expected in B.C. The framework outlined by Barer in a study on community health centres and hospital costs in Ontario will be used to consider determinants in the enrolled population, in the providers of care and in the organization that may explain differentials in hospital utilization\(^6\).

**HMO COST SAVINGS**

Since expenditures for health care services are the major concern of the client in this study, his first interest is likely to be in the relative costs of HMOs as compared with the traditional health care system. The economic
incentives in HMOs result in cost reducing behavior which is often viewed as potentially offering a pattern for cost control in the system as a whole. Since this study is concerned with assessing feasibility, it is important to understand where cost savings are made in HMOs.

The literature reviewed showed that the total costs for medical care (premium plus out of pocket costs) were lower for HMO enrollees than for people with comparable conventional insurance coverage. The lower costs are most predominant in PGP-HMOs and range 10 to 40% lower than conventional insurance. Although evidence is scant, total costs do not appear to be as low in IPA-HMOs. Knowing that total costs are lower, this difference, theoretically, could be reflected in lower costs per unit of service or in the number and mix of services delivered.

Unit costs may be lower as a result of the lower cost of inputs. Yet no suggestion appeared in the literature reviewed that HMOs pay lower costs for labour or other inputs. An alternate explanation may be that lower unit costs are achieved through improved efficiency in the production of medical care services. Group practice settings may lead to some economies of scale that effect physician productivity through the centralization of resources but it could be argued that such efficiencies are not exclusive to the HMO but also could be equally available in FFS practice.

Since hospital care is the most expensive part of medical care services, efficiencies in the production of hospital services may have some impact on total costs. Data from Kaiser hospitals in California and Oregon, as well as the GHC of Puget Sound hospital, were compared with a matched sample of similar hospitals in the same region. No consistent differences were found in the cost
per patient day but lengths of stay were shorter for the HMO-controlled hospitals, making the costs per case lower (n.5 Luft and n.7). From the earlier discussion on arrangements for hospital care (Chapter 9), it was apparent that most HMOs do not own their hospitals so these findings may not apply generally to other HMOs. Thus, lower unit costs do not seem to emerge as a major factor contributing to reductions in total costs.

The number and mix of services delivered by an HMO, therefore, may shed some light on cost reduction. Increased coverage for ambulatory care services and the substitution of ambulatory care for inpatient care have always been emphasized by HMOs. In reviewing data from 26 pairs of HMOs matched to comparison groups, Luft (n.2, 1978) found PGP enrollees to have 4.41 ambulatory care visits per year in contrast to 4.19 visits for those with conventional insurance coverage. For the IPAs in his sample, the difference was 5.11 visits versus 4.32 with conventional coverage. Despite increased visits, HMOs have not been found to offer more preventive services than FFS practice when people have the same coverage. Nor is it apparent that more ambulatory care visits are necessarily associated with lower hospitalizations.

Furthermore, the major source of the cost difference in HMO was consistently shown, in the literature reviewed, to be lower hospitalization rates. Enrollees in PGPs have generally about 35% fewer hospital days per 1000 than people with conventional insurance coverage. Again, IPAs show less consistent and higher rates but still may be up to 25% lower than those with conventional insurance. The lower rates seem to be associated with fewer admissions as length of stay shows some variation (n.n.2, 5 and 10 Luft). Why these rates are lower is yet an unanswered question about HMOs? Consequently,
the following discussion will look at some factors that may help to explain these differences.

Before leaving costs, however, one criticism of HMOs is that their financial incentives cause them to skimp on care in order to achieve cost savings. Although evidence on the quality of care in HMOs is not extensive, what is available suggests that care is not inferior and is at least equal to FFS practice. 

Finally, a critical question about HMOs is what effect does HMO cost saving behavior have on the health care system as a whole but little is known about this. In 1970, there were 33 HMOs in the United States, by 1983, 280 HMOs were serving 12 million people or 6.7% of the insured population. While these numbers remain small compared to the total population, continued growth likely would facilitate some assessment of the fiscal impact of HMOs on the American health care system.

Next, enrolled population, physician, hospital and organizational factors will be individually discussed from the perspective of their potential impact on lower hospitalization rates in HMOs.

**ENROLLED POPULATION FACTORS**

Because the HMO is at financial risk for services provided to enrollees, it would be in its interest to select the healthiest enrollees, least likely to use a significant number of services. If this were the case, it would provide an explanation for lower hospitalization rates. The American Public Health Association has identified distorted risk selection as a potential hazard of HMOs. However, the regulations of the HMO Act protect against this to a
large extent by requiring community rating and periods of open enrolment. The dual choice requirement of the Act facilitates the marketing of HMOs to employed populations who may be a healthier target group than the general population by virtue of their employment status. Nevertheless, by definition the HMO requires voluntary enrolment which assumes that the HMO will be a more attractive option to the enrollee than alternative plans. The answer to the question then, of who joins what kind of HMO and why, is of vital importance to understanding differentials in HMO performance.

Underlying the choice of any health plan, is a basic assumption that consumers behave as utility maximizers and will choose a plan that maximizes their satisfaction for any given level of costs. Thus, numerous variables may have an influence on satisfaction and subsequently on the choice of a plan. This discussion, however, will focus only on variables associated with risk as perceived by the consumers and on variables associated with accessibility to care. The risk variables are associated with the insurance characteristics of the HMO plan while accessibility variables are associated with service delivery characteristics of the HMO. These variables may have independent effects on HMO choice, but also there may be interactive effects between the variables and with other exogenous variables to influence choice. The interactive effects, however, are difficult to distinguish and often are not mentioned in the literature.

Bashshur and Metzner proposed a risk vulnerability hypothesis as a possible explanation of HMO selection. In brief, it suggested that people who believe that they may be at high risk for expected illness and who feel financially vulnerable due to potentially high out-of-pocket costs, are more likely to join
prepaid plans. Others have argued that this hypothesis should be disaggregated to consider risk vulnerability and financial vulnerability as separate variables likely to enter into a decision about choice of an HMO. Risk vulnerability refers to expectations about needs for service and is associated with the concept of adverse selection (n.15 Bice). Financial vulnerability, on the other hand, refers to expectations about the effects of the costs of services and is associated with the concept of self selection (n.15 Bice). Since both of these concepts have different implications for HMO enrolment, they will be discussed separately below.

Adverse Selection

The risk vulnerability hypothesis states that:

"the higher an individual's perceived likelihood of the occurrence of future events that will require the use of medical services, the more likely that individual is, other things being equal, to choose a more comprehensive benefit package and to pay the higher premium"

The level of perceived health risk is likely to be related to the individual's medical history, age, previous utilization of health services and present state of health. The risk vulnerability hypothesis is consistent with the concept of adverse selection. Perceiving that they may need future services, these individuals choose extensive coverage and are willing to pay higher premium prices. Once they begin to utilize services, however, their out-of-pocket costs are lower thus their use of services may increase substantially (n.16 p.594).
From the perspective of the HMO, high utilization behavior is not desirable. Yet, many HMOs offer comprehensive benefit packages with generally lower co-payments and deductibles and are likely to be attractive to those with high perceived risk vulnerability. Several studies have found comprehensive coverage to be a reason for HMO enrolment. The primary attraction of comprehensive coverage appears to be associated with prepayment and knowing medical care costs in advance (n.17 Tessler and Mechanic). However, other aspects of the benefit package such as immediate coverage and preventive services are also important.

Hetherington and his colleagues (n.8) studied six different insurance plans and found those choosing PGPs rather than conventional insurance or provider-sponsored plans were characterized by the highest level of illness risks, whether measured by age level, symptom sensitivity, or chronic illness. Benefit differences that were present across these plans may have had some influence on choices as well. Similarly, Blumberg found that those with limitations on activity due to chronic conditions, and those who self-appraised their health status as fair or poor, were slightly higher among PGP members than those with private coverage. In a post enrolment study at the Columbia Medical Plan in Maryland, Gaus (n.17) found that enrolled families had histories of more frequent prior hospital use as well as more medical conditions requiring continuous follow up. In addition, Tessler and Mechanic (n.17) found more chronic conditions prevalent among PGP enrolles who participated in a telephone survey after a dual choice experience. But, there was some variation in benefit coverage that could have contributed to the difference.
Previous utilization of health services may influence the level of perceived risk vulnerability and thus may affect choice of an HMO. Jackson-Beeck et al. studied the inpatient utilization and costs of employees and their families during the year, prior to optional HMO enrolment in the Minneapolis-St. Paul area, and found both hospital and professional expenditures to be lower among those who chose HMOs. Eggers came to a similar conclusion at the GHC of Puget Sound in Seattle, where he compared the pre-HMO-enrolment utilization pattern of a group of aged Medicare beneficiaries to a control group of Medicare beneficiaries from the same area. The GHC group demonstrated markedly lower pre-enrolment utilization than those in the control group. Also, Roghmann et al. (n.17) in an enrolment survey among firms in the Rochester area, found no evidence that HMO enrollees are at higher risk than non enrollees but on the contrary, their younger age and more favourable attitudes towards prevention put them at lower risk levels.

At times, age may be used as a proxy measure for health status and may be indicative of a degree of risk vulnerability. Several studies suggest younger families with children enrol in HMOs (n.14 and n.17 Moustafa et al. and Juba et al.). However, Berki et al. (n.15) found younger families with more children likely to choose an IPA-HMO rather than a PGP-HMO. Gaus (n.17) found HMO enrollees to have larger families and older heads of families than non-enrollees, although the mean age for both groups was forty. Likewise, Scitovsky et al. found more people forty-five years and under enrolled in an HMO. The apparent attraction of younger families to HMOs may be associated with a perceived future need of health care services for people in an expanding stage of life. This kind of population may demand certain services
such as maternity benefits\(^{23}\) and if their service expectations are met their enrolment duration may be affected. The experience at GHC of Puget Sound suggests, however, that young families may change plans frequently in search of better financial arrangements\(^{24}\). Berki and Ashcraft (n.16 p.626) caution that most studies have focused on dual choice options, involving employed workers and their families which, by definition, exclude potentially higher users of services – the aged and the unemployed.

Furthermore, a number of studies have found no differences in health status between those enrolled in HMOs or PGPs and those enrolled in conventional insurance plans using the FFS system of care\(^{25}\). In addition, Berki and Ashcraft (n.16 p.626) found no differences in health status between those who enrol in IPA-HMOs and PGP-HMOs. To summarize, it seems apparent that evidence supporting adverse selection of HMO enrollees is mixed and inconclusive, thus suggesting that this may not be a major factor likely to affect HMO performance.

Self-Selection

The financial vulnerability hypothesis argues that:

"the larger the expected utility loss associated with a given level of expected financial loss, the more likely that the individual will purchase a plan that reduces the cost of utilization of medical services" (n.16 p.593)

Financial vulnerability is related to risk perception; for without an anticipated future need of health care services, the financial vulnerability hypothesis may not hold. But, even in the absence of perceived health risk, fear of future economic consequences may exist. Thus, the characteristics of
different plans may be salient in an enrolment decision and influence self-selection into certain plans (n.16 p.614).

In order to assess the impact of financial vulnerability on an HMO enrolment decision, it is necessary to have some measure of the degree of vulnerability. In general, factors that may be linked to such a measure are income, age, and family size. Income appears to be the most common indicator but there seems to be no agreement on whether family income or per capita income should be used as the measure.

Some studies using family income as a measure reported higher family incomes for HMO enrollees (n.17 Gaus and n.18 Metzner and Bashshur) whereas Scitovsky et al. (n.22) found lower income for families choosing the Kaiser plan over a FFS group practice, although premiums and co-payments were lower for Kaiser. Roghmann et al. (n.17) found no significant differences in family income between those choosing a Blue Cross/Blue Shield plan and those choosing three HMO plans in Rochester, New York that had wider coverage and no waiting period for maternity coverage. However, among the HMO plans that they studied, the open panel or IPA-HMO had the highest family income. Alternatively, using a per capita measure of income, Berki et al. (n.15) found lower per capita incomes, in support of the financial vulnerability hypothesis, for those joining HMOs in a quadruple choice situation involving Blue Cross/Blue Shield, one open panel, and two closed panel HMOs. Looking at choices between different types of HMOs, Berki et al. 1978 (n.25) found that lower per capita income increased the probability of enrolment in a PGP-HMO. Enrollees in IPA-HMOs, on the other hand, had higher family and per capita incomes as well as the largest families, namely the largest number of children.
Financial vulnerability may be related to expected future expenditures for health care. If HMO enrolment is an action to protect against this, higher pre-enrolment medical expense might be expected to lead to HMO selection. However, in the studies done by Berki et al. (n.15) and Roghmann et al. (n.17) no differences were found in previous out-of-pocket expenses between those choosing HMO enrolment and those choosing Blue Cross/Blue Shield. The same studies also found IPA-HMOs were chosen over PGP-HMOs, despite potential savings offered by the closed panel HMO. Juba et al. (n.17) found that HMO enrollees generally reported expected out-of-pocket savings on medical expenses were a significant reason for HMO selection. The prepayment aspect of "knowing medical costs in advance" was also viewed to be a relevant factor in HMO choice by Tessler and Mechanic (n.17). However, Moustafa's study (n.17) showed that plan members were often not aware of services offered by their chosen plan.

Thus, it appears that there is some support for the financial vulnerability hypothesis playing a role in the selection of an HMO and of different types of HMOs.

Accessibility

Donabedian (n.4) and others (n.17 Gaus, Juba et al., and Tessler and Mechanic) have suggested that the greatest obstacle to PGP enrolment is the existence of reasonably satisfactory ties with the traditional health care system. Using multivariate analysis, Berki et al. 1978 (n.25) found the strongest predictor of HMO enrolment was the previous source of care. Having a private physician as a regular source of care reduces the probability of enrolment in a PGP-HMO, while not having a private physician or regular source
of care increases the probability significantly. The latter may result from reduced access caused by poor integration into the traditional medical care system due to being new in an area (n.17 Gaus and Juba et al.). Goldberg and Greenberg found population migration to be an important variable in HMO choice. Ashcraft et al. (n.25) reported that dissatisfaction with a previous source of care was a characteristic pre-enrolment experience of an HMO enrollee, whereas the post-enrolment experience showed satisfaction with the access aspect of care.

In their analysis of factors affecting selectivity of plans, Metzner and Bashshur (n.18) found being able to choose a doctor and to see the same doctor ranked very high. Similarly, Berki et al. (n.15) found having a private physician as a usual source of care very significant and those with such relationships tended to follow their physician into an IPA-HMO. Free choice of physician, therefore, appears to be an important factor influencing the type of HMO chosen.

Geographic accessibility, in terms of physical distance from the source of care, was found by Scitovsky et al. (n.22) and Tessler and Mechanic (n.17) to have an influence on the choice of a plan. Furthermore, Gaus et al. (n.25) measured accessibility to care in terms of the time it took to contact a physician by phone, by appointment, and by waiting time in the office, and their results favoured the HMO.

A discussion of problems of access also raises questions about distributional equity of services and whether some sections of the population may be underserved. According to the 1983 HMO Census, total membership in HMOs was 12,490,780 but aged members covered by Medicare represented 492,035 of the
total, and poor members covered by Medicaid represented 258,272 of the total. The figures suggest that these groups known to have higher health risks are significantly underserved by HMOs. Spitz (n.1) provides a discussion of the Medicaid program and enrolment in HMOs and correspondingly, Bonanno and Wetle discuss HMO enrolment and the Medicare program. Both indicate that problems have arisen due to bureaucratic barriers and retroactive payment mechanisms which have deterred HMO involvement with these populations.

Another factor related to accessibility of services is financial barriers to seeking needed care. In many instances, employers pay part or all of HMO premiums, particularly where union contracts are in effect (n.5 Luft 1981). Not only does this improve accessibility by reducing the employees' costs for services but also it may increase accessibility through better benefit coverage. Due to legislation, HMOs generally offer more comprehensive benefits than conventional insurance plans, especially with respect to ambulatory care services. Third party involvement in the full or partial payment of premiums makes the enrollee less sensitive to the cost of purchasing these services. When this is combined with improved benefit coverage, it may lead to a greater use of services, for example, of ambulatory care visits.

In a review of several studies, HMO enrollees were found to have at least as many or slightly more ambulatory visits (n.2 Luft 1978). The suggestion is that HMOs may not necessarily make savings from increased ambulatory care visits. However, some studies that used matched populations with differences in ambulatory care coverage have reported higher rates of ambulatory care servicing accompanied lower inpatient hospital utilization in PGP (n.15 Berki et al., and
n.23). These findings imply that there may be an association between lower hospitalization rates in HMOs and greater accessibility to care through better ambulatory care coverage.

Thus, the evidence presented on accessibility suggests that an established relationship with a physician decreases the probability of HMO enrolment. Those without access to a regular source of care appear to be more attracted to HMO enrolment. Questions arise as to whether this group may differ in some way that may affect hospitalization rates from those served by the traditional health care system. The under-representation of the poor and aged covered by publicly-funded health care programs in HMO populations suggests perhaps some homogeneity of population that may have implications for lower hospitalization rates. Finally, broader coverage offered by the HMO improves accessibility to a wider range of services, particularly ambulatory care, which may also be reflected in lower hospitalization rates and decreased costs.

In conclusion, this discussion has attempted to identify factors in the enrolled population that may account for differentials in hospital utilization and subsequent lower costs attributed to HMOs. It is by no means exhaustive, and merely accents the generally mixed and inconclusive evidence on HMO enrolment.

Although evidence presented did not support adverse selection in HMO populations, it did suggest that HMOs may serve population subsets favourable to its objectives such as young families and few aged or poor populations. This situation appears to have developed despite mechanisms designed to promote equity in population selection such as community rating and open enrolment. To be fair to HMOs, other structures may have predisposed it to this situation.
The dual choice option of the HMO Act encourages the marketing of HMOs to lower risk employed populations. At the same time, the publicly funded Medicare and Medicaid structures present bureaucratic barriers to the enrolment of higher risk populations. The incentives offered by a competitive market structure reinforce the situation as it tends to place the HMO in a favourable position in the marketplace. As a result of these structures, it may be very difficult and not likely desirable to alter the population mix in HMOs.

While some evidence indicates self selection in HMO enrolment due to financial vulnerability, it is not clear this would have an influence on HMO performance. Accessibility to ambulatory care through broader benefit coverage in HMOs may increase utilization. Increased ambulatory care utilization may not necessarily be cost saving but if there is an association, as some studies suggest, with lower hospital utilization, overall savings may result. Finally, the evidence on having an established relationship with a physician and on the freedom to choose a physician suggest possible implications for the type of practice setting selected which might indirectly affect hospital utilization rates and possibly lower costs.

**PHYSICIAN FACTORS**

Physician factors possibly accounting for lower hospitalization and reduced costs in an HMO could be related to the supply and mix of its physicians. In the staff and group contract models of physician organization mentioned earlier,
the HMO controls the number of physicians selected as well as the mix of primary care physicians and specialists. Most of these HMOs attempt to determine optimal ratios of physicians to enrollees but this may vary with the stage of development of the organization and the needs of the population. While the determination of such ratios may facilitate lower admissions per capita, Barer (n.6) points out that it is difficult to separate this argument from the issue of patient access, as lower physician/population ratios may mean less access. However, access does not appear to be a problem in HMOs and may in fact be improved by an HMO.

On the other hand, IPAs, being open panel practices, have no control over the number and mix of physicians joining their organizations. If their physician mix is skewed in favour of specialists who tend to have hospital intensive practices, higher hospital admission rates might be expected. As discussed earlier, IPA physicians are reimbursed on a FFS basis which provides an incentive to maximize services especially those with high renumerative value such as hospitalization where overhead costs to physicians are considerably reduced. Also, as previously noted, IPAs have weaker organizational influence on physician decision making than the PGP model HMO. Thus, a combination of number and mix of physicians, the method of payment to physicians and the structure of the organization may possibly affect hospitalization rates in HMOs.

While Egdahl et al. show reductions in hospitalization for IPAs relative to FFS practice, others have found these reductions not to be as great as in the PGP model. In Pett's study (n.31) comparing a staff model HMO and an IPA where benefits were identical and enrollees very closely matched, he
suggests that the explanation for differences in hospitalization is organizational incentives, but he was not able to determine which incentives were responsible. However, Holahan proposes that the prepayment incentives affect decision making of the individual physician in the PGP model more than under the IPA model and this has an influence on utilization patterns.\textsuperscript{32} In contrast, Broida et al. comparing prepaid and FFS populations each receiving care from salaried physicians demonstrated no differences in hospitalization between the two groups.\textsuperscript{33} In this study, the method of reimbursement to physicians was held constant rather than varying in accordance with the different types of populations served which is the usual procedure in such studies. Therefore, these results may need cautious interpretation.

If access to hospital admitting privileges is denied physicians for any reason, such as resistance to HMOs by local medical societies, this could be reflected in lower hospitalization rates. Klarman criticized earlier studies done on the Health Insurance Plan (HIP) of Greater New York on this basis. He implied the lower hospitalization rates reported were affected by discrimination against HIP physicians with respect to admitting privileges.\textsuperscript{34} Densen et al. refuted this claim, reporting that 80% of HIP general practitioners were affiliated with at least one hospital.\textsuperscript{35} In response, Klarman suggested that the figure would be more impressive if it related to specialists who tend to have more admissions and that hospital affiliation is not necessarily to be equated with access to hospital privileges.

Given the financial incentives of the HMO, it is reasonable to expect that more preventive services might be provided by HMO physicians and that this may
have an effect on hospitalization rates. Luft in reviewing the evidence on preventive services in HMOs concludes that greater use of preventive services by HMOs

"appears to be attributable to better financial coverage rather than a preventive care ideology. When people have full coverage they have at least as many if not more, services under the FFS system than in an HMO. These results are entirely in accord with data for hospitalization - HMO enrollees seem to get fewer services if everything else is held constant" (n.9 pp.163-164)

Donabedian (n.4) has proposed that the key question about utilization rates is whether they are appropriate. Thus, do lower hospitalization rates in HMOs represent reductions in "necessary care" or "excess care"? From his review of the hospitalization literature, Luft suggests that PGP physicians admit patients less frequently for diagnostic tests than control group physicians. But his findings with respect to surgery were not as clear,

"people in HMOs have markedly lower surgical rates and prepaid group practices have very low rates for some specific 'discretionary' procedures. However, the rates for non surgical admissions tend to be equally low and the 'discretionary' rates, with the exception of tonsillectomies are not consistently lower than the rates for all surgical procedures" (n.2 Luft, 1978 p.1341)

These findings suggest that reductions in hospitalization rates in HMOs occur across the board in surgical and non-surgical categories. However, the implication is that HMOs do not necessarily reduce admissions only in the discretionary or unnecessary categories.

Another question arising is; are lower hospitalization rates associated with a lower quality of care? Cunningham and Williamson reviewed 27 studies concerned with quality of care in HMOs.
"In 19 studies, the investigators found the quality of care in HMOs to be superior to that of other settings; in the remaining eight studies, either quality was found to be similar or the total study findings were inconclusive; in no project were the overall results indicative that quality of care in HMOs was below that of other settings" (n.11, p.4)

The California Medicaid experience described by Starr seems to be the only exception reporting substandard services. While this experience involved fraudulent practices and low quality care, it seems to have been a distinct exception to the norm. Because of the involvement of government funds, it was quickly remedied and no recurrences have been reported. On balance, HMOs would appear to deliver at least equal if not somewhat better care than conventional practices.

To sum up, from the above discussion of physician factors, it would appear that the method of payment to the physician, the form of organization prevalent in the practice setting and hospital admitting privileges are factors that may lie behind lower hospitalization rates attributed to HMOs.

HOSPITAL FACTORS

Earlier, the discussion on arrangements for hospital care pointed out different levels of integration between the hospital and the HMO. As a result, certain characteristics such as hospital ownership or the method of payment to the hospital are factors that may influence internal hospital policy but are unlikely to have any direct impact on admission rates aside from their effect on the availability of beds.
Some evidence suggests that per capita bed supply may be a factor contributing to hospital utilization rates. A study conducted by Roemer in upstate New York found that when two hundred new beds were added in a community that had a previous bed occupancy rate of 78%, a sharp rise in hospital admissions and average lengths of stay was observed. However, bed supply per se does not determine admission rates as utilization decisions ultimately rest with physicians.

The Kaiser Permanente Health Plan is the classic example of the use of lower bed population ratios because it operates on the allowance of two beds per thousand enrollees when the American average is 4.4 beds per thousand population. The Kaiser plan is at risk for providing hospital services and generally has lower hospital admission rates, although factors other than bed scarcity may be involved. Weil studied seven HMOs delivering health services to Medicare patients, three of these were Kaiser plans. Resource availability was one dimension that he considered in each plan. The Kaiser plans, in addition to owning their own hospitals, also owned and operated their own home health agencies and one plan owned an extended care facility. Consequently, this suggests that the availability of alternative resources may influence the extent of utilization of acute care hospital beds.

However, other findings such as those of Densen et al. in a study involving HIP of Greater New York, show lower hospitalization rates even when the organization was not at risk for hospital care and when bed supply was not subject to constraints. Furthermore, Wersinger et al. (n.23) compared three HMO settings in Rochester, New York where bed availability was not restricted and found lower admission rates for the PGP-HMO than for the IPA or
network types of HMOs or Blue Cross/Blue Shield. The findings of these studies imply that imposing constraints on the number of available beds is not a necessary condition to reduce admission rates. However, restrictions on bed availability eventually could become a sufficient condition to reduce hospital admission rates. Thus, lower admission rates reported by Kaiser plans may have been related, to some extent, to bed scarcity.

To sum up, it would appear that factors within the jurisdiction of hospitals such as bed supply do not offer an adequate explanation for lower admission rates in HMOs. Bed restriction policies do not discriminate directly against particular population groups so could not reduce admissions through the exclusion of, for instance, high risk groups. These policies, nevertheless, may have some interactive effect on the treatment decisions of physicians but these decisions are probably more susceptible to the influences of the payment method and the organization of the practice setting.

ORGANIZATIONAL FACTORS

Wolinsky (n.4) has noted the failure of studies on HMOs to isolate the influence of different structural incentives on HMO performance. As a result, the literature was able to shed little light on the influence of organizational factors in decreasing hospitalization rates. Barer has commented,

"Undoubtedly that is partly due to the vague 'formalizations' of organizational factors and their dimensions and to the conceptual difficulty of distinguishing practice style and philosophy from the entrepreneurial and financial risk aspects." (n.6 p.66)
The previous discussion on physician organization and method of payment (in Chapter 8) suggests a number of organizational factors that may contribute to decreased hospitalization rates. Particularly in the group models, factors such as peer review, the availability of diagnostic facilities and auxiliary personnel, the accessibility of consultation with specialists and the absence of FFS as a method of payment could have an influence on hospitalization patterns. Scitovsky and McCall compared a prepaid multispecialty group practice with a prepaid FFS multispecialty group practice that was not at risk for hospital care. They found that the number of patient days per 1000 persons (excluding maternity) was almost identical for the two plans. Although the admission rates for the PGP were lower, its lengths of stay were longer. These findings lend support to the hypothesis that lower hospitalization rates may be due as much to the group practice form of organization as the prepayment feature. Since many comparisons showing lower hospitalization rates have been done between solo FFS practice and PGPs, this suggests possibly an independent role for organization factors as an explanatory variable. Nevertheless, the extent of the influence of organizational factors or the specific factors likely to be responsible for lower hospitalization rates remain highly uncertain.

SUMMARY

The total costs to enrollees are lower in HMOs than for comparable comprehensive coverage under conventional insurance plans. These savings appear to be achieved through lower hospitalization rates, without jeopardizing the quality of care to the enrolled population. However, having reviewed some evidence of
factors likely to affect lower hospitalization rates, it is difficult to draw conclusions about causation.

Certain subsets of populations served by HMOs may be a contributing factor. The unwillingness to change a source of care once a relationship is established with a physician may prejudice the selection of a particular practice setting which subsequently may affect hospital utilization. Regarding physician factors, practice setting, method of payment and access to hospital privileges, were all possible explanations for consideration in lower hospitalization rates. Since decisions to hospitalize ultimately rest with physicians, the availability of resources is the only hospital factor likely to have an indirect effect on utilization patterns. Finally, organizational factors, although limited, seem to point to practice setting as a probable pre-disposing factor.

The theme throughout seems to indicate a role for practice setting as possibly being influential in lower rates. Often, the most favourable results of decreased hospitalization were associated with the PGP model. Since physicians in this setting are not paid FFS, their incentives to hospitalize are removed. Thus, it appears from this analysis that practice setting and payment method are consistent factors associated with lower hospitalization rates.

Evans offers a conclusion that seems appropriate to this discussion:

"Organization and philosophy differ dramatically across modes, as presumably does the psychology of the participating physician. It is not rigorously proven, therefore, that the remarkably consistent reduction of hospital use of about 20-25% which is associated with shifts away from fee-for-service is in fact the result of the removal of economic incentives to excess use. Nevertheless, on the basis of existing evidence, it is clearly much more plausible than the null hypothesis." 42
EVIDENCE OF PERFORMANCE IN ALTERNATE FORMS OF MEDICAL CARE PRACTICE IN CANADA

Evaluation of the performance of CHCs in Canada has not been extensive, although the Community Health Centre Project report recommended that CHCs be developed in sufficient numbers to allow effective evaluation. One estimate, in 1983, accounted for 140 CHCs in Canada and of these, 112 were CLSCs in Quebec. Thus, limitations in numbers plus a lack of standardization among CHCs due to adaptations to local needs have provided some obstacles to evaluation. The prevailing political climate towards alternative forms of health care delivery as well has tended to create a defensive atmosphere where the onus to prove the worth of these organizations is placed on its supporters. Evaluation, frequently, becomes a matter of measuring CHC performance against a FFS standard often in terms of cost rather than other less measurable variables such as appropriateness, quality or accessibility. The studies that have been done on CHCs, nevertheless, have found some supportive results.

Anderson and Crichton conducted the first major evaluation of the community clinics in Saskatchewan regarding their effect on hospital utilization. The rates reported were for regions, three of which each contained one of the largest clinics. While there was variation in data among regions, the findings were

"that complex multispecialty clinics, and particularly consumer sponsored clinics do have economies in clinic operation that result in...higher investigative and consultative or referral costs...balanced by lower rates of hospitalization for investigative and non-surgical conditions...and lower rates of discretionary surgery." (n.45 pp.322-323)
when compared with general practice in the regions studied. These clinics serviced a user population rather than a population that had enrolled through a prepayment system. Also, their revenue was derived from FFS billings which is contrary to CHC ideology, although clinic physicians were reimbursed by salary.

In Ontario, the union sponsored health centres that were originally developed on a PGP model have largely been the focus of comparative studies. Prior to the introduction of universal first dollar medical care insurance, utilization patterns of enrollees at GHA of Sault Ste. Marie were studied by Hastings et al. in 1967-68 for the World Health Organization. Samples of matched subscribers to a commercial insurance plan were compared with GHA enrollees. Hospital discharge rates were found to be lower for GHA enrollees, 109.4 compared with 136.4 for the commercial plan. In addition, GHA enrollees had lower lengths of stay 8.95 days relative to 9.32 for the insurance plan.

After the implementation of medical care insurance, capitation payment was introduced by the Ontario MOH for the centres in Sault Ste. Marie and St. Catharines. Part of this new funding arrangement included a provision for rewarding decreased hospital utilization. As a result, another study was commissioned to review utilization claims made by these centres relative to a FFS comparison group. An increased rate of 1,228 days was found for GHA in contrast to the 979 reported by Hastings et al. in 1973. Considering that the universal medical care insurance program had eliminated adverse incentives to enrollees for the use of out-of-plan services, this result is not surprising as the centre's control over enrollee hospitalization had been
substantially weakened. Even with the increase, however, the rate remained below the provincial rate of 1,373 days (n.49 p.900). The study, nevertheless, concluded that when the costs of ambulatory care were balanced against hospital costs for these centres, the total cost of providing care was slightly more than care provided by the FFS system (n.48 p.1351).

In 1973, the Ontario MOH launched an internal evaluation of the Sault Ste. Marie and St. Catherines centres. However, problems of standardizing each clinic with a comparable control clinic arose in both cases which caused these studies to be viewed with a sceptical eye. For example, the GHA was matched with the Glazier Medical Centre in Oshawa for the period April 1974 to April 1975. The comparative value of this clinic was quite questionable because of its different location, different mix of services and different methods of payment to physicians.

Later in 1975, De Friese compared the results of the Hastings et al. study with those of a household survey in order to assess the impact of universal health insurance on the organization and patterns of medical practice. His findings indicate a rise in the admission rates of GHA patients from 104.6 in 1968 to 149.6 in 1973, but admission rates for non-GHA patients also rose from 129.8 in 1968 to 166.8 in 1973 (n.50 p.139). He concludes that the organization of services and patterns of consumer utilization characteristic of these systems have not experienced major change since the introduction of the health insurance program. Furthermore, Vayda has pointed out difficulties in the publicly funded system for developing PGP models, especially with respect to problems of enrolment, opposition and capitalization.
More recently, Barer (n.6) conducted a study on CHCs and hospital costs in Ontario. This study focused on the implications of lower hospitalization rates reported in the literature for PGP's in the United States and for CHCs in Canada for both hospital expenditures and total health care expenditures in Ontario. The findings are briefly summarized as follows:

"...estimating potential savings in hospital and health care costs was fraught with data problems, it did not produce a consensus as to the likely magnitude of such savings, and it was dependent on a number of assumptions where information was not available. But whereas the hospital utilization studies showed that CHC/PGP members use at least 20 per cent less hospitalization, the potential net expenditure savings, under a variety of assumptions, appear to be no more than 5 per cent of total health care expenditures or 8 per cent of hospital expenditures." (n.6 p.164)

These results suggest caution in advocating widespread development of CHCs as an alternative to FFS practice for financial reasons (n.6 p.164). Moreover, they suggest the need to improve data collection systems and to do research into other aspects of CHCs that may contribute to cost-reduction.

In B.C., there has been far less effort in evaluating the performance of CHRHCs. Unlike a PGP model which provides only medical care services, they attempt to integrate the provision of health and social services. However, the Report of the Audit Committee in 1977 revealed "that the centres' salaried physicians make fewer demands per population served on expensive health facilities such as hospitals and emergency services"53.

Despite encouraging results from a limited number of studies in Canada, the medical profession manage to dismiss CHCs as experiments on the basis of insufficient proven effectiveness. As well, governments tend to give little credence to such evidence for less obvious reasons.
FOOTNOTES


8. See above note 2 Luft, "Assessing the Evidence", Roemer and Shonick, "HMO Performance" and Luft, "How do HMOs Achieve their Savings" and note 5 Luft, "Trends in Medical Care Costs" and Luft, "HMOs Dimensions of Performance". Also see R. Wersinger and A. Sorenson, *An Analysis of the*


40. Paul M. Densen, Eve Balamuth and Sam Shapiro, Prepaid Medical Care and Hospital Utilization, Hospital Monograph Series No.3, (Chicago: American Hospital Association, 1958).


42. Robert G. Evans, "Paying the Dentist: How, To Whom and For What?", paper prepared for the Dental Health Care Services and Epidemiology Research Unit, Faculty of Dentistry, University of Toronto, Toronto, Ontario, March 1975, p.21.


CHAPTER 11 THE HMO STRATEGY AND AMERICAN HEALTH POLICY

Chapters six through nine have looked at aspects of internal organization of the HMO and chapter ten has attempted to review factors likely to affect HMO performance. However, for the HMO to survive as a viable alternative mode of health care delivery, it must be able to interact successfully with and respond to its external environment. Miles has proposed an ecological model of organizational effectiveness which suggests that the goals of an organization are determined not as much by internal constituencies as by the mix of powerful external strategic constituencies on which it depends for survival. Thus, the following discussion will shift the focus from an internal perspective of the HMO to understanding the HMO in the external environment of American health policy.

The HMO strategy was introduced by President Nixon in 1971 as a cornerstone of a national health policy. A wide range of groups such as politicians, senior government bureaucrats, private industry, health care providers and consumer rights advocates hoped that the strategy would be a catalyst for restructuring in the American health care system. From this lofty beginning, the strategy was tempered gradually by the harsh realities of politics and the complexities of the health care system. Hall et al. offer a useful paradigm for analysing the course of an issue. They consider an issue to have a natural history so at any particular time, levels of legitimacy, feasibility and support can be ascribed to it by authorities with the power to determine its priority. While the interpretation of these criteria is not fixed, the score that an issue receives on the scales of legitimacy, feasibility and support over the course of its
natural history will determine the extent of the progress or retardation of the issue. Adopting this perspective, the development of the HMO strategy will be traced within a relevant historical framework of American health policy. (Refer to Appendix C for a chronological summary of events in HMO development.)

PRE-1970: IDENTIFYING THE NEED FOR RESTRUCTURING

In the post-war period, public policies in the United States like those of other western nations began to focus on the inequalities in society. As a result, "welfare state" programs developed as mechanisms for the redistribution of wealth. The 1960's were heralded by a public philosophy expressed by Galbraith as "private opulence and public squalor" which rapidly led to an under-developed public sector addressing urgent social needs. The subsequent outcome was a move toward centralization and a greatly expanded scope and scale of U.S. federal government involvement in social programs. Centralization was accompanied by increased politicization as government expanded its role in policy areas previously viewed as the nearly exclusive preserve of the private sector. Another side effect was an acceleration of political participation, for example, some federal programs had mechanisms specifying "maximum feasible" participation.

The cumulative effect of these trends began to shake the foundations of the political structures that had created them. Consequently, a "crisis of democracy" emerged which expressed concerns that the "welfare state" had unleashed forces the federal government was no longer able to control. Within a decade, the tide turned dramatically from support for the public sector meeting unmet social needs to criticism of the public sector as
overdeveloped and inefficient at meeting needs. In this context, the rationalizing policies of the 1970s which emphasized cost- and government-containment began to sharply challenge the expansionary policies of the 1960s.

Health Policy

Prior to the war, in 1933, problems of accessibility and inadequacy in health care had been identified by the report of the Committee on the Costs of Medical Care. However, no immediate action was taken and health care remained the prerogative of the private sector until the end of the war. With the trend toward equalizing policies, the U.S. federal government began to venture into the realm of health in the late 1940s. Expanding its support of biomedical research on dreaded diseases such as cancer was the first step. Cochrane has described this as "attacking the inequality between diseases". The second step was to equalize resources among regions which was tackled by the creation of the Hill-Burton program that directed funds to the planning, construction and renovation of hospitals. Neither of these programs posed a threat to the private sector nor to the powerful AMA as both were essentially subsidies supportive of their activities.

However, the availability of research funds and the expansion of hospital facilities illuminated a shortage in the supply of physicians. From the early 1950s, discussions of federal funding for physician training were strongly opposed by the AMA as a threat to professional control of medical education. Finally in 1963, almost fifteen years after the development of the other programs, federal aid to medical schools was approved. Between 1965 and 1980, medical schools increased from 88 to 126 and the number of graduates almost
The final area of inequality tackled by federal health policy was the inequality faced by the elderly and the poor due to financial barriers to health care services. The legislation of the Medicare and Medicaid programs in 1965 added a new strategy to the policy mix—financing mechanisms. This shift in strategy roused strong opposition and mobilized exceptional political organization by the AMA and the hospitals. Consequently, the federal government moved to accommodate their concerns in order to gain the critical cooperation of these groups for implementing the programs. As a result, the programs were almost uncontrollable by design as the concessions made denied the government any leverage to control costs.

While major steps towards equality had been taken, the federal government also had become deeply involved in both sides of the medical economics equation, on one side building up the supply of medical care providers and services (the production of biomedical research and technology, the construction of hospitals, and the training of physicians) and on the other, generating new demand for care among previously deprived parts of the population (the elderly and the poor) (n.4 p.13). However, these changes in policy were accompanied by new and difficult problems. The hospital program had resulted in overbedded and under-occupied hospitals. The increased supply of physicians had little impact on the problems of maldistribution. Although medical costs were rising before 1965, many attributed their continued increase to Medicare and Medicaid. But, a more fundamental explanation lay in the basic incentives in the health care system, particularly its financial arrangements which had only been reinforced by Medicare and Medicaid (n.6 p.384).
In addition, the change in the distribution of health functions between the private and public sectors created new constituencies and political obstacles. Now, as a major subsidizer and purchaser of health care, the federal government was thrust from the sidelines to the forefront of health policy making.

1970-1974 DEVELOPING LEGITIMACY FOR RESTRUCTURING

Crisis in Health Care

Starr describes the 1970's as opening

"with ominous declarations of a 'crisis' in health care. The wide use of the term crisis did not simply register an objective reality - it changed it. Crises make hard decisions seem unavoidable; they change the political agenda and create political opportunities" (n.6 p.381).

The crisis was one of money - if medical care costs continued to escalate "runaway" inflation would "price medical care out of the reach of most Americans" (n.6 p.381). The crisis of cost also began to highlight deficiencies in the existing system. Despite the equalizing programs mentioned earlier, problems of accessibility were prevalent even where services were abundantly available. Doubt began to be raised by politicians about whether high expenditures were worth the return on the investment, as the health of Americans did not appear to be as good as that of people of most other industrialized countries (n.6 p.382). Recognition was spreading that more dollars could do more harm than good unless they were channelled to affect the organization of health care resources.

Health as a Right

At the same time, the civil rights struggles of the 1960s had contributed
to a public belief, in the 1970s, that health care was a right and not a privilege. This belief went beyond the right "for" health care, as exemplified by access to services, to include the demand for rights "in" health care such as informed consent. The health rights movement began to challenge the distribution of power and expertise of the medical professional, thus sowing seeds of distrust. For example, there were movements to demedicalize critical life events such as childbirth or dying (n.6 p.389). This increased consciousness of rights and ambivalence toward medical authority led to pressure for government intervention in the health care system. The political pressure mobilized by these groups, however, blocked solutions such as simplistic reductions in public expenditures. Thus, if health care was to be a right, government now was being compelled to look at structural reform as a means of cost control.

Increased Regulation

Increasing pressures from rising costs in health care prompted a shift from fiscal policies such as Medicare and Medicaid to regulatory policies aimed at controlling the supply of health care resources and, in some cases, the price, for example, with diagnostic related group reimbursement in hospitals. As well, policies shifted from administration by a centralized bureaucracy to administration by decentralized local institutions. The federal government was attempting to reverse the trends of the 1960s by trimming waste and bringing medical costs within acceptable boundaries. As a result, the certificate of need laws placed the burden of proof for large scale construction and capital expenditures on hospitals; the Professional Standards Review Organizations were aimed at
physician behavior and attempted to curtail unnecessary admissions and needlessly long stays in hospitals; and the Health Service Agencies were an effort to view the future of hospital plans and operations in the context of areawide needs and resources (n.4 p.530). In general, these were weak programs with few powers or sanctions and were delegated to local areas in order to be sensitive to regional differences. Because of a lack of consensus about the means of achieving cost-containment, the federal policy makers had deliberately approached regulation with caution in order to diffuse and deflect conflict (n.4 pp.507-508).

Conservative Assimilation of Reform

Starr (n.6 p.393) suggests that the "conservative assimilation of reform" is an apt description for American health policy in the 1970s. Critics of the health care crisis in government and business were concerned with costs, whereas liberal critics and those from the health rights movement were concerned with equality and participation in medical care. Although these groups approached the issue from different perspectives, they shared several common views. For example, they saw the central problems of the health care system being generated by the medical profession. As well, they agreed that to initiate change political boundaries would need to be extended so that decisions about health care delivery would be in the political rather than the professional arena.

The liberal groups traditionally had supported PGP, the concept of an expanded health team including nurse practitioners and health planning as means of improving the health care system. Now conservatives were beginning to see some of these measures as having value for cost saving (n.6 p.394). What was
emerging was a consensus about certain means for reform in the health care system yet there was no consensus on the desired ends as the ultimate goal of the liberals was universal and comprehensive national health insurance (n.6 p.394). However, under President Nixon, there was a predisposition to assimilate liberal ideas, recast them in conservative ideology and present them as policy initiatives. The HMO strategy is exemplary of this approach.

The HMO Strategy

The HMO strategy originated in early 1970 from a chance meeting on a plane of an assistant to John Veneman, under Secretary of the Department of Health, Education and Welfare (DHEW) and Dr. Paul Ellwood. Dr. Ellwood, a paediatric neurologist, who, as executive director of the American Rehabilitation Foundation was interested in health policy, had been disillusioned by the failure of government planning and regulation. Furthermore, Ellwood and his colleagues had become interested in PGPs and FMCs as vital variations in the organization of American medical practice as they felt the poor performance of the current system was caused by its structure and incentives. In the course of their conversation, the DHEW official expressed concern that government had been tinkering with cost control problems but had no coherent or effective plan for addressing them. After hearing Ellwood's views on incentives in the system, the official felt that perhaps a solution to the DHEW problems of cost control had been found.

A clandestine meeting between Ellwood, Veneman and some other senior officials in DHEW was rapidly arranged. Falkson comments that "the meeting provided an opportunity for a small group of people to assemble old facts and
old ideas into a framework that yielded a new idea: health maintenance organizations". The DHEW had been searching for new insights and approaches to national health policy as there was some apprehension that the White House health task force might not be able to pull together a coherent health policy for the President (n.8 pp.39-40). A week later, Ellwood submitted a detailed and sophisticated document, "Health Maintenance Plan" which was supported by DHEW professionals just in time for a high level meeting between DHEW and the White House.

Following this meeting, the White House gave its blessing to the HMO initiative to be introduced as Part C HMO option of Medicare under the Social Security Amendments bill. The acceptance of this option on March 25, 1970 meant that the Administration had formally committed itself to the health maintenance strategy. However, the HMO initiative now would have to move through an organizational process in DHEW and a legislative process in Congress before it could be implemented. From the initial meeting with Ellwood to the acceptance of the Part C option a period of six weeks had elapsed. Baumann has noted that many top DHEW officials were unaware of the move and outside groups were taken by surprise (n.7 p.131).

The health maintenance strategy envisioned a series of government and private actions designed to promote a highly diversified, pluralistic and competitive health industry. Many different types of HMOs would provide comprehensive services needed to keep people healthy and would offer consumers a choice between such services and traditional forms of care. Since services would be purchased from the HMO for a premium before illness occurred, the provider then would share the economic risk of ill health. By offering
economic and professional incentives directed toward maintaining health rather than merely providing services when illness occurred, self-regulation would result in improved performance of the health industry in terms of cost-containment, quality of care and accessibility. After some initial political involvement, this policy, in the long term, should be able to achieve the objectives of decentralizing the federal role in health by reducing the need for regulation and drawing private capital into a competitive health market, thus decreasing pressure on public funds.

Ideological Justification

With respect to health system reform, Alford suggests that:

"One point of view - that of 'market reformers' - blames bureaucratic interference and cumbersomeness for the deficits of the system and calls for the restoration of market competition and pluralism and health care institutions" [10].

The market reformer approach certainly fits the HMO strategy and has contributed significantly to its success. The thrust of the strategy was not based on the substance of the HMO concept but rather on its appeal for a market-oriented approach of expanding the diversity of available facilities. While liberals feel that health care fails to meet the criteria of a market model, political conservatives in the United States find the market model enormously appealing for the health industry. Both conservatives and liberals, however, had been disillusioned with the inability of government to bring about health system change in the 1960s, so Ellwood's market-oriented private sector subsidy approach was indeed timely. Also, the largely self-regulating nature of
the HMO was very popular with the Nixon Administration as it meant that constant government intervention and tinkering to achieve cost control would be unnecessary. The market analogy and its deference to competition and pluralism permeated the HMO debate and gained widespread support.

Baumann has suggested that the interest in the HMO policy was not due to the inherent superiority of PGP but rather because it

"advanced a marketplace government-minimizing strategy of activism that bridged the gap between the politically perceived problems of the health care system and the accretion of ideas, experience and expertise gathered in one particular sector of the industry" (n.7 p.132).

Legitimacy

Falkson (n.8 p.66) has proposed three reasons for the HMO strategy achieving high levels of legitimacy. First, the HMO was an idea whose time had come; in fact, it was the redefinition of an old idea at the politically right moment. Also, the idea was comprehensive yet compatible with the fundamental public-private nature of existing health care system. Second, the HMO concept was politically attractive as it was a conservative social reform that was ideologically consistent with the position of indirect rather than direct intervention into private markets. In addition, it was an "income approach" that would present a phased withdrawal of federal intervention once the initial capital investments had been made. Finally, the HMO strategy had generated sustained advocacy and support from the highest health policy circles of DHEW and the White House. The President's Health Message to Congress on February 18, 1971, outlined the HMO strategy and advocated federal assistance and again, on
March 2, 1972, President Nixon urged support for HMOs in his Health Message to Congress. By and large, the legitimacy that had been ascribed to the HMO strategy was concentrated at very senior levels of health policy formulation within the federal government.

Marmor has suggested a framework for understanding policy development that includes: a rational actor model, an organizational process model and a bureaucratic politics model. While these models are not mutually exclusive, they are useful in understanding that various perspectives yield different approaches to policy. For example, the choice of an HMO strategy by an elite group in government as a rational means for managing a health care crisis is congruent with the rational actor model perspective. The following discussion uses these models as a guide to highlighting other dimensions of HMO policy development associated with legitimacy. However, the perspectives described by using these models are not identical with the institutional perspectives of DHEW or Congress.

Organizational Process

The degree of legitimacy ascribed to the HMO strategy by DHEW is likely to have a significant impact on implementation. One approach to understanding the development of legitimacy in DHEW is offered by the organizational process model which emphasizes organizational functioning according to standard patterns of behavior (n.11 pp.92-94). Prior to the enactment of HMO legislation, an HMO section was set up in DHEW to protect and foster the fledgling HMO strategy. Although it was technically legal, it operated without legislative authority. This overzealous maverick approach to the development of an HMO program was
offensive to the "muddling through" incremental character of DHEW. The department normally operated within narrow constraints following standard procedures in order to avoid uncertainty (n.7 p.136). The repercussions of this new approach were to generate severe internal conflicts within the department and to stimulate considerable tension and distrust between DHEW and the Administration.

The HMO strategy did not contradict the values of many middle level DHEW staff as they had long been advocates of PGP. However, the rapid development of the policy had placed heavy emphasis on nebulous political and economic aspects in order to gain support and had evaded the complex technical aspects of HMO implementation. Consequently, the administrative process was extremely cumbersome due to a lack of technical expertise about HMOs in DHEW, but the deeper non-technical problem was a lack of political consensus on what HMOs were or should be. The HMO strategy had not evolved from the cumulative effects of normal organizational processes in DHEW but rather it had been parachuted into the department, and had caused shock waves of confusion and conflict.

Bureaucratic Politics - the Legislative Process

The confusion about the HMO strategy arising from the organizational process in DHEW was exacerbated by the legislative process. The bureaucratic politics model which is characterized by the outcomes of a series of overlapping bargaining games within the hierarchy of government structure (n.11 pp.94-96) is useful for trying to understand this situation.

The Administration's first HMO bill was introduced in 1971 and a flourish of debate and bi-partisan activity followed that would be prolonged for the next
two years. One of the fundamental issues to be resolved was how strong government's financial commitment to the HMO movement should be and how fast should it proceed. Senator Kennedy, an advocate of national health insurance, led the debate on the senate bill and essentially took the position of a "reformer". Representative Roy, a physician and lawyer, and Representative Rogers were responsible for the House bill. The AMA was very disturbed by the threat that the HMO strategy posed to the organization of medical care practice, and organized a strong lobby that convinced the House to take an "experimental" approach to HMOs.

With an impending election in 1972, the financial and political power of the AMA was exerted through its delegation to the Finance Committee to Re-elect the President. Under this pressure, the White House began to retract its support and widely disparate factions of HMO support developed. In this context, a joint conference of the House and Senate committees was held to attempt to reach an acceptable compromise on differences in financial commitment and numerous other issues on the HMO bill. On the financial issues, the "experimenters" defeated the "reformers" but some of the expansive reforms suggested by the Senate such as open enrolment were included in the final bill (n.12 p.214). Finally, the Health Maintenance Organization Act was passed December 29th, 1973. The legislative bargaining process between the House and the Senate, however, had created a hybrid HMO as compared to the original vision.

1974-1980 FEASIBILITY PROBLEMS OF RESTRUCTURING

By the time the HMO legislation was passed, the interest of the
Administration had subsided considerably, due to pressure from the AMA and the Watergate scandal. The legislation, in many ways, symbolized the opening of the flood-gates for problems of implementation. Berman provides a framework that may be helpful to understanding the implementation problems of the HMO program. He suggests that implementation problems stem from the interaction of a policy with its institutional environment. The macro-level of implementation, he points out, encompasses many interests and organizations that span the federal to the local level and include both the public and private sectors. Each organization has its own problems, perspectives and purposes reflected in its particular structure and culture and each acts more or less autonomously within a loosely coupled macro-structure. Furthermore, Pressman and Wildavsky have concluded that the difficulty and uncertainty of implementation increases with the number of organizations and inter-organizational agreements necessary to achieve the desired policy outcome.

As the policy passes through successive levels of implementation it undergoes a transmutation. Berman has proposed that the effective power to determine policy outcome, however, rests with local service deliverers and not federal administrators. At the micro-level of implementation, a complex process of mutual adaptation occurs between the local interpretation of federal policy and local organizational characteristics. In summary, this macro-micro approach to implementation implies that the macro level involves politics and bargaining, that the federal government has limited leverage over the behaviour of local implementors and that the micro level adaptive process cannot be predicted accurately nor controlled (n.12 pp.172-179). Using this framework as a guide, some of the major interest groups involved in implementing the HMO program will
now be discussed.

Federal Department of Health, Education and Welfare

Immediately following the enactment of the HMO legislation, the DHEW was assigned the task of writing the regulations for the Act. It soon became clear that every word of the legislation had virtually three different definitions: a legal definition, a political definition and a practical definition (n.4 p.342). Consequently, the task of writing regulations to clarify the law was truly a nightmare. At the same time, interest groups were pressuring DHEW, anxious to know the exact rules of HMO development and qualification before they began to play them. Brown states that the HMO staff in DHEW were forced into a mediating position between a heterogenous community of angry HMO interest groups and a new confining federal statute (n.4 p.342).

Earlier, a lack of technical expertise and internal staff conflicts were mentioned as problems experienced by DHEW over the HMO program. This situation was further complicated in 1973 when a major re-organization was undertaken to impose principles of functional management on health programs which had proliferated over the previous fifteen years. The impact of this was to submerge the highly visible line agency Health Maintenance Organization Service into an obscure program under a newly formed service (n.8 p.166). Given this general context, it was almost impossible for the HMO program staff in DHEW to devise an optimal administrative solution to implementing the HMO program.

American Medical Association

Historically, the AMA has been a powerful lobby to the federal government
in opposing any government intervention or policy that was likely to affect the traditional practice of FFS medicine. However, the watershed was passed in 1965 when, after a vigorous lobbying effort, the AMA failed to block Medicare and Medicaid legislation, although it was successful in having the legislation state that no changes in the organization of medical care practice were intended. The "foot was in the door" and it was inevitable that the federal government would seek to protect its ever growing investment in the health sector with statutes and regulation (n.8 p.144). The AMA membership was taken by surprise with the HMO strategy and viewed it as yet another step toward more government intervention.

The thrust of the AMA lobby was opposition to federal subsidization of HMOs to compete against other forms of medical care practice. However, their lobby failed to acknowledge that FFS medicine was a professional monopoly of awesome proportions heavily subsidized by federal biomedical assistance and (public/private) third party payment programs. Nevertheless, a two tiered strategy directed at the Senate and House committee hearings and at the Administration was mobilized. This achieved some success as the legislation was labelled as experimental, thus limiting funding to a five year period and weakening White House support for the HMO strategy.

Earlier, the AMA had assisted local medical societies in lobbying for restrictive state laws prohibiting PGP and twenty-two states had such legislation. The HMO Act included a provision to override these laws in order to allow for the equitable growth of HMOs throughout the country. The AMA exploited this issue on the basis of states' rights but its main concern was limiting the role of the federal government in health and medical affairs. This
action may have contributed to some of the local resistance experienced by HMO physicians in the form of blocked membership to medical societies and the refusal of hospital privileges.

The final version of the HMO Act included a tightened definition of "medical group" which, when combined with other requirements of the Act, prevented existing FFS group practices from converting to HMOs until half of their patients were converted to a prepaid premium (n.12 p.217). Many existing group practices served prepaid patients but did not meet the legislative definition of 50% pre-payment. Consequently, this restriction was viewed as discriminatory and was later eased in the 1976 amendments to the Act. However, the legislation had provided for the development of IPAs, anticipating that in some locations physicians would not accept a change to the PGP.

Havighurst has argued that an effective blocking mechanism to counter the HMO movement has been physician sponsorship of HMOs, particularly IPAs. While IPAs can cut costs, he feels that they should be recognized as part of a profit maximizing strategy of a coalition of monopolists. The IPA represents a token medical profession commitment to internal reform but makes the profession's concerted resistance to innovative alternatives substantially more effective*. At the present time, IPAs account for approximately one-third of all HMOs.

While the medical profession has played a significant role at both the macro and micro levels of HMO development, the context is changing. As the federal government has decreased its role in HMO development, multistate for profit firms have increased their role. These changes, in addition to some shift in the public image of the medical profession due to the questioning of
medical authority by new constitutencies, gradually have weakened the bargaining position of the AMA as a powerful lobby group.

The HMO Industry

The Group Health Association of America (GHAA) was the trade association of PGP plans and was a staunch advocate of HMOs, mainly representing consumer and labour interests. However, the association viewed federal government involvement in HMOs as a mixed blessing. On one hand, federal assistance could accelerate the pace of development, as growth, although steady, had been slow over the previous forty years. On the other hand, government involvement might prove a threat to the competitive position of HMOs with indemnity insurance plans by imposing unrealistic restrictions. The proposed HMO Act generated considerable disagreement within the association. Some purists objected to the inclusion of IPAs in the legislation while others objected to federal support of for-profit HMOs. They feared that IPAs and for-profit HMOs would be confused with the true non-profit PGP model.

When the HMO Act was passed, the GHAA denounced the legislation as unworkable and planned immediately to work for amendments. It felt that the law was unworkable because it failed to conform to existing organizational practices and offended the group's sense of justice and business judgment. As well, they voiced concerns about specifications of the Act regarding comprehensive benefits, limitations on co-payments, open enrolment and community rating as these restrictions threatened the marketability of HMOs which is critical to HMO survival and development. Open-enrolment which means offering HMO enrolment to
all who wish to join and community rating which is basically charging the same premium to all of its enrollees were the most contentious issues. Both requirements are linked to the concept of adverse selection which, for the HMO, means the probable increased enrolment of those with increased needs for health care. Once enrolled these "bad risks" may harm HMO financial status and marketability because high utilization of services drives up costs and, in turn, premiums. The HMO then becomes less desirable to those who do not anticipate substantial health care needs (n.12 pp.225-226). The vicious circle likely to be perpetuated by these requirements caused feelings of extreme dismay to pervade the HMO industry.

Falkson has described the context as follows:

"The combination of a restrictive enabling act, determined obstruction at the highest level of the Ford administration and inevitable bureaucratic inertia that develops when top-level policy makers let a program fend for itself within a hostile administrative environment - all these factors weighed heavily on HMO advocates" (n.8 p.174).

The result was the formation of the HMO consensus group to lobby for amendments. The group was composed of GHAA, Blue Cross Association, American Group Practice Association, American Association of Foundations for Medical Care, some individual insurers, a number of established HMOs and the Health Insurance Association of America. They sought amendments on three issues: the elimination of benefits not originally specified in the pre-Act requirements, open enrolment and community rating. Finally, after another lengthy process of bureaucratic politics, the Act was amended October 8, 1976. There was some reduction in mandatory benefits and more reasonable boundaries were placed on
open enrolment and community rating. After three years of strife and confusion the industry now felt that it could work within the HMO legislation.

Organized Labour

Since organized labour had been an avid supporter of the HMO movement it was surprising that dissatisfaction would come from this sector. However, the root of the paradox was a matter of principle. The HMO Act required any employer with 25 or more employees to offer HMO coverage as an alternative to whatever other health program it provided. The requirement was dependent on a federally qualified HMO being located in that geographic area. The intention of the provision was to facilitate marketing for the HMO. The problem for labour was that the HMO Act implied that the choice of coverage should be left to the employee whereas the National Labour Relations Act lists health benefits as a "condition of employment" and therefore a subject for collective bargaining and specification by the authorized bargaining representative (n.12 p.212).

Consequently, the HMO Act was perceived as weakening the position of labour. However, under the amendments, it was specified that where employees are represented by a collective bargaining process, any qualified HMO is subject to approval by the union before it is offered to employees.

The Fight for Survival

The HMO strategy had been rapidly developed by an elite group of government officials exclusive of consultation with government staff and outside interest groups. This high level government advocacy of HMOs provided the concept with a certain legitimacy that it would otherwise have lacked in the face of organized
medicine. The Administration, however, did not fully understand the potential for the rather major structural changes in health care delivery that a large shift to prepayment could effect. When the activist implications of the policy were realized, it rapidly withdrew support of the DHEW program. Consequently, the fledgling program was left to languish from departmental lack of support on such basic matters as staffing.

The HMO Act of 1973 established a federal grant and loan program to encourage HMO development. Almost two years after the law for this five year period was signed, only 157 projects and 375 applications had been received. The original projection for applications had been 800. Only seven HMOs were actually federally qualified and not all of those were operational. The DHEW had spent only $22.5 million of the $40 million appropriated by Congress for the period and the Administration requested only $15 million of the $85 million Congressional authorization for fiscal year 1976 (n.7 p.138).

These figures were probably a reasonable response, given the turmoil in the DHEW. In addition, lobbying by interest groups augmented delays by pointing up the political and controversial nature of substantive provisions of the Act. The implementation phase demonstrated that bureaucratic bargaining does not stop with legislation but is an ongoing and dynamic process that consumes time over the course of an issue. Not surprisingly, then, the progress of HMO development was slow through 1974, 1975 and 1976. The foregoing obstacles were complicated further by the worst recession in twenty years, combined with unrelenting double-digit inflation (n.8 p.170). Needless to say, circumstances were not auspicious for stimulating new developments in health care.
Revitalization and the Management of Growth

After a period of sagging interest, HMOs were re-discovered by the Carter Administration because of their implications for containing hospital costs through decreased inpatient utilization rates. At the same time, criticism was high about the scandalous California experience with enrolling the poor in HMO prototypes under Medicaid (see Chapter 10). Hence, economic and political realities converged leading to a vigorously renewed HMO initiative. First on the agenda was a bureaucratic regeneration of the HMO effort within the DHEW. The HMO program had been plagued with unresolved management problems since its inception, so this strategy was not without risk. Nonetheless, the re-organization considerably improved the efficiency of the program and a serious effort was made to communicate this renewed initiative to health, business and labour groups.

The internal re-organization strategy was strengthened further by the passing in 1978 of a number of amendments to the HMO Act. The amendments essentially extended HMO program authorizations for three years and increased the maximum dollar limit for initial development project grants, contracts and loan guarantees (n.8 p.193). The passage of the amendments, combined with the renewed commitment of the Carter Administration to HMO development, set the stage for a period of rapid growth and expansion of HMOs as illustrated in figure 12. The objective of the new national HMO development strategy was to maximize the community cost saving potential of HMOs by stimulating their development in those areas of the country experiencing the highest levels of health care cost inflation (n.8 pp.193-194).
Figure 12
HMO Enrolment Growth 1978-1983

Source: Adapted from National HMO Census, June 30, 1983, Excelsior, Minnesota: Interstudy, 1984, p. 3.
The new strategy committed the federal government to a ten year program of sustained support for HMOs but also it anticipated a significant increase in private funding of HMOs. The challenge of the 1980s appeared to be one of managing growth which simultaneously raised new questions about the role of the federal government in a rapidly maturing HMO industry.

THE FUTURE OF HMOs IN THE 1980s

The 1980s have seen HMOs become part of the mainstream of the American health care system. According to the 1983 HMO Census (n.18 p.36), there are 280 HMOs in operation serving 12.5 million people, as compared with 33 HMOs in 1970 serving 3 million people. The trend, clearly, has been an urban phenomenon with few rural success stories. Ninety per cent of HMO enrolment and 71% of HMOs are located in areas with populations of 500,000 or more.

The federal government played a galvanizing role in encouraging HMO development. However, government subsidies and grants were phased out in 1982 by the Reagan Administration with the blessing of the HMO industry. The HMO program regional offices have been abandoned and staff are centralized in Washington where their primary function is to promote HMOs to the private sector. The department's two bestsellers include "Investor's Guide to HMOs" and "Profiles in Private Funding". For a government agency such as DHEW, the HMO program has required a drastic shift in direction from being a watchdog of social equity to being a venture capitalist on behalf of health care reform (n.19 p.452).

Similarly, there has been a change in the composition of the HMO industry from a base of largely non-profit HMOs to vigorously growing for-profit plans.
The entry of aggressive for-profit organizations may well change the complexion of this mode of health care delivery as multi-state firms are beginning to dominate the industry, much as proprietary firms did in the hospital sector. The most compelling force driving non-profit HMOs in the 1980s is raising capital. Because capital markets are interested in for-profit entities, some HMOs are converting to a for-profit orientation and many multistate firms are listed on the stock exchange. The non-profit HMOs now believe that they have no choice but to redesign their operations so that they can acquire capital through public stock offerings or limited partnership - investments that trade equity for a promised future return (n.21 p.1205).

The original objectives of the Nixon Administration for the HMO strategy were to decrease the federal role in health and increase private funding to health care. While these objectives have been achieved, the implications that their achievement has for the future of health care delivery in the United States are yet unclear. Salmon predicted, some ten years ago, qualitatively different institutional configurations as a result of the growing corporate takeover of health services delivery\(^22\). Starr (n.6 p.448) has commented that corporate sector health care is likely to aggravate inequalities in access to health care, making a two class medical system more conspicuous. This closer alliance with corporations will raise other critical issues about "the boundary between medical decisions and business decisions; when both medical and economic decisions are relevant, which will prevail and who will decide?" (n.6 p.447). Such questions will test the limits of professional control and autonomy. What does seem clear, however, is that "the failure to rationalize
medical services under public control has led to their rationalization under private control" (n.6 p.449).

CANADIAN HEALTH POLICY: RESTRUCTURING EXPERIENCE

Similar to the American experience, the impetus for restructuring health care services in Canada came from the federal government's concern with increasing costs of health care services. In both cases, the introduction of publicly funded health care programs had heightened federal awareness of escalating costs. The publicly funded programs of Medicare and Medicaid in the U.S. were limited to poor and elderly populations. The publicly funded universal health insurance program in Canada, however, was concerned with the equitable provision of health care services to the entire population.

Developing Legitimacy for Restructuring

The federal Task Force on the Cost of Health Services in Canada in 1969 clearly substantiated government concerns about escalating health care costs and articulated the need for reorganization of health care services. While new funding arrangements were being negotiated, the Community Health Centre Project was commissioned to explore the feasibility of organizational reform. Subsequently, it offered a plan for restructuring primary care services that attempted to alter some of the traditional boundaries of the health care system, whereas previous federal initiatives for change had tended generally to tinker with financial mechanisms within the established boundaries of the system.
A broad spectrum of interests was covered by this report. It recommended
the development by the provinces of CHCs as non-profit corporate bodies linked
with hospitals and other health services in a fully integrated health services
system. Centres were to be in sufficient numbers to allow effective evaluation
of their impact on the health services system. Funding for CHCs was to be
global or block funding given by the province to the district where citizen
boards would decide priorities and allocate funds. The CHC was to offer primary
care through a multidisciplinary team of professionals but the report recognized
that alternative payment mechanisms to FFS and conducive to the team approach
would need to be developed. A review of existing provincial legislation and
regulatory measures also was recommended to allow for greater flexibility and
innovation in service provision. Finally, objectives for re-organization of the
health care system were outlined which emphasized the CHC as the point of
integration of health as well as social services (n.24).

Because health is a provincial jurisdiction, the federal government was
dependent on the provinces responding to their initiative for any restructuring
to occur. Prior to this, Quebec had embarked on a very comprehensive study, the
Castonguay-Nepveu Commission of Inquiry into Health and Social Welfare.25
Other provinces quickly followed suit, for example, B.C. with the report, Health
Security for British Columbians in 1973.26 and Ontario with the Health
Planning Task Force in 1974.27 The provincial planning reports had common
themes about restructuring as each recommended new decentralized primary care
structures to improve the co-ordination of health services at the local level.
The reports, also, reflected the belief that health care services should be
responsive to priorities set by the community, thus citizen boards were
recommended for these new structures. These themes, in general, echoed recommendations of the community Health Centre Project but were tuned for individual provincial differences.

Provincial Variation in Legitimacy

While the themes of the reports showed some consistency, the flavour of legitimacy for restructuring varied in each province. According to Hall et al., prevailing levels of legitimacy can vary with the ideology of the party in power and with the perceived power of interest groups to resist change.

In Saskatchewan, consumer concern about accessibility to medical care services prompted the pioneering of the CHC concept. The rise of community clinics in response to the crisis caused by the infamous "doctors strike", however, associated these clinics with socialized medicine and socialist ideals. The drama of that event drew attention to the socialist connotations of the CHC concept which have had repercussions for its legitimacy both in Saskatchewan and other parts of the country.

The almost revolutionary atmosphere in Quebec in the early 1970's linked the CHC concept into a political culture that placed value on high profile global social service reorganization. Before the final report of the Castonguay-Nepveu Commission, Castonguay had become the Minister of Health giving charismatic legitimacy to the reforms proposed in the report. The health care system, subsequently, was re-structured by a dramatic gesture of legislative fiat, distinctive of political problem solving in Quebec. The legislation, however, stated explicit objectives for the direction of health care towards a new social model of medicine. A decentralized system was created with new
primary care structures, CLSCs which were to be the point of entry into the
system (refer to Appendix B). These centres were similar to the CHCs described
by the Community Health Centre Project. Thus, a rapid restructuring occurred
exclusive of extended public debate, pilot projects, and other methods of
gradual change.

With the election of the NDP in 1972, the government of B.C. also was
smitten with the zeal for change and reform. In human services, prominent
reorganization themes included service decentralization, co-ordination and
integration, and citizen participation. The NDP took a planning approach
to reform in the health care system. Prior to its election the party had
commissioned the Foulkes Report which provided a blueprint for health care
reorganization comparable in scope to the Castonguay report in Quebec. The
CHRHCs were the cornerstone of the Foulkes plan and involved the integration of
primary medical care, public health, nursing, social and mental health services
at the local level in order to facilitate community participation and
decision-making (refer to Appendix D).

A Development Group for CHRHCs was established outside the bureaucratic
framework of the health and human resources Ministries but reported through a
co-ordinator directly to the two ministers involved. The group visited and
assessed interested communities, then chose five target areas for CHRHC
locations; all but one of these were in remote areas. One of the NDP's final
acts in government, in 1975, was to pass an Order-in-Council giving formal
legislative authority to the operation of CHRHCs. The subsequent election of
the Social Credit government signalled a change in direction and a decline in
enthusiasm for structural reform and experimentation.
At the other end of the spectrum, staunchly conservative Ontario took an incremental approach to CHCs. Although Ontario had been one of the original experimenters with the CHC concept in Canada, the MOH had not been directly involved. As mentioned in Chapter 7, unions had initiated two health centres in the 1960s that were based on the American model of PGP. However, the Community Health Centre Project report and the Health Planning Task Force had stimulated provincial interest in the CHC concept and the MOH, then, felt the need to be actively involved.

In 1973, the MOH launched a CHC program with a research and development orientation but it had no particular formulation of a CHC concept as other provinces had had. As a result, a patchwork quilt assortment of CHCs was established and funded under this program. The eclectic mixture raised questions of accountability of these organizations to the Ministry and outside the Ministry, the medical profession questioned the quality of care delivered by the centres. The cumulative effect of these pressures plus the occurrence of other relevant events precipitated a funding freeze on establishing new centres in 1975\(^30\). For example, the Ministry was bargaining with the Ontario Medical Association during this period and was trying to hold them to minimal fee level increases. As a result, the CHC issue took a back seat, so to speak, as it may have further antagonized the medical profession and threatened negotiations. Thus, the timing of idiosyncratic events such as this or the election of Claude Castonguay as Minister of Health in Quebec have had a very significant effect on determining the policy direction of CHCs in Canada.

Responsibility for CHCs was moved to another sector of the Ministry and by 1977, a draft policy on CHCs had been developed proposing a capitation system of
funding. Many established centres disagreed with this as previous inconsistencies in ministry funding had caused considerable instability for them. However, they were unable to present a unified opposition to the Ministry. What essentially emerged from this process was two forms of organization with different funding mechanisms. Health service organizations rostered patients similar to a PGP model and then were reimbursed by capitation payments adjusted for age and sex plus an ambulatory care incentive payment based on decreased hospitalization rates. Alternatively, CHCs which had community boards were to be funded by program global budgets and were to be directed towards underserviced target populations.

A change in the Minister of Health in the spring of 1982 saw the appointment of another Task Force to Review Primary Care. This report recommended a pluralistic approach to primary care delivery whereby a mix of mechanisms would be available: fee for service private practice; capitation-reimbursement for health service organizations; and program budget global funding for CHC's. Recently, the Ministry has been exploring the addition of an HMO model to this mix. Although this is in the elementary stages of development, this model would likely consider integration with hospital services and a capitation rate that would cover both medical care and hospital care services.

This pluralistic policy approach for the delivery of primary care services is exactly parallel to the approach advocated by the HMO strategy in the United States. The HMO strategy not only allowed for variation within the HMO concept such as IPAs in order to increase pluralist choice but also it encouraged competition among other forms of medical care delivery. Of interest to this study is the incorporation of American models in the development of health
services in Ontario as compared with other provinces. The early development of union sponsored prepayment centres was based on the American experience with PGP's but was associated with socialist ideals. Later, the HSO program reflected some accommodation to the PGP model within the context of a publicly funded health insurance program. Recent interest in experimentation with an HMO model suggests perhaps that some accommodation may be possible with that model as well. The emphasis on pluralist choice among a diversity of service models is consistent with conservative ideology. However, trends in the development of alternate forms of medical care practice in Ontario also show some signs of the "conservative assimilation of reform". This was a central theme of the HMO strategy as the liberal idea of PGP was recast as a conservative health care reform.

Feasibility Problems in Restructuring

Berman's analysis of macro-micro levels of implementation outlined in the discussion on HMO feasibility is also applicable here (n.13). His hypothesis that the effective power to determine policy outcome rests with local service deliverers rather than government administrators is supported by the CHC experience in Canada. Feasibility problems in introducing new primary care structures arose with respect to interest groups such as the medical profession and hospitals and these have been discussed in chapters 8 and 9 respectively. This discussion will focus on two other major areas where feasibility problems were experienced: citizen boards and relationships with government.
Citizen Boards

The Task Force Reports on the Cost of Health Services in Canada expressed the belief that citizen participation was essential to gaining commitment for restructuring in the health care system. The Community Health Centre Project report, similarly, was committed to the belief that health care services should be responsive to priorities set by the community. Citizen boards of CHCs, although fraught with difficulties, were the mechanisms for implementing these beliefs at the local level.

Legislation, in Quebec, stipulated five elected and two appointed citizens on CLSC boards to comprise a slim majority. But when citizens had to work with professionals and administrators under these circumstances, the "real" power of citizens was seriously questioned. In Ontario and in Saskatchewan, citizen participation on boards was closely associated with sponsorship of the centres. The strong and militant medical profession opposition to clinics in Saskatchewan to some extent was related to the political alignments of their sponsors who became involved in quarrels between the Liberal and New Democratic parties. In B.C., community participation was a core concept of the CHRHCs. Locations for centres were based on evidence of community interest and local residents were involved in their planning. Citizen boards were elected once centres had been established, which often meant a shift in focus from the excitement of planning change to dealing with divided interests of board members over whether emphasis should be on accountability or expanding services to meet community needs (n.29 pp.151-154).

In all provinces, boards shared the same dual accountability: to the provincial government for the expenditure of funds and to the community for the
provision of services effective and relevant to community needs. In general, citizens had little preparation for their role on boards, few guidelines, and varying amounts of knowledge about the health care system. Some citizens were actual consumers of service in the centres while others represented specific community interests. Educational background and social status in the community had an effect on the level of contribution citizens were able to make to the board. Thus, differing social and political ideologies led to diversity in their interpretation of CHC objectives. A wide spectrum of models of board functioning consequently emerged, often related to the strength of citizen participation.

The intent of citizen involvement, from a government perspective, largely had been to gain commitment for cost saving and the restructuring of health services. However, results often fell far short of expectations. Providers of care, particularly physicians, were resistant to lay involvement in health services. Further aggravation was caused by the ideologic association of the CHC concept with socialist ideals and socialist political parties due to experiences in Saskatchewan, Quebec and British Columbia.

Relationships with Government

Provincial governments have perceived their role in health care basically as bill payers and insurers rather than organizers of health services. Where the organization of services falls outside of the traditional mould, as in the case of the CHC, they have difficulty finding a role. Similar problems arose in the DHEW because the HMO strategy required staff to shift the focus of their role. Although Quebec did take an aggressive role as a catalyst in the
organization of health services, this was not an approach politically acceptable to other provinces. Initially, provincial governments did have some funding problems with CHCs as the federal government did not provide funding in a fashion conducive to exploring new forms of organization until 1977. Yet another impediment for governments was the association of alternative forms of health care delivery with political opposition parties. For example, in Saskatchewan, the Liberal government (1964-1971) cut off most support for the NDP endorsed community clinics. Likewise, in B.C., the Social Credit government (1975-) has not been enthusiastic toward NDP initiated CHRHCs although they were permitted to continue.

Lomas has described the Sault Ste. Marie centre as having roller-coaster relations with the Ontario government. This instability was the result of a lack of policy objectives in the MOH as well as changes in funding mechanisms. Consequently, the Ontario Association of Health Centres was formed in 1981 to act as a buffer in relations between centres and the government. Once the Development Group dissolved, centres in B.C. no longer had a central body in government to relate to. Thus, they were forced to spend increasing amounts of administrative time negotiating budgets with as many as five different parts of the MOH and the Ministry of Human Resources. The problem was "with integration at the bottom part of the system without integration at the top part" (n.29 pp.176-177).

In conclusion, government objectives of cost saving through restructuring generally were not realized by sponsoring the development of new primary care structures in Canada. As a result, provincial government sponsorship of alternate forms of health care delivery has been considerably curtailed except
in Quebec, but even there enthusiasm has been restrained. More recent cost pressures, however, have breathed some new life into the restructuring argument for provincial governments, but their actions are cautious due to this previous experience.
FOOTNOTES


30. Interview with Ray Berry, former Director of the Program Development Branch, Ontario Ministry of Health, Toronto, 29 April 1985.


32. Interview with Paul Donahue, Director, Community Health Programs Branch, Ontario Ministry of Health, Toronto, 20 December 1984.


36. Interview with Dr. John Hastings, Professor, Community Health and Health Administration, Division of Community Health, Faculty of Medicine, University of Toronto, Toronto, 11 June 1984.
CHAPTER 12: THE HMO MODEL AND THE HEALTH CARE STRUCTURES OF B.C.

Part A of this section reviewed basic properties of the HMO model and its variant characteristics such as: sponsorship, physician organization and method of payment and arrangements for hospital care. In addition, it considered some evidence on HMO performance and outlined the development of the HMO strategy in relation to American health policy. Concurrent with the HMO discussion was an attempt to describe some comparable Canadian experiences in order to facilitate some understanding of the possible implications of the HMO model for B.C.

Despite evidence of positive performance, difficulties were experienced in implementing the HMO model in the U.S. Mainly, these difficulties were related to confusion in understanding the intricacies of a complex organization that integrates financial mechanisms with service delivery and to the multiple interests involved in its operation. As well, the Canadian discussions point out the difficulties of trying to implement new primary care structures that were largely developed and designed for a Canadian setting. Given the complexity of the HMO model within the competitive market structure of American health care and previous Canadian experience with introducing new primary care structures it appears clear that the HMO model could not be simply transposed unaltered into the publicly funded health care structures of B.C.

Therefore, the following discussion has selected certain aspects of the HMO model for consideration on the basis of difficulties that they are likely to present for application in B.C. First, the discussion will consider contractual
responsibility, enrolled population and financial risk which were identified as generic elements of the HMO in Chapter 5. Then, variant characteristics of the HMO, sponsorship, physician organization and method of payment will be considered. The purpose will be to identify issues for each characteristic that are likely to present difficulty for adaptation. Thus, the focus will be on identification rather than resolution of issues.

**CONTRACTUAL RESPONSIBILITY**

In the HMO in the U.S., the consumer, either individually or through a group, contracts with the HMO for the provision of a stated range of health care services for fixed payment. The consumer can legally expect to receive certain services from the HMO. Similarly, the HMO has a legal obligation to provide services outlined in the policy or contract. As well, if it is federally qualified, it has a responsibility to comply with the HMO Act by offering a certain range of comprehensive services. At minimum, the contract will include ambulatory medical care and inpatient hospital services. The consumer assumes the cost of services not included in the benefit package or used outside of the HMO without referral plus various copayments and deductibles. Essentially, the contract signifies a risk transfer from the consumer to the HMO; at the same time it provides boundaries for the HMO as it is clear for whom and what it is responsible, and what funds it has to work with.

No such specific contract exists between health care providers and consumers in Canada. The provincially administered health insurance programs are required by legislation to ensure conditions of universality,
comprehensiveness, accessibility, portability and public administration. These broad principles then guide the provision of health care services. The Medical Care Act and Hospital Diagnostic Services Act do outline the scope of medical care and hospital care services to be provided under the public program but there is no specific contract with consumers and enrolment is voluntary. In some provinces, such as Alberta, British Columbia and Ontario, premiums are charged, in others, funding comes entirely from general revenue. For health services not covered under these Acts, the consumer can either assume the risk or purchase a package of extended health benefits from a private insurer.

The issue of contractual responsibility between health care providers and consumers would be of critical importance for implementing an HMO model in B.C. The contract defines the risk accepted by the organization and provides the basis for financial planning and determination of levels of service provision. However, would consumers in B.C. accept contracting for health services? What incentives might be necessary to encourage this? Could both public and private health care benefits be contracted through an HMO? Could the HMO contract with the provincial government and private insurers in order to offer a wide range of benefit packages?

ENROLLED POPULATION

During a period of open enrolment, consumers choose voluntarily to enrol in an HMO as a source of health care. Enrolment must be renewed annually during these periods, also disenrolment can only occur at these times. Otherwise, enrollees are locked into using HMO services unless they choose to incur the costs of using other services. Regulations of the HMO Act ensure that enrolment
must be open to any group, yet the dual choice regulations tend to bias enrolment in favour of employed populations. Voluntary enrolment places competitive pressure on the HMO to be sensitive to consumer needs and demands or enrollees will be attracted away to other services.

At the present time in B.C., there are no voluntarily enrolled populations in any health care organization, to the knowledge of this author. The HSO program in Ontario does roster its patients and a ministry information system tracks out of plan use. If a patient uses an outside source of care for a service that could have been provided by the HSO, the HSO's capitation rate for that patient is negated. Patients voluntarily agree to be rostered but there is no penalty to them for out of plan use. While the MOH usually requires an annual update of the roster, patients do not renew their commitment necessarily at regular intervals.

The crux of the enrolment issue in Canada, however, rests on whether the principles of medicare can be maintained within the structure of an HMO. For example, an HMO in B.C. would need to have continuous open enrolment in order to uphold these principles. Patients would need to be assured that enrolment would not impede access to services unavailable in the HMO if they were necessary. While not impossible, it would likely be politically difficult to endorse a plan that "locked" patients in or to support patients paying for out of plan use even if not advised by the HMO. Such action might be opposed by some as compromising the principles of universality and accessibility or as moving in the direction of the British system. Attractive incentives such as lowered premiums or extra benefits could, however, be offered as carrots to encourage enrolment. The issue of free choice of individual physician is also associated with enrolment.
Although free choice of physician is generally offered to enrollees in an HMO, it could be argued that choice is limited to only those physicians practising in that setting. Without question, any HMO structure implemented in B.C. would have to satisfy the principles of medicare.

FINANCIAL RISK

The HMO accepts financial risk for providing a contracted range of health care services to a defined population for a fixed revenue. Consequently, it places heavy emphasis on financial planning and analysis in order to control its risk. For example, the needs and demands of the population are determined and evaluated; staffing ratios are established; and utilization rates are projected. Since increased servicing will not increase revenue, the HMO has strong incentives to reduce utilization appropriately. As a result, risk shared with its basic components through financial incentives encourages physicians and hospitals to provide effective care and reduce utilization. Through good financial management, the HMO is able to gain administrative control over resources so performance can be optimized within a fixed budget.

The complexity of tight financial management and the subsequent integration of financial and delivery systems within the organizational unit of the HMO may be difficult to adapt due to the existing financial structures of health care in B.C. At the present time, the revenue raising system that collects premiums and taxes for health care is distinct from the expenditure system which is subdivided into medical care expenditures and hospital care expenditures. Linkages between these three systems at the MOH level are loose. An HMO
structure would require strong linkages between these systems at the organizational level to facilitate financial management and administrative control of resources. To achieve this in B.C. considerable negotiation and bargaining would need to occur between these systems to create a financial structure in the HMO compatible with its goals. Otherwise, the success of the concept may be seriously limited.

A critical premise of financial planning in the HMO is being able to project from a fixed prospective funding base. Funding alternative forms of medical care practice in Canada, however, has tended to follow a retrospective pattern, despite good intentions. Lomas, for example, describes the desire of the GHA in Sault Ste. Marie to accept the financial risk for an enrolled population and to do prospective financial planning. Delays in receiving capitation payments complicated by negotiations with the MOH seriously undermined that desire and created uncertainty for the organization. Similarly, the CHRHCs in B.C. spent so much time negotiating global budgets with different government groups that financial planning was hampered. In spite of deterrents, these organizations have made some gains in reducing hospital utilization. Perhaps those gains might be augmented with greater recognition of and support for financial planning.

SPONSORSHIP

In the U.S., the sponsor provides the impetus for the initial development of the HMO and has a role in influencing the structure and orientation of the organization. Once the HMO is established, however, it becomes a separate legal entity with a board. The HMO Act does specify some regulations about board
composition such as that a third of its members should be enrollees. Boards, nevertheless, do have some tendency to reflect the interests of the sponsor. While HMOs have been sponsored by a variety of organizations, physicians have been a dominant sponsoring group. At another level, the U.S. federal government has also been a major sponsor of HMOs and has supported their development legislatively and financially with substantial grant and loan programs.

Sponsorship is a very important factor in gaining support and commitment for a new concept as well as legitimizing its acceptability to both consumer and provider groups. The CHRHC development in B.C. had strong support from the selected communities. These supporters became transformed into citizens participating on their boards. The Mount Pleasant Community Health Centre in Vancouver is a different example of sponsorship. Here, the CU & C Health Services Society developed and financed the health centre which employs salaried physicians and serves an urban population. However, the centre does generate its revenue by billing FFS for insured patients and CU & C supplement this amount to cover expenditures. The centre remains under the administrative wing of the company rather than being a separate legal entity with a board.

A crucial question, then, is who would sponsor an HMO in B.C. and what model of sponsorship might be most suitable? The MOH has the most to gain from cost savings achieved by an HMO. During the course of this study, however, no group other than the Ministry clearly emerged as an eager sponsor of an HMO, although hospitals showed the greatest interest in the concept.

Being an American concept, a clear understanding of the HMO concept was not prevalent among those interviewed in this study. A certain amount of scepticism surrounds the concept as it is difficult to envision its application in a
publicly funded health care system. During the implementation of the HMO strategy in the U.S., similar confusion and lack of clarity about the meaning of the concept caused feasibility problems. Due to the complexity of the concept and the lack of clarity in its interpretation, it might be reasonable, then, for B.C. to consider sponsoring an HMO as an experimental research project in order to gain a more accurate assessment of the legitimacy and feasibility of the HMO concept in a Canadian setting. Also, previous experience in B.C. and other parts of Canada in implementing new primary care structures seems to have fostered a cautious attitude towards the value of new structures. Since this was reflected in interviews, an experimental project might help in overcoming these attitudes. Either the MOH alone or the MOH in association with a consortium of groups likely to have vested interests in such a concept, for example, the medical profession, might consider sponsorship of such a project.

The Development Group used to initiate the CHRHCs seemed to be a successful approach in the early stages of development. While it was composed of representatives within government from the MOH and the Ministry of Human Resources, it functioned outside of the bureaucratic structures, reporting directly to the ministers involved. A similar group, but perhaps expanded beyond the scope of government representatives, might be a worthwhile consideration for an HMO experiment. The selection of representatives would be critical to developing legitimacy, feasibility and support for the HMO concept. Group members would not only need to have some expertise relevant to the HMO concept but also would have to be able to act as advocates of the concept in developing the support of various constituencies. Asking for a commitment to participate in an experimental project offers some prestige and would be far less threatening and
demanding than attempting to sponsor an HMO. Group representatives might include for example; from within government Treasury Board, MSP, institutional services, legal services, policy and planning, and from outside of government, the medical profession, hospitals, a consumer group representative, an academic representative concerned with evaluative research, a private insurance industry representative familiar with extended health benefits. Such a planning group would need to be legitimized by senior levels of the provincial government and would need to have clear lines of accountability defined.

PHYSICIAN ORGANIZATION AND METHOD OF PAYMENT

The HMO concept offers a range of organizational arrangements and methods of payment for physicians, but in each case the goal consistently is to try to influence physician decision making toward cost effective delivery. The most prevalent model is a group practice where physicians form a partnership that negotiates with the HMO for a capitation rate that usually includes ambulatory and hospital medical care services. The capitation rate allows the HMO some risk sharing with the physician group, plus it provides incentives for physicians to provide efficacious and necessary care. While the partnership or practice is reimbursed by a capitation rate, individual physicians are reimbursed by a formula developed by the group. Most frequently this includes some combination of salary, profit sharing plus fringe benefits. Within this framework, physicians control their work schedules and set practice standards. In general, this model seems to be the best compromise for meeting both the professional and entrepreneurial goals of the physicians and the cost containment goals of the HMO.
With the almost total dominance of FFS practice in B.C., a strategy to increase the pluralist choices of medical care through the introduction of an HMO would expect to meet opposition from the medical profession. Historically, the BCMA has expressed resistance to the Community Health Centre Project Report and to the development of CHRHCs. Since that time, however, circumstances have changed considerably for the medical profession due to: increased numbers of physicians, excessively high fee schedules and some signs of increasing government intervention. These changes have raised questions about value for money in an open-ended FFS medical care system and thus have somewhat weakened the defensive position of the medical profession, perhaps making it amenable to some change. For example, the Ontario Medical Association recently presented a brief to the Ontario MOH urging the adoption of an "incentive-based" approach to the organization of health care delivery.

In an experimental HMO, the model of choice for physician organization might be the group practice partnership model since it seems to be the most acceptable model from the U.S. experience. While group practice organization is not a new concept for B.C., the associated capitation method of payment to the practice would be new. The Ontario HSO program has found general satisfaction with the concept of capitation and the mechanism of capitation - negation (see Chapter 8) but considerable dissatisfaction with the capitation formula. The main issue concerned the denominator used in the calculation of the capitation rate and the lack of adjustment for burden of illness in the population served. Capitation funding also necessitated the development of new information systems for tracking out of plan use. Administrative problems also arose as capitation payments were not updated quickly enough in relation to fee schedule changes.
Furthermore, capitation - negation information was often late and insufficient for management purposes. Finally, because the capitation rate was based on medical service equivalents in the FFS system, there was insufficient scope to develop additional primary care programs, especially where initial capital outlay was involved.

The Ontario experience documents some of the difficulties of implementing capitation reimbursement in a Canadian setting. The development of a similar system in B.C. would require co-operation in altering MOH accounting systems and developing new information systems which might prove costly. Moreover, the capitation rate would need to be perceived as fair by the medical profession in relation to the FFS system. The identification of these issues suggests that in the evolution of any innovative funding program time is required to refine many of the intricate details. Therefore, consideration of the HMO as an experimental project might be a desirable step before consideration of larger scale implementation.

ARRANGEMENTS FOR HOSPITAL SERVICES

The HMO is at financial risk for providing inpatient hospital services to its enrolled population. Since these are the most expensive services provided by the HMO, it is in its financial interests to minimize expenditures for hospital care. In order to achieve this, it offers economic incentives for providers to deliver efficacious and necessary care. Because physicians are responsible for determining the use of hospital services, the HMO shares some risk with them through the inclusion of ambulatory and inpatient medical care services in the calculation of their capitation rate. Some of the risk is also
shared with the hospital through the financial arrangements negotiated for providing hospital care.

The relationship between the HMO and the hospital has been described as one of vertical integration. This varies in degree according to the specific arrangements for services and the amount of risk sharing negotiated between the two organizations. Like the arrangements for medical care, the HMO has a range of possible options for acquiring hospital services but the most common is a contractual agreement between the HMO and the hospital. The terms of the contract are likely to depend on the relative bargaining positions of the two organizations. The HMO goal is to negotiate a reimbursement formula involving a fixed cost which gives the hospital an incentive to deliver services efficiently as it assumes any excess costs above that rate. Over time, the degree of integration may change between the two organizations from a strategy of mutual accommodation to one of strong support which increases the degree of vertical integration. The rate of progression of the degree of vertical integration, however, is dependent on individual circumstances and the stage of development of the HMO.

The concept of vertical integration between hospital services and medical care practice is one aspect of the HMO concept that is most deviant from the norms of the Canadian health care system. The Hastings Report recommended that CHCs be linked with hospitals and other health services in an integrated health services system. However, the provincial experiences with these centres showed that despite good intentions very little integration occurred with hospitals. At that time, hospitals saw CHCs as a threat to their role as centres of medical
care practice and thus did not consider them to be legitimate structures of the
health care system.

In the course of this study, the hospital sector expressed considerable
interest in the HMO concept. Although initially resistant to HMOs, hospitals in
the U.S. gradually became more enthusiastic as vertical integration became a
strategy for their survival in a contracting industry. With an excess supply of
physicians in B.C. plus a decreasing supply of hospital beds and constrained
hospital budgets, the practice styles of FFS physicians have placed a great deal
of strain on hospital resources. The hospitals, consequently, see an HMO as a
means of better rationalizing hospital resources, as an enrolled population
would allow some projections of utilization. As well, the financial incentives
the HMO creates for its physicians would likely alter practice patterns in a
more cost-effective manner which would help the hospital to get better control
of operating costs.

For an HMO in B.C. to be at financial risk for hospital care for an
enrolled population, funds would need to be redirected from the Ministry to the
HMO. The HMO would then need to share some of its risk with providers through
financial incentives for the delivery of efficacious and necessary care. Part
of this risk would be shared with hospitals in accordance with the arrangements
it was able to negotiate for the use of hospital services. This decentraliza-
tion of financial responsibility to an organizational level would be a major
shift in orientation. Such a change would require a lengthy negotiation and
bargaining process among various sections within the MOH, between the Ministry
and the hospital, among departments in the hospital, and between the hospital
and the HMO. As well, numerous administrative changes would be necessary in
accounting procedures and information systems in order to implement such a change.

**SUMMARY**

Some of the major problems of accommodating an HMO model in the health care structures of B.C. have merely been highlighted here. The outer boundaries for accommodation are defined by the principles of medicare and the publicly funded health insurance program. Within those boundaries, however, the possibility exists for accommodations to be made. The major thrust of accommodations appears to centre on the redirection of financial systems in order to decentralize funds to an HMO in such a way as to facilitate the integration of financial mechanisms and service delivery within that organization. The interest expressed by hospitals in the HMO model suggests, perhaps, some willingness to accommodate to an HMO structure. Since hospitals are familiar territory to physicians, capitalizing on the hospital interest in HMOs may facilitate some accommodation by the medical profession as well to an HMO structure. Clearly, this process would require a great deal of negotiation and bargaining between many groups both inside and outside of the MOH in order to adapt the existing system.

The conclusion reached by Pressman and Wildavsky that the difficulty and uncertainty of implementation increases with the number of organizations and inter-organizational agreements necessary for the desired outcome would be applicable here. Consequently, the need for offering incentives for structural change to strategic constituencies becomes critical for implementation. From the American experience, feasibility problems in implementing the
HMO strategy were caused by the lack of a clear understanding of the complexity of the concept and the resistance of interest groups. This experience plus issues raised in the above discussion suggest that similar problems are likely to occur in implementing an HMO model in B.C. Therefore, the endorsement of an HMO pilot project by senior levels of the provincial government and the Ministry might be one approach to sorting out pragmatically the implications of the complexities of the concept and the necessary accommodations that would need to be made in B.C. Also, it would provide an opportunity to develop the support of various constituencies for the concept. No doubt, such a project would be a costly investment that would have to be balanced against the potential long term benefits that might be achieved by introducing the HMO model as a competitive alternative to FFS practice.


3. Interview with Dr. David Schreck, General Manager, CU & C Health Services Society, Vancouver, April 1984. Dr. Schreck also indicated that since beginning operation in April, 1983, the centre has not broken even with FFS revenue and that CU & C continues to supplement that to meet expenditures. However, he expects eventually to break even as the practice grows.


SECTION IV: STAGE 5 - GENERATION OF DEBATE

To review briefly, section I was concerned with stages 1 and 2, the expression phase of the methodology, and described the problem situation in B.C. The client's interest in the HMO model as a possible solution to setting some boundaries on a presently open-ended medical care system was presented. Also, a review of some expenditure data attempted to clarify problem areas where increased expenditures occurred. Section II followed stage 3 of the methodology by identifying and describing the perspectives of systems relevant to the problem situation. The identified systems were the medical profession, the hospital system and the B.C. Ministry of Health system.

Section III involved stage 4, the model building stage of the methodology. Because the client had specified interest in the HMO model, part A presented the HMO model with its generic and variant characteristics and how it operates in the American health care system. At the same time, an effort was made to draw on some relevant Canadian comparisons to the HMO experience. Part B tried to raise issues about the accommodations that might be necessary in the health care structures of B.C. in order to incorporate an HMO model. Now, section IV will deal with stage 5 of the methodology which returns to the problem situation to compare it with the model presented in order to generate debate about the appropriateness of the HMO model of the problem situation in B.C.
CHAPTER 13: AN HMO FOR THE HEALTH CARE PROBLEMS OF B.C.?

The following discussion will briefly review the problem situation and current policy approaches described earlier, then it will explore alternative strategies that might be introduced. The crucial question, however, is whether an HMO model, as one possible alternative, would be an appropriate strategy for the health care problems of B.C.?

REVIEW OF THE CURRENT PROBLEM SITUATION IN B.C.

From the expenditure data presented in chapter 4, it is evident that the major force driving up health care expenditures in B.C. is physician services. The primary factors contributing to these expenditures appear to be an excess supply of physicians complicated by an excessively high fee schedule relative to other provinces. Although it is clear that physician supply must be curbed, the available means of achieving that end are measures that are not totally within the control of the MOH and that are likely to yield results only in the long term (see chapter 4). As well, such measures may be accompanied by substantial political costs.

Since B.C. has significantly lagged behind other provinces in introducing cost-containment policies, there has been some pressure to catch up in gaining control over expenditures. Generally, the MOH has resorted to centralized regulatory policies directed at restricting hospital resources through budget constraints and decreasing bed supply. In addition, some efforts to limit prices and incomes have been employed through wage settlements for hospital
workers and fee negotiations with physicians. From the Ministry perspective, these policies have been successful in curbing utilization and expenditures in acute care hospitals. From the point of view of professionals and institutions, however, these policies have created an underfunding crisis. Hospitals are dissatisfied with budget allocations and physicians are dissatisfied with incomes due to the lack of fee increases and the restrictions on hospital facilities. Newspapers report regularly on bed closures and waiting lists for elective surgery. The confrontational management style adopted by the Ministry for implementing these blunt instrument policies has aggravated the situation by provoking unpleasantness for both patients and providers.

While these policies have limited the treatment options of physicians by restricting available hospital resources, they have not necessarily influenced physician decision-making in a cost-effective direction as financial incentives for physicians remain unaltered. In the short term, these policies have proven to be politically feasible and have successfully reduced some expenditures, but this may create a false sense of security. The imbalance caused by an excess supply of physicians competing for the use of fewer hospital resources with no particular financial incentives to alter their practice styles in a cost-effective manner is a source of mounting tension in the health care system. The situation raises many critical questions. Can the short term gains produced by regulatory policies be sustained over the intermediate to long term? Can a crisis be averted in the B.C. health care system? What alternative options are available to the MOH for gaining administrative control over health care expenditures?
INCREASED REGULATION

Given the apparent success of a regulatory policy approach in reducing some expenditures, the MOH might find further regulation an attractive option for controlling expenditures. Regulation has the advantage of strengthening centralized control over expenditures. By placing ceilings on certain expenditures, regulatory policies have the potential to reduce total expenditures. In addition, the Ministry focus on regulating resource availability avoids regulations that are perceived to interfere directly with medical care practice or the principles of universal health insurance. But, were the Ministry to continue on the path of further regulation, what might be the implications? Increased regulation is likely to mean tighter controls on hospital spending, the prohibition of certain new technologies or at least rigorous guidelines for their introduction and the continued and increased effort to reduce hospital bed supply and to limit directly the numbers of physicians.

While an increased regulatory strategy may reap some gains, it will also accrue some losses. The confrontational management style, necessitated by this strategy, may stand a good chance of intensifying rather than relieving tension among health care providers. Furthermore, Stoddart and Seldon (n.l p.129) have warned of some dangers inherent in utilizing this strategy. First and perhaps most important, regulation tends to create a provider-government focus and thus undermines the provider-patient focus. The provider-government focus increases the motivation of those with vested interests in the system such as physicians and hospitals to organize collectively in protest. Second, increased regulation is likely to reinforce inadequacies of the existing health care system and stifle innovations. Since it does not change the financial incentives of
providers, further regulation tends to address the symptoms of increased expenditures rather than the cause. Third, regulation is a very blunt policy instrument and therefore is insensitive to making allowances for relevant programs or services on an individual basis. For example, reductions in resources may not be related necessarily to the need for service. Rather, such restrictions may impose the rationing of services by providers which may not result in an equitable distribution of services relative to need. Finally, regulation itself uses up resources and is a costly activity to implement, monitor and administer.

To sum up, regulatory policies undoubtedly have potential for cost-containment and may be the political course of least resistance. However, they do not address efficiency in health care delivery as they leave provider incentives untouched. Nor are they necessarily concerned with social equity in the distribution of resources relative to need. The centralized control inherent in regulatory policies emphasizes a provider-government focus which is a point of increasing pressure and diverts attention away from the provider-consumer aspect of health care delivery.

**INTRODUCTION OF MARKET FORCES**

Another option available to the MOH for gaining control over health care expenditures might be the re-introduction of some market forces into health care delivery in B.C. Since the introduction of publicly funded universal health insurance considerably weakened incentives for competition and efficiency in the system, this approach may be worth exploration. The HMO strategy is the American counterpart of such an approach and was aimed at strengthening market
forces in the health care industry as an alternative to increased regulation as a method of cost-containment.

Among those disillusioned and discontented with regulatory policies in the U.S. was Dr. Paul Ellwood who designed the HMO strategy to promote a highly diversified, pluralistic and competitive environment for health care delivery. By altering incentives to providers in a competitive market, it was hoped that self-regulation would occur through decentralization and result in improved performance with regard to cost-containment, quality of care and accessibility. Thus, the need for federal regulatory policies would be substantially reduced.

One approach to creating a competitive environment in health care delivery in B.C., in theory, might be to re-establish private health insurance. This would vary benefits and prices for the consumer, perhaps making them more sensitive to the cost implications of physician treatment decisions. Yet, in reality, this solution is neither politically feasible nor ideologically consistent with legislation governing health care services (n.l p.131). Furthermore, the U.S. experience, with health care expenditures higher than those in Canada\(^2\), would suggest that this approach would not address the problem situation in B.C. Within the context of a publicly funded system, however, Stoddart and Seldon (n.l) have developed a plan for competition in health care delivery, using Ontario as an example.

Their plan is based on the creation or continued encouragement of three distinct modalities of service delivery contingent on different methods of payment to physicians. The modalities would include: FFS practice which would remain unchanged; a capitation modality that would be equivalent to the Ontario HSO program; and a salary modality which would contain CHC's funded through global budgets. Physicians would be free to choose in which modality they would
like to practise and could change modalities at specified intervals. Citizens would continue to pay for health care in their usual way through premiums and taxes.

The important exception would be that citizens would choose a modality, then enrol for a specified time period. During that period, all primary and hospital care for each individual patient would be recorded against the appropriate modality. Each physician, therefore, would contribute the total cost of caring for his patients to the cost pool for that modality. At the end of the enrolment period, the insurance premium for each modality would be adjusted according to the overall cost performance, case-mix adjusted. The least costly modality would be the baseline and patients enrolling in other modalities for the next period would pay higher premiums reflecting the more costly styles of practice.

Assuming that quality of care is equivalent across modalities, patients would benefit from seeking the efficient modality, new incentives would be offered to providers to use cost-effective styles of practice and the financial protection afforded by publicly funded health insurance would not be seriously eroded. Access to quality care would not be hampered by ability to pay and any user charges would be the result of consumer decisions rather than government regulations. The proposal builds on existing structures in Ontario but improves the pluralistic range of choice for both providers and patients. The rationalization of hospital services would continue to be facilitated. The crucial element of the plan, however, is the re-establishment of the linkage between patient decisions and provider economic welfare, thus placing providers under stronger incentives to practise in a cost-effective manner. No one group of
providers would be able to totally insulate itself from the others (n.l pp.131-134).

In comparison to regulation, this plan, being provider-consumer focused, has the very distinct advantage of leaving the decisions about how to deliver care in the hands of people most knowledgeable about the activity. By altering financial incentives to physicians it attempts to deal with efficiency in the system. Nevertheless, no one method of physician renumeration is without adverse incentives on cost or quality. In addition, the plan would raise administrative and logistical questions and other issues such as free choice of providers or self-selection of patients to name a few. The authors, however, recommend a pilot test within a region accompanied by appropriate evaluation before proceeding with implementation. The value of this proposal is that it illustrates that within the boundaries of a publicly funded system it would be possible to satisfy some criteria necessary for the operation of market forces.

INCREASED PLURALIST CHOICE

Another option available to the MOH for controlling health care expenditures might be to increase the range of choice of organizations for the delivery of medical care services. By introducing organizational models such as the HMO, it might encourage cost-effective physician practice styles and improve technical efficiency. Although it may not be necessary to introduce efficient service delivery models such as the HMO into a competitive policy framework, it would be highly desirable from the perspective of creating incentives to stimulate restructuring within the system for improved efficiency.
The publicly funded competition plan outlined by Stoddart and Seldon has many parallels to the American HMO strategy as both rely on competitive market forces. As well, both plans alter financial incentives to providers and consumers and encourage diversity in a pluralist range of health care delivery organizations. Likewise, they both depend on the ability of consumers to contract with groups of health care providers for a specified period of time at a particular rate. In addition, they link provider behavior to premium costs paid by consumers. Given these similarities, it seems reasonable to consider that an HMO model in B.C. might be introduced within the context of a publicly funded competition plan.

Stoddart and Seldon's plan was based on existing alternative structures of medical care practice in Ontario. A possible continuum suggesting range of medical care services that might be available under this plan in Ontario is illustrated in figure 13.

Figure 13
A Possible Continuum of Medical Care Services Under a Publicly Funded Competition in Ontario

<table>
<thead>
<tr>
<th></th>
<th>Most similar to traditional medical practice</th>
<th>Least similar to traditional medical practice</th>
</tr>
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<tbody>
<tr>
<td>FFS</td>
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<tr>
<td>HSO</td>
<td></td>
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<tr>
<td>CHC</td>
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<tr>
<td>Capitation Funding</td>
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<tr>
<td>Global Budget Funding</td>
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However, were such a plan to be adapted to B.C. the range of choice in comparison would be extremely limited based on existing structures as figure 14 shows.
The CHCs in Ontario and the CHRHCs in B.C. are comparable models similar to that envisioned in the Community Health Centre Project. Both provide comprehensive health and social services through multidisciplinary teams, emphasizing prevention and health promotion. These models concentrate on the primary care services and are not particularly well integrated with hospital services. Since B.C. has no comparable structure to the HSO and since the Ministry has shown interest in the HMO, the development of an HMO model as a competitive alternative to FFS practice seems appropriate within this context.

The HSO and HMO models do have some similarities as both have enrolled populations and alter incentives to providers through the use of capitation payment. The HMO, however, is a more comprehensive model because it has control of both medical care and hospital care resources thus facilitating vertical integration of these services\(^3\). Its financial management and organizational accountability, in addition to altered financial incentives, strengthen its influence on the cost-effective practice styles of physicians. Within the boundaries of the HMO concept, considerable flexibility in organizational arrangements and payment mechanisms is possible to allow adaptation to local needs. Finally, the wealth of experience accumulated in the U.S. and discussed
earlier in section III, provides a good basis from which to begin to develop an
HMO model suitable for a publicly funded health insurance context.

Since the FFS method of payment is known to have adverse incentives that
encourage overservicing and inefficiency, any movement away from that method is
likely to encourage some improvement in efficiency. Because the medical
profession strongly reveres the FFS method of payment as a symbol of profes­
sional autonomy and economic discretion, it is likely, therefore, that it will
remain a dominant method of service delivery. Other alternatives may need
substantial government and public support to become viable competitors. In the
U.S., for example, the federal government grant and loan program gave initial
support to HMO development in order to encourage competition.

Increasing the pluralist choice of organization of medical care delivery
through the introduction of an HMO model emphasizes a provider-consumer focus
rather than a government-provider focus encouraged by regulatory policies.
Consequently, it may foster reduced tension in the system as a provider-consumer
focus is more compatible with medical ideology. Also, competition between
service modalities provides a greater incentive to individual organizations to
control utilization and reduce expenditures in order to remain competitive. As
a result, self-regulating behavior in the use of resources is encouraged within
the organization, thus possibly decreasing the need for centralized regulatory
policies.

The MOH policies of capping funds for medical care services and constrain­
ing hospital budgets mirror similar constraints at an organizational level
within the HMO. At a provincial level, these blunt policies have caused
dissatisfaction and tension between the Ministry and health care providers.
Such constraints at an organizational level, however, may be more sensitively implemented and acceptable as health care resources can be rationalized on a smaller scale with fewer complications imposed by political agendas. Within the context of an excess supply of physicians and excessively high fee schedules, an HMO model may have an effect on reducing utilization and to some extent, constraining physician incomes. It will not, however, affect physician supply. But used in combination with a long term strategy to reduce physician supply, it may have a mediating effect in the intermediate term by relieving some tension in the system and reducing some expenditures through better integration and rationalization of resources.

**APPROPRIATENESS OF THE HMO MODEL FOR B.C.**

The discussion of the HMO in section III made the distinction between an HMO as an efficient organizational unit and the policy development of the HMO strategy. Both levels are interdependent and necessary for the promotion of restructuring of medical care services. This distinction is useful in considering policy options in B.C. The problems of an oversupply of physicians, an excessively high fee schedule and a dominance of open-ended FFS practice would appear to make a publicly funded competitive strategy that incorporates an HMO model as one option for delivering medical care services an appropriate policy direction for B.C. This approach provides a stimulus for restructuring medical care services. As well, it begins to define some boundaries for an open-ended medical care system. In general, a competitive and pluralistic approach is ideologically consistent with Social Credit policies and with the ideology of the medical profession. The HMO model, in particular, is compatible
with MOH priorities that stress financial management and administrative accountability. The accessibility and quality of health care currently prevalent in B.C. would not appear to be threatened and might even be improved by this strategy.

Neither the publicly funded competitive plan nor an HMO model have ever been implemented in Canada. Thus, considerable support would be needed to introduce such change. Based on the American experience, emphasis was first directed to supporting the development of the HMO organizational unit and substantial feasibility problems were encountered. Therefore, an incremental approach might be most appropriate beginning with a pilot project HMO and eventually progressing to a pilot study of an area with publicly funded competition among different modalities of medical care practice.


3. The degree of control that the HMO has over these resources is dependent on the type of organizational and financial arrangements that it has for medical care and hospital care services.
Section IV was concerned with the generation of debate about the appropriateness of HMO for the problem situation in B.C. From this process, consideration of a publicly funded competitive policy which would introduce an HMO model into the spectrum of medical care practice in B.C. as an alternative to FFS practice emerged as a possibility for change. Because of the complexity of the HMO model and the accommodations that would be necessary in the existing structures, an HMO pilot project appears to be a preferable choice initially. Then, a more accurate assessment of the feasibility of the model for B.C. would be available on which to base recommendations for further implementation.

The emphasis in this section will be on stages 6 and 7 of the "soft" systems methodology which are concerned with feasible and desirable changes and action to improve the problem situation. Each of the relevant systems identified in section II will be discussed in chapter 14 in terms of its perspective on the feasibility of the proposed solutions outlined above. Then, conclusions will be drawn and recommendations for action made.
CHAPTER 14 PERSPECTIVES ON FEASIBILITY OF AN HMO MODEL FOR B.C.

The perspectives of systems identified as relevant to the problem situation in Section II: the B.C. Ministry of Health system, the medical profession system and the hospital system will now be discussed with respect to the feasibility and desirability of introducing an HMO model into the health care structures of B.C.

THE B.C. MINISTRY OF HEALTH SYSTEM

In recent years, changes in government structures emphasizing corporate management practices have increased the Ministry's accountability, causing it to take a corporate rationalization approach to gaining control over health care resources. As part of the Ministry's current strategy to downsize the present health care system through centralized regulatory policies, some consideration has been given to the restructuring of health service delivery. The client, the Senior ADM, consequently, became interested in the feasibility of an HMO model as a means of placing some boundaries on an open-ended medical care system in order to facilitate better use of health care resources.

The ecology model of organizational effectiveness presented by Miles provides a good framework for understanding the Ministry's perspective on feasibility. He suggests that organizational effectiveness is determined by whether the mix of goals pursued by the organization is responsive to the mix of expectations held for the organization by its strategic constituencies. Feasibility of this plan for the Ministry, therefore, must take into consideration the relative power of its strategic constituencies to create or manage
uncertainty for the organization. Areas of congruency or incongruency between the plan and the expectations of its strategic constituencies need to be assessed carefully. Otherwise implementation could be seriously undermined.

Political Constituencies

The introduction of some market forces into medical care practice through publicly funded competition is a policy option that appears to be compatible to some extent with the conservative ideology of the Social Credit government. This plan would diversify the pluralist choices of medical care organization available to the public and practitioners. By creating tension between competing modalities of medical care practice based on premium differentials, the plan encourages self-regulation which should result in improved performance and cost savings. The American federal government found the self-regulating aspects of the HMO strategy to be a very attractive means of decentralizing the federal role in health and reducing the need for regulation that consumed government resources. A competitive strategy in B.C. might similarly decrease the need for some government resources presently used to sustain regulatory policies.

The Social Credit government has not had a history of experimenting with innovations in health care delivery. Experiments with alternative forms of medical care practice in B.C., and in Canada generally, have been associated with socialist ideals and political parties. In the U.S., however, the development of the HMO concept was a recasting of the liberal idea of PGP into a social reform that could be claimed as a conservative invention. Political support for a similar scenario using the HMO model as a conservative reform for restructuring medical care services in B.C. is doubtful.
While a publicly funded competitive policy may have potential for cost savings and improved efficiency in health care delivery, it may also challenge some aspects of Social Credit ideology. Its small business orientation and constituency are likely to favour FFS practice. Despite bureaucratic interest in cost-containment, there may not be political agreement with extending competitive structures into the FFS domain. From the experience of the HMO strategy in the U.S. and the CHC, in B.C. and Canada generally, political support is critical to giving legitimacy to the introduction of new structures.

Therefore, the option of endorsing an HMO pilot project might be more appealing as it requires less political commitment than proceeding with a publicly funded competitive plan. Also, it would be consistent with the Social Credit incrementalist approach to health policy. While many good ideas have withered under an uncertain pilot project status, in this case, it would seem a practical initial step, due to the complexity of the concept and the degree of adaptation likely to be required by existing structures. This approach would allow time for evaluation and for building credibility and support for the model in B.C. Initially, political support would be important for the selection of a location for the project as well as for a sponsor. In addition, a pilot project would require a firm financial commitment for a specified time period, at minimum probably three years and more realistically five years. Should political circumstances change or the project prove unworkable, substantial latitude for political manoeuvering would remain.
Bureaucratic Constituencies

The American HMO strategy was imposed on the federal DHEW as a result of the actions of an elite group of senior government officials. Because of a need to do something about a perceived "health care crisis", this group rapidly engineered the HMO strategy almost exclusive of consultation with DHEW staff. The subsequent establishment of the HMO program within the DHEW structure violated the traditional norms of its bureaucratic organizational process. Although many DHEW staff were supportive of the HMO concept, the approach caused so much confusion and conflict among staff and departments in DHEW that the initial stages of implementing the HMO program were seriously hampered.

The germination of interest in the HMO model in the B.C. health Ministry has been quite a different process with the impetus largely coming from the bureaucracy. Generally, there has always been some residual ministry interest in alternative forms of medical care delivery but these organizations often have been viewed with scepticism. With changes in government structures, however, ministry spending came under the scrutiny of Treasury Board which began to raise questions about the exploration of lower cost alternatives for health care delivery. As well, in fee schedule negotiations with BCMA, the Ministry has had few alternatives with which to compare the performance of FFS practice. Finally, the regulatory policies directed at downsizing the present system have caused tensions among providers which could lead to a crisis situation. Thus, interest in the HMO model has emerged from the organizational processes of the Ministry as one possible way of rationalizing resources and improving performance and accountability in health care delivery while simultaneously achieving cost containment and more appropriate utilization of services.
Interviews conducted with senior ministry staff showed consistency in interest in the HMO concept but variation in interpretation of the concept. A lack of a clear consensus on the meaning of the HMO model caused abundant administrative problems for DHEW in establishing the HMO program. Another major area of difficulty for DHEW was the lack of technical expertise about HMOs in the department. A similar situation would most likely occur in the B.C. Ministry as it is organized to deal with the traditional health care system and an HMO would require different relationships and expertise. With the CHRHCs that were to some extent outside the boundaries of the traditional system, the Ministry had some difficulty sorting out its role once the Development Group dissolved. The major areas of technical expertise likely to be required for implementation of an HMO model would be economic analysis, financial management and management information systems. Information systems would need to be developed and made compatible with ministry systems for evaluative purposes. In the U.S., HMOs have well developed marketing skills and are adept at doing market research to assess population risks, community interest and financial feasibility of potential HMO locations. While these skills are more appropriate to the private market in the U.S., some of the principles that they employ might also have value in a publicly funded system.

Clearly, the initial costs of setting up an HMO model pilot project could be substantial. Savings from such an investment would not likely be immediately evident nor should they be particularly expected from the pilot project per se. Since establishing an enrolled population is subject to many variables, predictions of initial performance would be very difficult. In the early stages of development HMOs are known to behave similarly to the traditional system
until an adequate market share is secure. Then cost-saving behavior begins to accelerate as the HMO matures. (Refer to figure 11 p.170). Some consideration might be given to converting established group practices, for example, the Caledonia Clinic in Nanaimo or health centres such as the Mount Pleasant Health Centre in Vancouver, to an HMO model in order to reduce some initial capital and operating costs. Nevertheless, the MOH, Treasury Board and Cabinet would need to strongly support the development of an HMO model in order to justify considerable expenditure that might not yield a return for perhaps two or three years. Also critical would be the incorporation of evaluative procedures at the outset of the pilot project. Evaluative data and the resources necessary for monitoring and evaluation would be vital to determining the value of the model and whether it should be expanded in a context of publicly funded competition. In a time of restraint in consumptive sectors of the B.C. economy such as health care, social services and education, costly experimentation could be highly criticized.

External Constituencies

The primary strategic external constituencies that the MOH would have to consider in the introduction of an HMO model in the framework of a competitive policy for medical care practice, are the medical profession, the hospital sector and the consumers of health care services. Since the perspectives of the medical profession and the hospitals will be discussed individually, they will not be mentioned here.
Consumers

Throughout this study, consumers have been a conspicuously ignored constituency mainly because the identified problems have focused on the relationship between providers and the MOH. While no particular dissatisfaction of consumers with current health care services is evident, any alterations in the delivery of health services must be acceptable to consumers in order to be effective.

Ideally, the health care system of B.C. should attempt to distribute services on the basis of need and social equity. Moreover, there are diverse groups of varying sizes within the population, displaying different socio-economic status, risk factors, age and sex distribution and other factors, in short, having different health needs. Therefore, pluralism is required as no one method of delivering services is likely to be appropriate for all circumstances. The introduction of an HMO model would increase the pluralist choice of medical care services to consumers. Within a competitive context it might also stimulate the development of other alternatives that would further diversify choices to the public.

For an HMO to be operational, it must be able to attract an enrolled population. Most HMOs in the U.S. are located in urban areas with a population base of 500,000 or more and the HMO goal might be to achieve 10% market penetration of that population. Voluntary enrolment in a health care organization would be a new concept for B.C. consumers. Consequently, it might be associated with limitations on the free choice of physician or with inferior quality care. On the other hand, enrolment might be able to guarantee certain services not always available in FFS practice, such as home visits. From the American experience, consumers that had an established relationship with a
physician were reluctant to switch to an HMO. Hence, those who were poorly integrated into the traditional health care system for whatever reasons tended to gravitate to HMOs. To be truly competitive with FFS, it would be important for an HMO to serve a comparable general population and not direct its services entirely towards the needs of underserved groups.

If a competitive policy similar to that outlined by Stoddart and Seldon were implemented, consumers would be able to benefit from premium differentials due to their choice of modality. Any user charges that might occur would be the voluntary choice of the consumer and would be directed at practice style rather than medical care generally.

THE MEDICAL PROFESSION SYSTEM

Interestingly, the HMO strategy was developed by a physician disillusioned with the effects of regulatory policies in the U.S. By altering incentives to providers, he felt that the performance of the health care system could be significantly improved. In order to engage physicians in the objectives of the HMO strategy, the HMO legislation made accommodation for two types of federally qualified HMOs, a PGP model and an IPA model where physicians could continue to be paid by FFS. From the selected literature reviewed for this study, physicians were found to be the predominant sponsors of HMOs which suggests that a competitive approach may appeal to their entrepreneurial values. However, the AMA did oppose the HMO legislation on the basis that it was unfair to offer government support to organizations competing with FFS practice. Their lobby was successful in having the policy labelled as experimental.
Like their American colleagues at the time of the HMO strategy, physicians in B.C. are now feeling the pinch of regulatory policies. Because of an excessive physician supply and a very high fee schedule in the context of an open-ended FFS structure, the MOH has been compelled to take stricter measures to gain some control over medical care expenditures. Legislation to restrict billing numbers has been passed in an effort to affect the supply problem or at least the distribution of the supply. No fee schedule increases have been granted since 1982 and this spring a global cap was placed on medical care expenditures. As well, restrictions on the availability of hospital resources have placed controls on medical expenditures. In general, the placement of ceilings on expenditure levels in the context of an oversupply of physicians implicitly suggests constraints on physician incomes.

Tension has grown between the Ministry and the medical profession over these policies and the confrontational management style with which they have been implemented. Such policies of government intervention challenge medical ideology and imply some weakening in control by the profession. Restrictions on the availability of hospital resources have successfully reduced utilization by limiting treatment options available to physicians. Since medical ideology emphasizes the professional control of the technical quality of care, policy decisions made by bureaucrats that arbitrarily limit the treatment options of professionals are a serious point of contention. A distinct advantage of a competitive policy for physicians is that it places basic decisions about how to deliver care in the hands of professionals most knowledgeable about the activity
rather than in the hands of bureaucrats. A competitive approach might decrease the need for regulatory policies, to some extent, by altering incentives to physicians and consumers thus encouraging self-regulation within competing modalities of medical care practice. In addition, the economic link between patient decisions and provider income would be re-established, thus making the physician more accountable to the patient for his treatment decisions.

While the choice of practice settings available to physicians would be increased by a competitive policy, the introduction of new structures such as an HMO are not likely to be welcomed. Any movement away from FFS practice organization symbolizes a loss of professional autonomy and control and is perceived as a threat to incomes. However, current regulatory policies that have been implemented in a FFS structure are beginning to show signs of eroding professional control, autonomy and possibly incomes. With the variety of organizational arrangements for physician services available under the HMO umbrella, a range of possibilities exists where physicians can retain some entrepreneurial control in the practice yet the organization is able to achieve its efficiency and cost control objectives. Entrepreneurial opportunities would be available as well for physicians to sponsor group practice model HMOs or possibly physician sponsorship of an IPA model might emerge as a competitive response.

An article in the BCMA News, December 1984, suggests that the HMO is a desirable vehicle for the delivery of health care in B.C. and that some physicians, particularly younger physicians, might be attracted to working in such an organization for lifestyle reasons. The article goes on to suggest that there might be policies to encourage physicians to organize in HMOs but it
suggests that an HMO will only function efficiently and effectively if it is in competition with other HMOs and FFS practice.\(^5\)

These comments are encouraging as they suggest some "conservative assimilation of reform". Previously, the BCMA had expressed opposition to the Community Health Centre Project Report and had been instrumental in influencing the placement of CHRHCs in rural communities. This apparent shift in the perspective of the medical profession suggests that there may be some room for compromise and negotiation concerning support for a competitive policy including an HMO model. The BCMA article also suggests medical profession participation in planning an HMO which could be accommodated in a pilot project. On one hand, this may be viewed as seeds of reform within the medical profession. On the other hand, it may be viewed as extending the medical monopoly to control the direction of reform.

THE HOSPITAL SYSTEM

In recent years, the MOH has been successful at improving accountability in the hospital sector through regulatory policies. Bed supply has been decreased, budgets have been increasingly constrained, and in some cases, hospitals have been amalgamated or merged for improved efficiency. While the Ministry was bringing the hospital sector under control, the medical care sector was not subject to such stringent constraints. As a result, an excess supply of physicians now is competing for the use of fewer hospital resources. The granting of hospital privileges is becoming an explosive issue and middle managers are constantly distraught trying to satisfy the demands of both physicians and administrators.
A similar scenario occurred in American hospitals as a result of increased regulatory policies. Status quo strategies were used to reduce capacity and restrict budgets, also horizontal integration was tried, merging hospitals to improve efficiency. When a shift to a competitive health policy occurred, these strategies were found to be inadequate at controlling costs enough to be competitive. Consequently, a vertical integration strategy between the hospital and the HMO gained popularity as it offered a means of reducing long run operating costs.

Because of increasing strain on hospital resources in B.C., the need for a vertical integration strategy has become apparent to hospitals. The Ministry, therefore, would be likely to find the hospitals supportive of an HMO model as this would help them to rationalize the use of their resources and improve their control over operating costs through the influence of the HMO on practice patterns of physicians. However, they would need to consider carefully HMO association in relation to their long range strategic plans. Initially, the HMO might use many hospital resources such as ancillary and technological services and in patient care services. As it matures, the HMO may decrease its use of some services such as inpatient services or it may find cheaper ways of providing other services, for example, ancillary services. The hospital would need to evaluate whether its goals for such a strategy were short or long term as this would influence the degree of integration that it would seek with an HMO. Since the circumstances of both organizations are likely to change during their association, they might progress from a lower to a higher degree of integration over time.
While the board and administration might see distinct advantages to vertical integration with an HMO, hospital medical staff might strongly resist or undermine such a strategy as it could threaten their incomes by decreasing some of their accessibility to hospital resources. Strong board commitment would be necessary and would need to be communicated to hospital staff in order to facilitate implementation. Some accommodations in hospital behavior may be necessary to shift its focus from serving physician needs to more concern for consumer needs because of the HMO's interests in maintaining its enrolled population. Since the HMO has incentives to get the best value for services, it is likely to monitor the costs of hospital services carefully, perhaps more carefully than the MOH, which would put the hospital under some pressure to be efficient.

The interest expressed by the hospital sector would seem to be sufficient to warrant supporting a pilot project HMO. Due to the complexity of the HMO concept plus the accommodations necessary in the hospital service delivery and accounting systems, some time would be required to work out problem areas. In selecting a hospital to participate in a pilot project, first consideration should be given to a community hospital as costs are likely to be lower and relationships less complex than in a teaching hospital. For certain specialized areas of care such as heart surgery, it may be necessary for the HMO to contract with other hospitals. Because of the mutual interests of the Ministry and the hospital in rationalizing resources and influencing cost effective physician practice patterns, it would appear that these bureaucratic and institutional interests might be merged to form a locus of support for an HMO pilot project.
CONCLUSIONS

The purpose of this study was concerned with whether it was feasible and desirable to introduce HMOs into the health care structures of B.C. as an alternative to FFS medical care practice. This reflected the client interest in restructuring as a means for placing some boundaries on an open-ended medical care system and reducing medical care expenditures. A review of the problem situation perceived by the MOH identified the major forces driving up health care expenditures in B.C. to be an excess supply of physicians and an excessively high fee schedule.

An analysis of the HMO model showed it to be a highly complex organization with potential for influencing physician practice styles in a cost-effective direction and reducing the utilization of health care services. For the B.C. problem situation, an HMO model may reduce medical care expenditures through its influence on the practice patterns of physicians. While it would not address the problem of an oversupply of physicians, it may be a mediating strategy to control expenditures and could be co-ordinated with other strategies for decreasing physician supply. Accommodations to a publicly funded system would be necessary for an HMO model. Logistical and administrative obstacles are likely to arise, particularly in adapting financial systems.

Despite the success of current regulatory policies in reducing hospital utilization and expenditures in B.C., dissatisfaction with these policies is pervasive among professionals and institutions. Consequently, an alternative policy option of publicly funded competition for medical care practice was explored. Because of its similarities to the American context, this approach seemed to be an ideal framework for the introduction of an HMO structure.
However, consistent support for the desirability of this option was not found across relevant constituencies.

The impetus for structural change was clearly centred in the MOH bureaucracy. Otherwise, the hospitals were the only constituency to show enthusiasm for the HMO model. Some convergence between these two interests might prove mutually satisfactory to the Ministry and the hospitals plus strengthen HMO support among professionals. A consensus across all the relevant constituencies was apparent for the introduction of an HMO model as a pilot project, in order to work out feasibility problems, to build support and credibility for the concept and to evaluate its effectiveness in a Canadian setting. Based on this consensus, the following recommendations for change are made.

RECOMMENDATIONS

1. An HMO pilot project should be the initial step in introducing an HMO model to the health care structures of B.C. due to the complexity of concept, the probable deficiency of technical expertise in the early stages and the degree of accommodation necessary in existing structures. An HMO pilot project should attempt to emulate moderate characteristics of the American HMO known to be successful. For example:

   i) the project should be located in an urban area with a population base of 500,000 or more. The goal should be to serve a general population with a demonstrated need for health services and an interest in the concept;
ii) consideration should be given to cultivating a sponsor or sponsors for the HMO pilot project although no strong interest in sponsorship was indicated by the data collected for the study;

iii) the group practice partnership model of physician organization that contracts with the HMO for a capitation rate in exchange for the provision of medical care services should be considered as the model of choice for medical care services in the HMO;

iv) the contract model for hospital arrangements, preferrably with a community hospital, should be considered by the HMO.

2. A planning committee similar to the Development Group for CHRHCs should be formed to oversee the development and functioning of the pilot project. It should be composed of ministry representatives as well as those from other constituencies, especially the medical profession and hospitals. It should operate outside the bureaucracy but have a reporting relationship to the Minister or Deputy Minister, and a defined mandate.

3. Evaluation procedures should be built into the structure of the HMO pilot project to monitor progress and develop a data base from which efficiency and effectiveness can be assessed.

4. Based on the experience and evaluation of an HMO pilot project, a decision should be made about further implementation of the HMO model as a stimulus for restructuring medical care services in B.C.
FOOTNOTES


APPENDIX A

INTERVIEWS

British Columbia

Chris Lovelace, Executive Director, Policy, Planning and Legislation, B.C. Ministry of Health, Victoria, 3 December 1984.

Garry Cardiff, Assistant Deputy Minister, Institutional Services, B.C. Ministry of Health, Victoria, 3 December 1984.

Stephen Kenny, Executive Director, Medical Services Plan, B.C. Ministry of Health, Victoria, 3 December 1984, 5 March 1985 and various dates to July 1985.

Paul Pallan, Director of Policy, B.C. Ministry of Health, Victoria, 16 November 1984, 3 December 1984 and various other dates to July 1985.


Dennis Patterson, President, Westcare Consultants, Vancouver, 27 January 1984.

David Schreck, General Manager, CU & C Health Services Society, Vancouver, 13 April 1984 and various other dates to July 1985.

James Moffat, Administrator, Caledonia Clinic, Nanaimo, 4 December 1984.

Robert Dill, Co-ordinator, James Bay CHRHC, Victoria, 4 December 1984.

Dr. James Corbett, Medical Director, Lions Gate Hospital, North Vancouver, 12 December 1984.

Dr. Warren Mayo, President, Professional Association of Residents and Interns (PARI), Vancouver, 17 December 1984 and June 1985.

Dr. Norman Rigby, Executive Director, B.C. Medical Association, Vancouver, 22 January 1985.
Malcolm MacIntosh, Group Practice Consultant, B.C. Medical Association, Vancouver, 22 May 1985.

Roger Sharman, Associate Executive Director, Royal Inland Hospital, Kamloops, 21 September 1984 and 7 March 1985.

Fran Brunelle, Assistant Executive Director, Health Care Services, B.C. Health Association, Vancouver, 2 May 1985.

Ontario

Dr. John Hastings, Professor, Community Health and Health Administration, Division of Community Health, Faculty of Medicine, University of Toronto, Toronto, 11 June 1984.

Dave Brindle, Senior Program Development Officer, Health Service Organizations, Community Health Centres Program, Community Health Programs Branch, Ontario Ministry of Health, Toronto, 20 June 1984 and various other dates to July 1985.


Paul Donahue, Director, Community Health Programs Branch, Ontario Ministry of Health, Toronto, 20 December 1984.

Ray Berry, former Director, Program Development Branch, Ontario Ministry of Health, Toronto, 29 April 1985.

United States


Chart - Quebec's Health System

National Assembly

Cabinet — Minister of Social Affairs

Ministry of Social Affairs (M.A.S.)

12 Regional Health and Social Services Councils (C.R.S.S.S.)

4 Health Sciences Centres (C.H.U.)

32 Departments of Community Health for sub-regions (D.S.C.)

Hospitals (C.H.) (acute, special, long-term)

Social Services Reception Centres (C.S.S.) (C.A.)

Local Community Service Centres (C.L.S.C.)

Private Physicians and Dentists (solo, groups, polyclinics)

Tertiary Care

Secondary Care

Primary Care

Notes: Solid lines represent the interrelations among the public components of the system. The broken lines represent the interrelations between the majority of doctors and dentists, who are in forms of private practice, and the components of the public system. It should be noted that they receive payment through the public plan, although they function as independent practitioners.

APPENDIX C

HMO CHRONOLOGY OF EVENTS

1929  Ross-Loos Clinic in Los Angeles becomes operational and is the first HMO prototype.

1937  Group Health Association opens in Washington, D.C., the first HMO on the East Coast.

1945  Kaiser-Permanente Medical Care Program established in Northern and Southern California.

1959  Formation of Group Health Association of America, HMO trade association representing group practice HMOs.

1970  33 HMOs serving 3 million enrollees.
      Dr. Paul Ellwood develops the HMO strategy and it is presented by DHEW to the House Ways and Means Committee as an approach to control costs of the Medicare and Medicaid programs.

1971  American Medical Care and Review Association founded, HMO trade association representing IPA model HMOs.
      February 18, 1971. President Nixon advocates federal assistance to establish a broad network of HMOs in his first Health Message to Congress.
      October, 1971. The HMO Service is established as a separate entity within a branch of DHEW.

      InterStudy, a Minneapolis health policy firm, founded to introduce competitive market forces into the health care system and has been a leading catalyst in the HMO field.

1975 From December 1973 to June 1975 DHEW awards 180 grants to 157 projects and receives 375 applications. It spends $22.5 million of the $40 million actually appropriated for the period. Seven HMOs are federally qualified by DHEW, not all of which were operational.

1976 HMO Act Amendments liberalize requirements creating widespread industry acceptance of federal qualification.

1978 HMO Act Amendments increasing federal funds to the program.

Formation of the National Industry Council for HMO Development following DHEW Secretary's Fortune 500 HMO Conference.

1980 236 HMOs serving 9.1 million enrollees.

1981 Federal financial assistance achieves its objective and is terminated; federal effort to encourage private investment in HMOs is initiated.

1983 Public offerings of for-profit HMOs attract high degree of Wall Street financial interest.

280 HMOs serving 12 million people, 200 plans are federally qualified.
COMMUNITY HUMAN RESOURCE AND HEALTH CARE

ACUTE GENERAL HOSPITAL

COMMUNITY HUMAN RESOURCE CENTRE
Voluntary Social Services
Community Human Resource Personnel
- Compensation
- Case Work

EDUCATION SYSTEM

COMMUNITY HUMAN RESOURCE AND HEALTH CENTRE

COMMUNITY HEALTH CENTRE
Primary Medical Care
Medical Consultation

HOME SERVICES PROGRAMME
Nursing
Boarding
Convalescent
Homes

Prenatal Supervision
Nutritional Counselling
Immunizations, etc.
(Public Health Unit)

Psychological Consultation
Psychiatric Social Work
Psychiatric Nursing
(Mental Health Centre)

SATELLITE


Ashcraft, Marie; Penchansky, Roy; Berki, S.E.; Fortus, Robert S.; and Gray, John. "Expectations and Experience of HMO Enrollees after One Year: An Analysis of Satisfaction, Utilization and Costs". Medical Care 16 (January 1978):14-32.


Berki, S.E.; Ashcraft, Marie; Penchansky, Roy; and Fortus, Robert S. "Health Concern, HMO Enrollment, and Preventative Care Use." *Journal of Community Health* 3 (Fall 1977):3-31.


Bice, Thomas W. "Risk Vulnerability and Enrollment in a Prepaid Group Practice." Medical Care 13 (August 1975):698-703.


Blumberg, Mark S. "Health Status and Health Care Use by Type of Private Health Coverage." Milbank Memorial Fund Quarterly 58 (Fall 1980):633-655.


Broida, Joel H.; Lerner, Monroe; Lohrenz, Francis N.; and Wenzel, Frederick J. "Impact of Membership in an Enrolled Prepaid Population on Utilization of


Budenstein, Mary Jane and Hennelly, Virginia D. "Deterrents to Family Enrolment in a Prepaid Group Practice." Medical Care 18 (June 1980): 649-656.


Densen, Paul M.; Balamuth, Eve; and Shapiro, Sam. Prepaid Medical Care and Hospital Utilization. Hospital Monograph Series No. 3. Chicago: American Hospital Association, 1958.


Evans, Robert G. "Paying the Dentist: How, To Whom and For What?" A paper prepared to for the Dental Health Care Services and Epidemiology Research Unit, Faculty of Dentistry, University of Toronto, March 1975.


Hall, Phoebe; Land, Hilary; Parker, Roy; and Webb, Adrian. Change, Choice and Conflict in Social Policy. London: Heinemann, 1975.


Hospital Act. R.S.B.C., 1979, c.176.

Hudes, Jack; Young, Cecilia A.; Sohrab, Lili; and Trinh, Chung N. "Are HMO Enrollees Being Attracted by Liberal Maternity Benefits?" *Medical Care* 18 (June 1980):635-648.


Luft, Harold S. "Trends in Medical Care Costs: Do HMOs Lower the Rate of Growth?" Medical Care 18 (January 1980):1-16.


Mia v. The Medical Services Commission of British Columbia (March 21, 1985), The Supreme Court of British Columbia.


Mullooly, John P. and Freeborn, Donald K. "The Effect of Length of Membership Upon the Utilization of Ambulatory Care Services." Medical Care 18 (September 1979):922-936.


Perkoff, Gerald T.; Kahn, Lawrence; and Haas, Philip J. "The Effects of an Experimental Prepaid Group Practice on Medical Care Utilization and Cost." Medical Care 14 (May 1976):432-449.


Renaud, Marc; Beauchemin, Jean; Lalonde, Carol; Poirer, Helen; and Berthiaume, Sylvie. "Practice Settings and Prescribing Profiles: The Simulation of Tension Headaches to General Practitioners Working in Different Practice Settings in the Montreal Area." *American Journal of Public Health* **70** (October 1980):1068-1071.


Scitovsky, Anne A.; Benham, Lee; and McCall, Nelda. "Use of Physician Services under Two Prepaid Plans." Medical Care 17 (May 1979):441-460.


Talbot, John. "Community Human Resources and Health Centres in British Columbia" Paper presented at the Nineteenth Annual Refresher Course: Issues in Community Health, Division of Community Health, Faculty of Medicine, University of Toronto, March 1978.


Wersinger, Richard; Roghmann, Klaus J.; Gauett, J. William; and Wells, Sandra M. "Inpatient Hospital Utilization in Three Prepaid Comprehensive Health Care Plans Compared with a Regular Blue Cross Plan." *Medical Care* 14 (September 1976):721-732.


