### NORTH AMERICAN/EUROPEAN HEALTH SYSTEMS RESEARCH CONFERENCE

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The increases in the costs of operating the Military Health Services System (MHSS) of the United States have exhibited striking parallels to that of the private health care sector. The past three years have thus been characterized by research efforts which are motivated by the desire to contain these MHSS cost increases while maintaining the quality of the health care delivered. These efforts have identified various areas in which improved management, organizational change, incentive manipulation and new modes of practice/
delivery may enhance achievement of the goals. The subject conference and contacts with health systems management and research personnel in Britain and France during the trip to and from the meetings offered the opportunity to gather comparative impressions of the potential efficacy of research efforts underway and contemplated within the MESS. This paper summarizes these results and policy recommendations.
The increases in the costs of operating the Military Health Services System (MHSS) of the United States have exhibited striking parallels to that of the private health care sector. The past three years have thus been characterized by research efforts that are motivated by the desire to contain these MHSS cost increases while maintaining the quality of the health care delivered. These efforts have identified various areas in which improved management, organizational change, incentive manipulation, and new modes of practice/delivery may enhance achievement of the goals.

As a participant in these research efforts (along with my colleagues at the Naval Postgraduate School), I have long held the belief that the experience of components of the various national health care delivery systems in Europe holds valuable lessons for us in deriving policy proposals for cost containment. However, in general, the available scientific literature contains macro or aggregate systemic studies of these systems and not the more micro, or intra-organizational information which is most appropriate in providing guidance for our projects.

Thus I was extremely pleased to be invited to participate in the North American-European Health Care Systems Comparative Evaluation Conference held in Milan, 12-15 September 1977. This not only gave me the opportunity to provide the other participants with information concerning the MHSS and its unique structure and not so unique problems, but allowed me to ask the kind of questions about their attempted remedies to cost inflation that might provide policy guidance to the MHSS decision-makers.

The Conference was ideally suited to this type of interaction as can be seen from the following excerpt from the conference program:

"AIMS OF THE SEMINARS
The Mario Negri Institute for Pharmacological Research is participating in an international, interdisciplinary, inter-university program initiated in 1976 by the Sloan-Kettering Institute of Cancer Research, Biomedical Communications and Education Facility, and the Faculty of One Hundred at Aspen, Colorado (USA). The first Aspen-Milan Seminars, based on optimal small group interaction, are planned as an opportunity to exchange experiences, views, actions and reactions between colleagues with knowledge of the health care systems or plans in Western Europe, Canada and the United States."
"Health systems in Western countries have recently been undergoing intense critical revision, as regards both their institutional aspects and their medical content. This process is the result of a growing awareness that the efficacy of the systems is lagging increasingly behind real needs.

"Any assessment of the factors underlying this state of affairs calls for the participation of bodies whose competence is traditionally not linked to medicine, while at the same time obliging the medical profession to adjust its mentality.

"Social and political pressures are pushing simultaneously towards solutions which encroach upon traditional values, not necessarily ideal, and set up inappropriate reactions and conflict.

"Comparative critical analysis and evaluation of existing health systems will be organized under the following headings:

- ECONOMIC ASPECTS OF HEALTH CARE PLANNING
- QUALITY OF HEALTH CARE
- SOCIAL POLICY AND PROFESSIONAL ROLES
- TECHNOLOGY TRANSFER AND HEALTH CARE
- ECONOMICS AND QUALITY OF CARE: WHAT INTERACTION
- HEALTH CARE AND USERS
- COMMUNICATIONS AND HEALTH CARE DELIVERY."

The "results" of the Conference presentations and discussions can be summarized in the following points:

1. There was general agreement that no national system has yet discovered any effective strategy to counteract sufficiently the cost inflation associated with providing health care to their eligible populations. These cost increases are due to five major elements, to wit:
   - The changing age structure and disease incidence rates of the catchment populations;
   - The increasing sophistication of medical technology and the "professional imperative" in implementing state-of-the-art advances;
   - The rising expectations of consumers who look to the health care delivery system both to cure and care for an increasing set of their problems;
   - The role of third-party (i.e., insurance and government) payment for these services and the failure of the "market" to motivate cost containment sufficiently because of the diminished role of the consumer and the very special "agency relationship" of the health care provider whose objectives may be inconsistent with minimizing the cost of the necessary level of health care for consumers.
- The service-intensive and labor-intensive nature of the commodity "health care" and the impact of attempts to achieve income-parity with other labor groups.

2. Given the above mentioned "market failure," significant organizational change may be necessary in order to contain costs. Although the form and magnitude of these changes was a subject of major disagreement (especially between provider and analyst groups), it appears that some degree of decentralization of authority and responsibility is required.

3. It will not be possible in the foreseeable future to measure the real aggregate output of a health care delivery system or its actual quality. This greatly complicates the ability to control the cost of operating the system (or production process) that generates the care.

4. More work is necessary in developing cost-benefit comparisons of the pieces of the system that most lend themselves to it (e.g., epidemiological research/programs). The methodologies may not be perfect, but they are better foundations for policy decisions than have tended to be relied upon in the past.

5. The appropriate use of non-physician providers (nurses, nurse-practitioners, physician assistants, etc.) has great unrealized potential in reducing costs and in providing more personally satisfactory care to patients which may in turn tend to reduce costs further, given the enhanced ability of patients to initiate health care demands on the system.

6. The development of micro health systems information bases has significant potential for providing better and more cost-effective care. The ability to identify individual consumers such as is possible in Sweden and is under development in the UK facilitates preventive care and utilization control and prediction for resource allocation.

7. The patient must be included to a greater extent in the process of health care demand generation and more resources must be devoted to patient education. There are indications from research and experimental projects that such inclusion and more humanistic and effective communication between providers and patients can lead to increases in the perceived (by the patient) quality of care and to more cost-effective delivery modalities.

8. There still remain significant obstacles to innovations in the process of health care delivery from the present vested interests. Thus advocacy in the form of "lobbying" in various ways may be necessary by research groups who want to see their results implemented.

This necessarily brief summary contains no individual elements of great surprise to anyone who has worked in health systems research. However, the fact that these elements were generally agreed upon at an international conference of researchers and systems operators does have many policy implications. I will reserve further comment until later in this article.

As part of my educational experience with respect to European health systems, I was also invited by various persons in either research
or operational capacities associated with the French and British national health services/programs to visit with them during my trip. The French system was of interest because of its significant private sector co-existing with the national health insurance program, while the British NHS more closely resembles the operational structure of the MESS. In both cases I attempted to determine from the personnel with whom I spoke whether there was any specific object lessons of which we should be aware in the MESS before making major changes. In particular, there are at present two pilot projects underway to ascertain the way in which the implementation of capitation budgeting (CB) will occur in the MESS resource allocation process. Recent research at the NPG has suggested the need for incentive formulas and performance measures (among other changes) in order for CB to result in cost containment. Therefore the question was, did the structure and operation of the micro elements (e.g., hospitals) of either of these two major systems have any insights or caveats to offer us? The answer was yes, and no.

The French system is characterized by an internal facility resource allocation system which is very much based on workload and the yearly rates of inflation in the major input categories—the sort of "cost-plus" system with no positive incentives to operate under-budget analogous to our past use of the Composite Work Unit in the MESS resource allocation process. The process depends very much on centralized decisions and information collection with no endogenous incentives to innovate or cut operating costs below those "forecast" by the central decision-makers, except insofar as the money may be used for capital improvements. There appears to be few, if any, attempts to measure the relative efficiency of facilities, and the cost increases they have experienced show no sign of decline. These same sorts of concerns were among the major motivations for the recent DOD/HEW/OMB recommendations for changes in the MESS resource allocation process.

The British NHS resource allocation process has been in a state of change since about 1971. They recognized that the almost totally centralized budget and resource determination process had generated inefficiencies and inequities between regions and facilities and decided to try a more decentralized approach. This took the form of basing regional allocations more on catchment population characteristics and allowing local personnel greater authority to allocate resources within the region and district. However, in speaking with both analysts and providers the uniform response was that, in fact, the major result has been the interposition of another layer of bureaucracy in the system (the district council) and an actual reduction in local authority. Thus the perceived result has been no decrease in costs and an increase in the dissatisfaction with the system on the part of managers, providers, and patients.
It is interesting to note that the NHS has recently authorized a pilot project to budget within a facility on a team or clinic basis and to include a cost-savings sharing feature. The results of this experiment are not yet in, but I might note that this project is very much like one of the NPS' recommendations made to the Navy's Bureau of Medicine and Surgery as a result of our research into the necessary conditions for successful implementation of CB in MESS. We shall monitor the progress of this NHS experiment.

I believe that the information derived from the discussions outlined above has direct policy implications for the MESS operation and structure. First, it seems even clearer that there are no easy solutions to the problem of cost containment in the MESS. The fact that knowledgeable representatives from most of the European nations indicated that no broad-based solutions have been effective in bringing about cost containment implies we must be wary and realistic in expecting that similar moves will be effective in the MESS. However, this does not indicate hopelessness. Rather, the concentration of discussion during the Milan Conference on the operation of parts of their systems and the hypothesizing of structural changes of an intra-organizational nature appear to define fruitful areas for further research. I believe that success is directly proportional to the extent that interdisciplinary research recognizes, and is aimed at, modifying the organizational and individual behavior of those whose decisions actually generate the costs that we wish to contain.

Analysts whose "clients" are MESS decision-makers must thus take both a narrower and a wider view of the problems to be solved. By the former I mean that we must recognize that it is the individual behavior of health care providers and clinic/hospital level administrators that causes resources to be used. A system does not spend money, people do. Investigation of methods to facilitate analysis of this behavior and the derivation of specific systemic changes to motivate goal congruence between the various levels of decision-makers will be more productive than allowing the absence of endogeneous incentives and depending upon management-by-fiat from above.

However, this in a very real sense requires that researchers have a broader view of the problem. Economists must recognize that there are nonmonetary motivations that impact on behavior and costs. Psychologists must see that providers and patients are making decisions in an environment partially determined by monetary incentives. Systems Analysts/Operations Researchers must be cognizant of the parametric changes in predictions that can result from difficult-to-measure phenomena many times ignored in construction of their models. And so on. The problems are not simple, but neither are they intractable if the research is correctly structured.
Finally, since the above summary is based upon many separate and group discussions during my trip, I have not attempted to identify the individuals responsible. The reader who would like further information about concepts discussed or sources of particular comments is invited to contact me. A list of participants at the Milan Conference and the composition of the panels discussing various topic areas are also available.