FINAL REPORT

Contract HRA 230-75-0062

Developing Methodologies for Health Planners to Evaluate Services Shared by Health Care Organizations

FINAL REPORT

Contract HRA 230-75-0062

Developing Methodologies for Health Planners to Evaluate Services Shared by Health Care Organizations

INTRODUCTION

For the sake of clarity in later discussions, the work under contract HRA 230-75-0062 is divided into two components. The first component, Methodologies for Health Planners to Evaluate Services Shared by Health Care Organizations", is referred to as the "Methodologies" component. The other, "The Economic Impact of Shared Service Arrangements", is referred to as the "Economic Impacts" component. The first yielded a four-volume report, and the other resulted in a separate monograph, which substantively, could be viewed as a fifth volume under the contract.

In the course of performing the work under this contract, the researchers encountered some issues or problems, which were enumerated in the quarterly progress reports. These issues are discussed as being either administrative or substantive details. The separation into the two categories is based on the area of major impact of the detail; it is recognized that the two areas are interrelated.

Based on the experiences of this contract, the methodology employed in achieving the objectives of the contract is examined, and some recommendations are made concerning possible improvements. Finally, some research areas for further investigations into shared services are suggested.

SUMMARY OF PROGRESS REPORTS

Overall, the administrative and substantive issues faced during the contract were resolved smoothly to all parties' ultimate satisfaction. No controversies or problems remained unresolved at the expiration of the contract.

Administrative Details

Time

The time period covered by this contract was Oct. 17, 1974, to Oct. 16, 1976. The "Methodologies" component required the first 15 months and the "Economic Impacts" the last 9 months.

Staff

The major professional staff members who contributed to the study and their approximate dates of participation are listed. For the exact dates of the work of compensated staff, the financial records of this contract should be consulted. Some other individuals who contributed isolated smaller efforts are mentioned in the acknowledgments for each volume.

Hospital Research and Educational Trust

Tryfon Beatzoglou Research Associate 9/75-10/76	Elizabeth S. LaPerle Assistant to the HSRC Director 12/75-10/76

James P. Cooney Jr., Ph.D.
Director, HSRC
Principal Investigator and
Project Director
10/74-7/75

Bernard Ferber, Sc.D.
Center Associate
10/74-3/76

Dolores E. Henning
Editor
9/76-10/76

Leo B. Matti
Project Technical Director
10/74-7/75
Project Director
8/75-3/76
Program Associate
4/76-9/76

James F. McDonald
Research Assistant
10/74-3/76

James R. Stith
Research Associate
10/74-8/76

Northwestern University

David P. Baron, Ph.D.
Professor, Managerial Economics
and Decision Sciences
9/75-10/76

Bernard S. Friedman, Ph.D.
Assistant Professor, Economics
and Center Associate (HSRC)
10/75-10/76

Diane V. Lloyd
Health Services Librarian
11/74-6/76

Barbara P. McCool, Ph.D.
Assistant Professor
Health Services Administration
10/74-6/75

William P. Pierskalla, Ph.D.
Professor, Industrial Engineering
and Acting Director, HSRC
8/75-8/76
Principal Investigator and
Project Director
4/76-10/76

American Hospital Association

George Bergstrom
Staff Specialist
5/75-7/75

John V. Holper
Senior Staff Specialist
10/74-12/75

Jenny Korling
Staff Specialist
5/75-7/75

Elworth Taylor
Senior Staff Specialist
5/75-8/75

Delay

For a number of reasons, one major delay did occur. When the draft of the "Methodologies" component was submitted to the Bureau of Health Planning and Resources Development

for review, the reviewers stipulated some major revisions. A three-month extension of time, at no added expense to the government, was requested by the Trust and granted by Health Resources Administration (HRA) authorities. All mandated changes were made within those three months.

Meetings

As specified in the contract, there was an initial meeting in Rockville, MD, of the project officer, other Health Resources Administration personnel, the project director, and research staff members. Subsequently, bimonthly meetings and extended telephone conversations were held. One meeting occurred in Seattle, when the project officer accompanied the research team on a site visit in order to monitor the application of the site visit methodology.

An eight-member advisory committee was appointed. Two advisory committee meetings were held in Chicago, one at the beginning of the contract and one just prior to the completion of the first draft of the two "Methodologies" monographs. No advisory committee was appointed for the "Economic Impacts" component.

Site Visits

The initial contact with potential sites to be visited was easily established because project staff members were familiar with many shared service organizations. The scheduling of 16 site visits during the summer months (that is, prime vacation time) was administratively difficult; ultimately the visits were conducted between April and September 1975 for the "Methodologies" component. The additional six site visits for the "Economic Impacts" component were conducted between June and early August 1976. A letter of agreement to participate in the study was obtained from each site prior to the visit. Three potential sites for the "Methodologies" component and two potential sites for the "Economic Impacts" component from the original approved lists declined to participate. Alternates were substituted, with the approval of the project officer. In both components the site visit methodology approved by HRA was implemented.

Modifications of the Contract

In the course of two years, four modifications were made to the original contract. The first modification pertained to rental cost limitations. The second modification was extensive; it included major additions of work, funding, and time to the original contract. Executed August 22, 1975, it covered the "Economic Impacts" component at an additional cost to the government of $99,900 for a nine-month period. Changes in the per diem rate, in project directors, and in deliverables under Article I B were included. A summary of the additional work is provided in the section "Substantive Details." The third modification deleted the requirement that the methodologies be tested. A contributing cause for this deletion was that the original intended recipients, namely Comprehensive Health Planning (CHP) agencies, were in a transition phase because PL 93-641 specified the development of Health Systems Agencies (HSAs). Under the third modification the work on the

"Economic Impacts" component, originally scheduled to overlap the work on the "Methodologies" component, was postponed until the "Methodologies" section was completed. A three-month time extension was granted, at no extra cost to the government, to accommodate the major revisions mandated by the Health Resources Administration. The fourth modification specified a change in project directors and granted a full nine months for the completion of the "Economic Impacts" component.

Dissolution of the Health Services Research Center

In December 1975 it was announced that the Health Services Research Center (HSRC), a joint venture between the Hospital Research and Educational Trust of the American Hospital Association and Northwestern University, would be dissolved on or before Aug. 31, 1976. This would be prior to the expiration of HRA contract No. 230-75-0062. However, HSRC was merely the agency designated by the Trust to conduct the work specified; the Trust itself was the actual contractor. Northwestern University and the Trust assured the government that the work under this contract would be completed under their joint auspices, even after the dissolution of HSRC.

Quantity of Final Monographs

A recurring issue concerned the number of copies of the final monographs that the Trust was to supply to the project officer. In the original proposal, in response to (RFP) HRA 230-CHP-2(5), 500 printed copies were specified. Actual printing by the contractor is not permitted under this contract. Eventually, the issue was resolved administratively by specifying that the Trust was responsible for supplying 8 copies for the "Methodologies" component and 26 copies for the "Economic Impacts" component. For each component one of the copies was to be a camera-ready manuscript.

Substantive Details

The final report discusses only those areas of the work performed which were problematic, issues to be resolved, and deviations from the original specifications of (RFP) HRA 230-CHP-2(5).

The Methodologies

The contract required the development of three methodologies: (1) to identify and analyze existing sharing arrangements, (2) to determine the potential of such arrangements, and (3) to initiate further sharing, with appropriate tools and techniques. As a whole, the three are intended to take the planner from an initial awareness of sharing to the point where the health care organizations themselves can implement sharing arrangements. As a real life point of strategy, it is clear that the moment a planner begins an inquiry into sharing arrangements in the geographic area, the health care organizations become aware of that activity. If the planner initiates the inquiry in the right way, he is actually laying some groundwork for eventual cooperation. If he initiates the inquiry in the wrong way, hostilities and suspicions are generated that may preclude eventual implementation. In short, the first methodology is also a subcomponent of the third methodology.

Analogous relationships exist for and between all of the methodologies, so that any subcomponent could actually fit into more than one methodology.

During the course of the work under the "Methodologies" component, several different schemata for the methodologies and submethodologies were proposed. The original draft version of the two monographs, submitted September 1975, represents the culmination of one possible approach. The advisory committee, in reviewing that document, recommended that the three methodologies be consolidated into one overall methodology, with a detailed series of "action steps" guiding the planner from one activity to the next. This recommendation was never implemented because of the changes mandated by the Department of Health, Education, and Welfare (HEW) review of that same draft version.

Site Visits and Case Studies

Agreements to participate in the study were relatively easily obtained from potential sites for the "Methodologies" component. Only one site flatly rejected the invitation. Two other sites cancelled shortly before they were scheduled for a visit, apparently for internal reasons. All 16 sites in that component of the contract yielded usable data. The only problem encountered by the site visit teams was that occasionally a key figure in the sharing arrangement was new to the job, without a full knowledge of the developmental history of the organization. However, in all such instances, a knowledgeable individual was found.

"Methodologies" Monographs

The original contract required two monographs. The first monograph was to contain (c.f. Article I B 12.): (a) a summary of the existing types of arrangements among health care organizations for sharing services as identified in B 3, (b) an analysis of these arrangements as determined in B 4, (c) the case studies of the arrangements evaluated in B 8, and (d) an annotated bibliography of the pertinent information. The second monograph was to contain: (a) the methodology with supportive examples for identifying and analyzing current arrangements for shared services, (b) the methodology for identifying and analyzing the potential for implementing arrangements for sharing services, and (c) the techniques to be used by health planning agencies for initiating arrangements for sharing services.

On September 11, 1975, a draft version of two monographs was submitted to the project officer. The HEW reviewers of that draft believed that the monographs should contain more financial information, be more analytical in the case studies, utilize the case study findings more overtly in the development of the methodologies, and relate the findings more to the development of a comprehensive health plan and/or the conduct of a project review. As a result, the two monographs were expanded to four volumes. Five national-level cost analyses of sharing, utilizing Hospital Administrative Services (HAS) data, were included in the first volume. The case studies in the second volume were expanded by the development of operational definitions for cost effectiveness, comprehensiveness, quality,

availability, accessibility, and acceptability of service. Each service was then scored, in terms of those definitions, as having increased, decreased, or remained the same. The 16 case study experiences were summarized across several dimensions. The methodologies comprising the third volume were restructured to eliminate all previously submitted material that involved actual implementation. The detailed instrument for gathering data requisite to a feasibility study, which had been submitted in the original draft, was deleted. The annotated bibliography, unchanged from the original draft, became the fourth volume. No contract modification was deemed necessary for these mandated changes based on the HEW review of the draft.

"Economic Impacts" Component

The contract required the development of an "Economic Impacts" monograph which contained, at a minimum, (1) the definition of economic impact of shared services and the discussion of the various factors associated with this definition, (2) the six case studies developed in B.20, and (3) the factors to be considered by comprehensive health planners, as developed in B.21. The economic impact of shared service arrangements was based on a conceptual framework relating health care field characteristics, economic theory, participants, nonparticipants, and the market area. With the use of the conceptual framework approved by HRA, an expanded discussion of economic impact was conducted, and 12 specific aspects of the economic impact were presented to HRA. In addition, 13 potential sites for conducting the analyses of the aspects were submitted.

At a meeting on April 30, 1976, with Jack Drake, project officer, and Robert Griffith, branch chief, six aspects and six sites were selected. Two of the six sites did not wish to participate. One of the sites was trying to reorganize to prevent collapse of the sharing arrangement and did not want to participate until the fall of 1976 at the earliest. The other site was undergoing some change, and the administrators did not believe that participation was appropriate at the time. Two new sites, chosen with HRA approval, agreed to participate. When they were selected, it was also necessary to substitute a new aspect for one that would have been studied at a site which decided not to participate.

The site visit methodologies were submitted to HRA and were approved. The site visits were conducted from June through early August 1976. The draft monograph on "Economic Impacts" was submitted on Aug. 17, 1976, and comments from HRA were received Sept. 1, 1976.

CRITIQUE OF METHODOLOGIES

"Methodologies" Component

Case Studies

The case studies, by design, covered administrative, medical/clinical, manpower, and educational/training services. More than 90 different services in those four categories could have been studied; 16 were required under the contract.

Because each of the four categories of services had to receive equal emphasis, the number of statistically valid observations and warranted generalizations stemming from such sampling is limited. The case studies do, however, serve the purpose of sensitizing planners to the operational details of sharing. It is questionable whether all 16 case studies were needed. By about the tenth site visit, some of the details became somewhat repetitive, at least as far as the general aspects of sharing were concerned.

The contract also required that the sharing arrangements be classified into four types: referred, purchased, multihospital sponsored, and regionally sponsored. This categorization proved to be of little value ultimately. The four types do not reflect the actual operational aspects of sharing; any one type of arrangement may utilize aspects of the other types for some of its services. For instance, a multihospital-sponsored arrangement may operate a "purchased" type of service. In other words, the fourfold typology lacks adequate operational differences.

Bibliography

The annotated bibliography on shared services was needed in the health care field. It is an excellent component of the contract, with application beyond the Health Systems Agencies (HSA) planner. It is an authoritative, comprehensive work, covering 1970 to 1975, so that future researchers will be able to concentrate their efforts on the literature of subsequent years.

Cost Effects

The Scope of Work articles of this contract required that the contractor perform financial analyses at each site. Unfortunately, many of the sites did not routinely collect data requisite for a research evaluation. Consequently, those financial analyses required under the "Methodologies" component and actually performed did not yield a sufficiently indepth insight into the effects of sharing on cost. The additional work under the "Economic Impacts" component corrected this imbalance.

Methodologies

The case studies performed under the "Methodologies" component of the contract had a dual purpose. First, they gave some idea of how shared services operate, how they are initiated, how they become self-supporting entities, what effects they have, and what their advantages and disadvantages are. Second, the case studies were to provide information that would serve as the basis for development of the methodologies. Overall, the first purpose was well met. The second purpose could be achieved only in part.

The methodology to identify and analyze existing shared service arrangements did rely on case study materials. Most sites had conducted some survey and analysis of existing arrangements, with a view to determining further activities to be shared. However, in virtually no instance did CHP health planners determine the potential for such sharing. Project staff consequently could not empirically evaluate activities or efficiencies of CHP planners involved in shared services. In view of this lack of input, the project

staff synthesized a series of actions and a methodology that could be undertaken by health planners if they became involved in shared services. The original draft monographs presented the material from a provider perspective; the final approved versions of the methodologies translated that content into the planning perspective. The site visits provided project staff with no instances of tools or techniques that CHP planners used to initiate sharing.

From the foregoing, one major difficulty in the overall contract methodology can be seen. Site visits should have been made to planning agencies that had already gained considerable expertise and experience with initiating shared arrangements. That would have provided significant input into the development of the methodologies. Apparently neither HEW nor the contractor was aware of how infrequently planners had been involved in sharing.

"Economic Impacts" Component

The extension period of the contract was more narrowly focused on the economic impact of sharing arrangements (SAs). The objective during this period was the assembly and analysis of useful data pertaining to six sites in the nation. In preparation for this task, the contract required three absolutely essential tasks--development of a conceptual framework, formulation of clear testable hypotheses (aspects of economic impact), and selection of sites.

Development of the conceptual framework was especially important because of the overall attempt to gain substantial insight from a statistically small number of case studies. This work was submitted as a complete separate report; there is no need to repeat it here, but several features of the report deserve further comment. Most of the measurable economic variables defined in the conceptual framework vitally affect the self-interest of each hospital participating in a SA and other members of a local community. On the basis of much accummulated literature, it was considered essential to view any voluntary SA as a complex resolution of the interplay of self-interests. In this view, economic impact of an SA, as forecast by the participants themselves, is a vital predetermining factor in the initiation and structure of an SA.

With the foregoing in mind, the natural next step is to make a small number of postulates about the economic impacts that are conducive to the long-term operation and survival of an SA and hence are expected to be observed in existing SAs. The value of the conceptual framework is that a small number of empirical tests can be designed which, because they reflect on the adequacy of basic postulates, cast some light on many other untested implications of the postulates. As a result, the empirical investigations were designed in order to clarify as much as possible, in view of the imposed constraints, the implications of the behavorial postulates in a variety of existing arrangements.

It is necessary to proceed from general considerations of self-interest (that is, favorable economic impacts) to more specific hypotheses about particular services in particular market areas. In each service, there is a different technology offering different potentials for economic impacts. Characteristics of an SA can be conceptually analyzed in several dimensions. Each characteristic has theoretical implications for the effect of an SA on

nonparticipants, final consumers of health care, and the general taxpayer. Characteristics of a market area make various economic outcomes more or less likely.

Support for the conceptual framework was found in a general review of the characteristics of existing SAs. The various characteristics seem to exist only for the services and market areas in which they contribute to the predicted self-interest of participants.

The major strengths of the conceptual framework lie in the explanation and justification of the existing SAs, as well as in the overwhelming realization of the conceptual framework's predicted outcomes in terms of the six sites that were analyzed.

In addition to these strengths, the conceptual framework offers a list of implications that were not derived from the site visits. For example:

1. The full realization of potential cost saving is not expected in some situations for clearly defined reasons.

2. When favorable economic outcomes to participants are predicated on collective negotiating strength, long-term success of the SA cannot be confidently predicted. Other reasons an SA may collapse can also be predicted.

3. The blocking power which physicians may exert against an SA is explored, and predictions about the nature of medical department consolidations are derived from consideration of compensatory benefits to some physicians.

However, new insights were gained, and details were added to the conceptual framework that were not present before the site visits were made and the data for the SAs were analyzed.

The selection of sites was complicated by a desire to test at least six aspects of economic impact using only six sites. The availability of useful data was seen as a more important consideration than the attempt to enhance generality of findings through randomized selection. Voluntary cooperation of shared service organizations and individual hospitals was necessary for any case study.

The methods of obtaining data by means of a site visit were crucially dependent on obtaining the cooperative efforts of local executives. The procedures for enlisting this effort, which are documented elsewhere, were extremely successful. Because each case study was read by local shared service executives prior to submission to the government, a substantial number of factual misrepresentations were avoided.

In each case study there is a central core of facts; an attempt was made to combine these facts to test hypotheses about economic impact. In each case study considerably more analysis was possible, and useful information obtained, than was foreseen in the preliminary theoretical discussions.

The results presented in the monograph on economic impact were well worth the effort of going beyond the narrow questions of economic impact.

RECOMMENDATIONS FOR IMPROVING THE METHODOLOGIES

"Methodologies" Component

Sixteen site visits for the "Methodologies" component were probably excessive for purposes of this contract. After about 10 visits, a certain level of redundancy was observed, although each subsequent visit still yielded an interesting case study with some novel aspects. However, little extra information was gained that could be used for input into the development of the "methodologies" component. With hindsight, it is recommended that 10 sites would have sufficed.

Although the methodologies were designed to be used by health planners, no provisions were made for visits to planning agencies with experience in shared services. Such provisions are recommended, as they will ensure some needed input.

"Economic Impacts" Component

For further study of the economic impact of voluntary SAs, several methodological recommendations may easily be derived from the experience of those who worked on the present contract. Basically, it is suggested that the indepth case study approach would still be helpful for a few selected issues; however, a questionnaire/survey method and published data resources might be used for some quantitative issues where statistical representativeness would be desirable.

Possibly the most pressing need for further indepth case studies concerns the long-run viability of an SA. In particular, can adverse economic impact and instability of an agreement be predicted at an early date? Under what conditions will an agreement collapse despite favorable economic impact on the community?

For such a case study, considerably more lead time must preceed a site visit than was planned in this contract. Local parties must be persuaded of the desirability of possibly unpleasant research; the early involvement of local officials and planning agencies might be beneficial.

Longer lead time would also be critical for a study of the effects of an SA on reimbursement policies and availability of grants. The case study method should be retained because the framework of negotiation and legal responsibilities varies across the nation. Indepth exploration may lead to inferences concerning collective negotiating strength that are relatively opaque in remote statistical evidence. One reason is that there is substantial lag between approval of new construction or equipment and the actual operation of new facilities. Typically, several third-party payers, regulatory agencies, and granting foundations deal with a single SA. The scheduling of a useful site visit would be much more complex than the scheduling of the visits under this

contract.

It was clear from the results of this study that medical department consolidations require relatively extensive data gathering efforts, partly because of the focus of attention on changes in the market shares of nonparticipants that result from changing referral patterns. The effects on nonparticipants remain of strong importance because the nonparticipants' response affects the success of the SA and the final outcome for the community.

More extensive data gathering effort would be needed to address some of the unanswered questions about the effect of market conditions for hospital personnel and supplies. As in the case of medical department consolidations, data gathering should begin with a site visit but must be augmented with regional and national data. In the case of personnel/collective bargaining programs, for example, it would be desirable to assemble more information on geographic mobility of personnel and the availability of alternative job opportunities.

With regard to cost savings in such services as laundry, blood banking, and credit/collection, the results of this contract were not designed to be statistically representative of all shared programs in the nation. The experience of the indepth case studies should make possible the design of questionnaire surveys for a broader sample of SAs. On the basis of this experience, it should be possible to address in this way the technological factors leading to economies of scale, as well as the determinants of administrative costs, marketing costs, competitive pressures, and other factors associated with organization structure and the motivations of participating institutions.

RECOMMENDATIONS FOR FURTHER STUDIES AND RESEARCH REGARDING SHARED SERVICES

In the course of the work on the current studies many ideas and suggestions for additional studies and research arose. It was not possible to pursue some of these ideas because the work on the current project requirements needed the primary effort and because the ideas lay beyond the scope of the current project.

The recommendations for future work can be classified into three areas: (1) studies made under this project that should be pursued in more depth, (2) studies recommended in the aspects section of the fifth monograph which were not carried out under this project, and (3) studies which would build in new directions on what has been done on this project. Although the list of suggested studies in each category is in no way exhaustive, the studies do represent the types of continuing research needed for a better understanding of the costs/benefits of shared services. As these costs/benefits are better understood, the questions of the potential for and the initiation and implementation of shared service arrangements can be handled successfully in the various regions of the country.

Studies Made Under This Project That Should Be Pursued In More Depth

1. More exploration is needed of collective negotiating strength, with regional surveys and case studies including reimbursement authorities and state and federal regulatory agencies as well as participants and nonparticipants. Particular attention should be paid to new technology and programs.

2. More exploration is needed of the costs/benefits of the major shared services, such as laundry/linen, blood banking, radiology and laboratories, to gain statistically sound results across many cases. Now that the important variables, relationships, and personnel have been identified, it is important to collect a large enough sample to verify the economies of scale, capital needs, and other economic impacts across the country (in urban and rural areas), so that in the future those planning sharing arrangements will know what results they should be able to achieve in view of their size, region, personnel, and organization. For example, an interesting question raised in the current case studies is: Why is the cost of laundry in a large urban area double the cost in a rural area? Differences in wage rates and prices for transportation and rent do not completely explain the difference in cost.

3. More development is needed of the conceptual framework and its bases in the economic theories of the firm, the behavioral theories of the interested parties, and the characteristics of the health care field. For example, an analysis of the tripartite reward structure of a hospital and its impact on the sharing arrangement's initiation, potential, implementation, benefits, and organizational structure would lead to further insight into the success or failure of shared ventures.

Studies Not Carried Out Under the Project but Mentioned in the Aspects

1. The area of education and training is an important one to study because it represents a sharing of large costs for many less easily measured economic benefits in quality, comprehensiveness, and acceptability of care provided. Some of the expected results, on the basis of the conceptual framework, would be:

   a. The new services will tend to have costs shared widely among the participating members, perhaps even more widely than the utilization of the services.

   b. The SA will permit attraction of new grant funds and higher allowable costs in those services that potentially raise the quality of health care throughout the patient community.

   c. Nonparticipants would appear to lose little from such agreements and even to gain from eventual commingling of professional staffs.

2. Other public services, besides education and training, should be studied with regard to the hypotheses resulting from the conceptual framework. For example, in emergency medical care, shared arrangements would permit better coordination and spatial allocation. That is, particular institutions would tend to specialize in particular types of patients or particular functions in an overall emergency system. Preexisting costs of such activity would

tend to be redistributed and to increase overall. The level and quality of final health care output would be expected to increase, and the pattern of inpatient admissions might change as patients are more quickly directed to the most appropriate source of care.

3. Some areas present indications of relatively extensive unmet health needs and potential demand for care. In these areas, cost increases for whatever reasons are more likely to be tolerated as long as the output of health care expands. Nonparticipating institutions are less likely to be affected by sharing, even with exclusive agreements.

4. There are dynamic long-term effects of the nature and structure of SAs which should be studied. It is known that the age or duration of an agreement will affect the measured economic impact. This has been established in the case of mergers, and a parallel expectation for sharing appears justified. For example, the elimination of specific administrative or medical services will not typically lead immediately to the reduction of related personnel.

The following aspects consider the feedback behavior leading to evaluation, long-run change, and/or dissolution of an SA. It is possible that agreements which do not offer widespread long-term net benefits will not survive. Although there is no basis in theory for expecting such a result, some conditions under which an agreement would tend to dissolve or evolve with a long-run impact differing from the short-run results can be indicated.

a. Agreements more highly predicated on exclusion or on highly sophisticated changing technologies are more likely to dissolve or to call forth countervailing forces in reaction to the effects of the exclusions. Previously the incentive for institutions in exclusive agreements to use potential cost savings for purposes of expanding their market share at the expense of nonparticipants was discussed. Once the nonparticipants attempt to restore their utilization rates, the basis for the initial agreement is weakened. So long as this newer competition does not overturn the earlier consolidations, the general community could expect to benefit.

b. Agreements that are embodied in formal sharing organizations should lead to the usual economic incentives for expansion, such as economies of scale, monopoly or monopsony power, spatial allocation, reduction in fluctuations, and improvements in quality and comprehensiveness of care. It is anticipated, however, that the addition of more and more shared services would tend to include activities where costs and benefits are redistributed rather than improved for all participants. Such growth would threaten the extent of participation to the degree that it is easy to form newer and more limited agreements.

Studies Which Would Build in New Directions on the Results of This Project

1. There is need for work in areas where SAs do not exist or cover only a few services. Why do they not exist? Is it because of the blocking power

of some group or groups? Is it because of market area characteristics? Is it because of the reward structure of the hospitals? Is it because of lack of knowledge of sharing, lack of leadership, or lethargy? Why have the planning agencies not served as catalysts?

2. In 1971 and in 1974 surveys of SAs were undertaken. A new survey should be initiated now to provide not only longitudinal data on sharing but also, more importantly, a statistically representative profile of the current economics (in the broad sense) of sharing some activities. At the same time a data base on each geographic area should be prepared so that the survey results can be evaluated and analyzed.

3. Studies should be undertaken on whether sharing can enhance or restrict the development of mergers or management contracts. Which of these forms of joint activity are economically (in the broad sense) better and under what conditions? If merger is the optimal solution in some cases, does sharing postpone the long-run benefits?

4. In many areas independent rural hospitals operate uneconomically. What are the specific transportation, geographic and other market area conditions which inhibit sharing? How can these be overcome without a decrease in the quality, comprehensiveness, availability, acceptability, and accessibility of rural health care?